

6.0 Case Studies of Nursing Facility Staffing Issues and Quality of Care¹

6.1 Background

The results of the Phase 1 and Phase 2 quantitative analyses provide compelling evidence linking staffing levels to the quality of care provided to residents.¹⁻⁵ The findings indicate that there are specific staffing ratios for different types of staff that are associated with higher quality of care in nursing facilities for both the short-stay and long-stay populations. These results were based on secondary data analyses that relied on Medicare Claims data and MDS data to assess quality, and Medicaid Cost Report data to measure staffing. With secondary data sources it was not possible to study how factors other than overall staffing ratios might influence quality of care. These qualitative case studies were designed to investigate relationships between quality of care provided to individual residents and staffing levels as well as other factors relating to nurse staffing.

Staffing ratios are only a part of the complex relationship between staffing and quality of nursing home care. Other aspects of the relationship, such as staff allocation among units and shifts, staff knowledge and training, staff supervision, and management practices are not easily quantified. The objective of these qualitative case studies was to understand the ways in which these different attributes of staffing influence the quality of nursing home care. Those attributes that appear to be very influential ought to be considered in the context of staffing regulations and investigations of staffing issues in nursing homes.

6.2 Methods

6.2.1 Overview of Data Collection and Analysis

The study team conducted site visits to seventeen nursing facilities in three states: Ohio, Colorado and Texas. During the site visits, study nurses investigated the quality of care provided to individual residents in relation to each of the following staffing issues:

- Staffing levels on different shifts,
- Staffing levels on different units,
- Short staffing,
- Staff working double shifts,
- Use of contract staff,
- Nursing staff supervision and management,

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- Staff knowledge, skills and expertise, and
- Staff development and training.

A balance was struck between structured collection of information and unstructured observation. Data collection instruments and questionnaires were designed to collect data in a systematic manner, yet allow the study nurses sufficient freedom to organize their investigation as dictated by circumstances in the visited nursing facilities. They recorded their observations of care for specific residents. The study nurses then used their professional knowledge and long-term care experience to interpret their observations and provide summary evaluations of both the quality of care delivered, and the staffing issues at the nursing facility they observed. Members of the research team then synthesized these observations and evaluations into specific staffing issues.

6.2.2 The Study Nurses

Three study nurses were recruited for on-site data collection; one for each of the three states. The research team's objective was to find data collectors who would be able to independently evaluate quality of nursing care and relate it to staffing issues in a nursing facility. Therefore, it was imperative to find nurses with substantial professional experience in the nursing home setting. In addition, since case studies rely heavily on observation and interviews, it was imperative that the nurses would be able to comfortably use these data collection techniques. Initially, we sought data collectors with a professional background in a nursing facility and background or experience in qualitative research. When this proved unsuccessful in some cases, we sought nurses with professional experience in the nursing home setting who had a personality amenable to qualitative research. We looked for the ability to establish easy rapport with people, good observation skills, and a willingness to be persistent in uncovering information from informants while not alienating them. One of the three nurses combined all qualifications including both nursing facility experience and a background and experience in qualitative research. The other two were registered nurses with work experience in nursing facilities, who had the required inter-personal skills.

These three nurses received a one-week training in Denver in February of 2001. The training consisted of instruction in the data collection protocols. In addition, they were given an introduction to qualitative research techniques, taught by J.K Magilvy, PH.D., R.N., F.A.A.N, Professor of Nursing, and J.G. Congdon, Ph.D., R.N., Associate Professor of Nursing at the University of Colorado Health Science Center in Denver, Colorado. Both conducted extensive qualitative research in long-term care including ethnographic field studies in nursing homes. The protocols were easily understood by the data collectors, but considerable emphasis was placed on the particular techniques of qualitative research. The two guest instructors spent additional time with the trainees to further explain and role-play observation and interview techniques. As part of the training the study nurses were taken for one and half days to a local nursing home in order to practice their skills and familiarize themselves with the data collection protocols.

6.2.3 Nursing Facility Selection and Recruitment

The state selection was based to some extent on whether states participated in the quantitative analysis and also by the search for qualified study nurses. We knew a qualified nurse data collector who could work in Ohio, were readily able to recruit a person in Colorado, and Texas was the first of several states under consideration where we found a qualified person.

One objective in the selection of nursing facilities was to include facilities with a range of staffing levels, based on Oscar data. Other facility characteristics that were considered included: urban/rural location, hospital-based vs. freestanding, and for profit vs. non-profit ownership. The seventeen visited nursing facilities had the following characteristics: two hospital-based facilities (15 free standing); eleven for-profit facilities (6 non-profit); two rural facilities (15 urban).

In each state, twenty facilities were randomly selected so that we could begin recruiting from a large pool. Each of the twenty nursing facilities was initially contacted by telephone by a research nurse from the UCHSC. During the initial conversation, most often with the facility administrator, issues of confidentiality, the facility selection process and data issues were discussed. During this initial contact, the research nurse emphasized that: 1) the nursing facility was selected from a number of eligible facilities on a random basis; 2) the facility's identity would be protected in all documentation; 3) the data collection would be conducted by one nurse with experience in nursing facilities; and 4) the duration of the data collection period if the nursing facility were to participate would be between six to ten days.

At this stage, eight nursing facilities declined to participate any further. A follow-up fax was sent to all nursing facilities that agreed to be considered. The research nurse contacted the nursing facilities again a few days to a week later to answer any questions and elicit a response. Several repeat phone calls were made to a nursing facility if no contact could be made with the administrator at this time. When required, a letter from CMS that strongly encouraged participation was sent to the facility. In Texas, where refusal rates were high, the state agency also made contact with selected facilities endorsing their participation. In the end, twenty-nine nursing facilities refused to participate or failed to respond, including nine from Ohio, eight from Colorado, and twelve from Texas.

The facilities were not aware until just before the visit whether they would be included in the study, nor the exact dates they might be visited. The general time frame in which the study would take place and the name of the study nurse was divulged at the time a nursing facility agreed to participate. A nursing facility was then informed that the study nurse would contact the facility one or two days prior to arrival, if the facility was selected for a visit. The study nurses received the name and location of the nursing facility selected for their next visit a few days to a week before their anticipated visit. This procedure was established in order to keep an element of surprise and avoid special preparation on the part of the facilities.

Two facilities declined to participate at the time the study nurse contacted them to confirm her arrival. Both facilities were located in the state of Ohio. Attempts to persuade the facility administrators to change their refusal failed.

6.2.4 On-site Data Collection

In order to investigate the relationship between quality and staffing in the selected nursing facilities, the data collectors focused on selected quality concerns for specific residents in particular units. In each facility, six residents distributed over no more than three different units were selected for the case studies.

Quality Areas

Seven quality areas were selected for examining the relationship between staffing and quality of nursing care in nursing homes. The quality areas included Rehospitalization, Resisting Care, Hygiene, Significant Weight Loss, Incident Pressure Ulcers, Functional assistance in Eating, and Functional assistance in Toileting. These particular quality areas were selected because these areas were investigated in the quantitative analyses in Phases 1 and 2, and were found to be associated with staffing.

These different quality areas also targeted residents requiring various types and intensity of nursing care. Rehospitalization focused on the short-stay population primarily composed of Medicare patients who required skilled nursing care. Of interest were those who were either discharged to the hospital, or at high risk for discharge to a hospital. The remaining quality areas focused on residents requiring long-term nursing care. These quality areas provided insight into staffing for the long-stay population.

Three quality areas were chosen for study in each nursing facility. The seven quality areas were arranged into four sets, each containing three quality areas. Each of the sets incorporated the quality area related to hospitalization for potentially avoidable causes, assuring that the case studies included the examination of skilled nursing care. Quality areas were grouped into these sets to maximize data collection efficiency. The quality areas within these sets are listed in Table 6.1. In some cases, it was also possible to investigate additional care areas based upon a selected resident's comorbid conditions. The selection of a quality area set occurred on-site. As a rule, the nurse researcher selected the sets sequentially for each subsequent site.

Table 6.1
Quality Area Sets

Set #	Quality Area	Sample Population
Set 1	Rehospitalization Functional assistance with Toileting Incident Pressure Ulcers	Admission Long-Stay Long-Stay
Set 2	Rehospitalization Functional assistance with Eating Significant Weight Loss	Admission Long-Stay Long-Stay
Set 3	Rehospitalization Resisting care Unclean / Ungroomed	Admission Long-Stay Long-Stay
Set 4	Rehospitalization Significant Weight Loss Incident Pressure Ulcers	Admission Long-Stay Long-Stay

Resident Selection

In each facility, the study nurses identified the particular units in operation at the time of the site visit and then selected a maximum of three units: if possible a long-term care unit, a Medicare/sub-acute unit, and an Alzheimer/dementia unit. If more than one unit of a particular type was in operation, the study nurse selected the unit with the highest resident census. On each selected unit, lists of twenty eligible residents were generated for either the Admission Sample or Long-Stay Sample. The Admission Sample list, compiled for the Medicare/sub-acute units, was restricted to those residents who were admitted to the nursing facility in the past 120 days from an acute care facility. The Long-Stay Sample list was compiled for each of the remaining long-term care units consisting of residents who had resided in the nursing facility for more than 120 days. Based on the quality areas set chosen for that facility, different resident selection criteria were applied.

For each selected quality area, residents were classified into an 'at-risk' category or a 'treatment' category. An at-risk resident was one whose condition placed him/her at an increased risk for developing a negative outcome. A treatment resident was one who had the condition pertaining to the quality area, and was receiving care for this condition. The study nurses obtained information regarding the criteria through individual record review, staff interviews and resident observations. The final selection of two residents on each unit, from those meeting the quality area criteria was determined by the study nurses, such that residents at greatest risk for quality problems were sampled in each quality area (see Appendix D).

Case Study Protocol Summary

The study nurses spent between six and ten days in each of the visited nursing facilities. These days were spent either consecutively or with several days separation. The duration of the on-site visit varied between six to ten days for several reasons: 1) the resident census and the number of units varied among nursing facilities; 2) the nurses were at liberty to organize

their days according to the needs of the facility and their own personal needs; 3) sometimes they stayed through multiple shifts and conducted the reviews in more concentrated days. The study nurses spent time on each of the selected units during three shifts (day, evening, weekend), with a maximum of nine shifts in each facility. The night shift was observed during either the early morning or late evening hours.

Almost all of the visited facilities accommodated the study nurses for the full stay. Only one Texas facility objected to the duration of the data collection once the study nurse had arrived on-site. Fortunately, the study nurse was informed about the facility's expectations for a relatively short stay at the onset of her stay. The study nurse focused her attention on one particular unit only and selected two residents. The sub-acute unit was chosen in this facility and data collection focused on the two case study residents on this particular unit.

The data collection in each of the visited facilities consisted of a review of individual resident records, general and resident-specific observations, and staff interviews. Resident interviews were not mandated but the study nurses were free to interview residents if they deemed this necessary and feasible.

An individual resident record review for each of the case study residents assisted the study nurses in targeting particular care areas for further investigation. For each case study resident, the study nurses selected a minimum of three nursing care practices for observation. These resident-specific observations were conducted during the three shifts that the study nurse spent on a unit. In addition, the study nurses made general observations during these times including the administration of preventive care such as repositioning and toileting of residents, the response time to call lights, and the interactions among staff and between staff and residents. The general observations were not restricted to the case study residents, but included any resident present on the unit during the time of observation. Brief interviews were conducted with all direct care nursing staff present on the unit during the observation shift, in order to obtain information regarding work assignments, number of hours worked, tenure etc. In-depth interviews were conducted with the direct care nursing staff observed during the administration of care to the case study residents focusing on their knowledge and familiarity with the resident's care. Additional interviews were conducted with management staff and administrative staff to understand policies, procedures, management approaches, and supervisory roles.

6.2.5 Analysis

The collected materials were delivered to the UCHSC for analysis. Initial data abstraction concentrated on observational data relating the care received by a particular resident to the prevailing staffing conditions at the time. Examples of both poor and good quality were related to staffing issues. This initial review pertained primarily to the care received by the residents selected for the case studies, but other residents appeared in these observations as well.

The findings for each site were recorded in a table format organized by staffing issues. Facilities and case study residents appear under their study identification number, other

residents were simply referred to as 'a resident' or were identified under a combination of the letters X and/or Y.

The process of relating quality of care to particular staffing variables required some interpretation. A quality of care issue could sometimes be related to more than one staffing variable. For instance, insufficient toileting could be related to low staffing levels and/or inadequate supervision. At this phase, data from staff interviews were incorporated in the tables, which added to and sometimes clarified the relationship between quality of care and staffing issues.

The three study nurses were consulted and each reviewed the completed tables with respect to the postulated relationship between quality and staffing for the nursing facilities they visited. Their comments and insights were incorporated into the existing tables. The tables were then reviewed for emerging patterns, which are reflected in the following section.

6.3 Findings

6.3.1 Staffing Levels

The staffing ratios for direct care nursing staff allocated to specific units during specific shifts were compiled by the study nurses during the site visit. The ratios represent actual ratios at the times of observation and thus reflect situations of both 'normal' staffing, when a unit is staffed with the usual number of nursing staff and 'short staffing', when a unit is staffed with fewer than the routinely assigned nursing staff. Nursing staff ratios varied, as expected, per shift and per unit and with acuity level. The variation in staffing ratios for licensed nursing staff was far greater than that for nursing assistants. While the ratios for nursing assistants fluctuated from 1:3 to 1:27, the variation in ratios for RNs, LPNs and Certified Medication Assistants (CMAs) was 1:6 to 1:49 residents. The extremes on the higher end of the spectrum, for nursing assistants 1:3 and for nurses 1:6, reflected staffing situations on the Medicare/ sub-acute units. The lower end of the spectrum, especially for nursing assistants, reflected situations when units were staffed below their routine levels.

Staffing levels for licensed nursing staff under routine or 'normal' circumstances appeared at times insufficient. Floor nurses frequently had multiple responsibilities, such as clinical assignment that included medication passes and treatments in addition to administrative and supervisory tasks. Managerial staff assigned to the units at times expressed being overburdened and unable to take care of all their responsibilities. This was confirmed by many observations in different nursing facilities. Nurses frequently seemed more focused on getting their paperwork done or getting the medication administered than on responding to residents' needs as they arose. In some instances, resident care suffered directly as the nurse chose or could not respond to clear indications of resident or staff needs. More often though, supervisory responsibilities suffered, at times indirectly affecting resident care.

The following two examples illustrate how the quality of resident care was negatively affected when the licensed nursing staff was or felt unable to provide supervision in addition to their clinical or administrative assignments. By making the choice to ignore their supervisory responsibilities, the quality of care was indirectly affected.

Observation on the long-term care unit with designated sub-acute care beds reveals that repositioning of the residents is insufficient on the evening shift. The nursing assistants on the evening shift have tenure between one day to eighteen months and are in need of supervision but the nurse is preoccupied with other duties. The nurse to resident ratio is 1:33. The nurse has a heavy medication pass in addition to six residents on tube feeding; consequently, there is little time to supervise and/or assist the nursing assistants. There is a nursing supervisor in the building in the evenings but her responsibility involves clinical care instead of nursing assistant supervision. Facility 40; pages 68, 124, 132, 134, 205.

Resident Med 01 has a history of pneumonia and several previous hospitalizations from this nursing facility where she resides on the sub-acute unit. At the time of the site visit the resident has a G-tube and receives tube feeding. Family has requested that staff gets the resident out of bed for a certain period each day. Observations reveal that the resident is clean and groomed, but not out of bed during the weekday shifts. The nursing staff ratio during these shifts is 1:13 equal for nurses, LVNs, and nursing assistants. This sub-acute unit is a heavy care unit with twenty-seven residents, 25 of whom require extensive assistance with activities of daily living. In addition, fourteen residents have tube feeding and seventeen require wound- or stoma care. The floor nurses each care for twenty-seven residents but for a different task; one LVN administers medication, while the other does all the tube feedings. The administrative nurse, ratio 1:27, who supervises the unit during the week, expresses feeling overwhelmed with paper work and indicates there is no time to "help staff". This is corroborated by the study nurse's observations. Facility 10; pages 32, 38, 58, 69, 72, 98.

The following example demonstrates a special care unit that was adequately staffed and the nursing staff was able to complete all their responsibilities.

All residents on the Alzheimer/dementia unit are appropriately dressed, clean and groomed at all times. The unit is clean and free of odors. Residents are toileted. One particular observation involves a nursing assistant assisting a resident with hand washing following toileting, testing the temperature of the water before placing the resident's hands under the faucet, cueing the resident to dry her own hands, allowing the resident to maintain her skill. Similar occurrences are observed with other residents. There is sufficient staff available on this Alzheimer/dementia unit. Nurse to resident ratio 1:24 and nursing assistant to resident ratio 1:12. The unit census is twenty-four residents: one requires stoma care, four have nebulizer treatments and all residents require some assistance with activities of daily living. Staff to resident ratio is the same on day and evening shift, during the week and weekends. The staff is well trained, and has tenure between three and five years. Facility 17; pages 26-29.

Numbers of nursing staff did make a difference. When insufficient staff were available, the provided care was more likely to be inadequate. This was revealed by inadequate responses to residents' immediate needs, for example, lack of or delayed response to call lights, food being served cold, inadequate or no assistance with eating, and inadequate monitoring of the residents in general. This inadequate monitoring could and did at times lead to more serious

incidents such as a fall. However, inadequate care did not always relate to an observed negative outcome for the particular quality areas investigated for this study; e.g., inadequate assistance with feeding would not always be evident in weight loss. Frequently, this occurred because low staffing and inadequate care was not a problem continuously, for instance, the resident would eat well when fed in the morning while adequate staff was available but would consume less or nothing at all in the evening when adequate staffing was not available.

Below a certain minimum staffing threshold, resident care was compromised. Above this minimum threshold, quality varied based on other staffing issues. When staffing levels were adequate, the relationship between staffing level and quality of care was not always direct. However, other staffing related variables also contributed very substantially to quality of care.

6.3.2 Allocation of Staff among Shifts and Units

One of the staffing variables contributing to differences in resident care was the allocation of nursing staff and non-nursing staff. Actual nursing staff ratios collected on the different units during the various shifts do not reflect the more complex staffing reality in the visited nursing facilities. Support staff, such as activity staff and social workers, management, clerical staff and housekeeping were not available at all times in similar numbers. Support staff were less likely to be available during the evening and weekend shifts; some of the support staff was not available at all during these shifts. Another factor that was not reflected in the nursing staff ratios on particular units was the availability of nursing and non-nursing support staff during peak hours (e.g., mealtimes). Finally, care was influenced by the allocation of nursing staff to particular units and/or re-allocation of assigned nursing staff to different units when short staffing occurred.

Support Staff

Additional nursing staff, such as single task workers and management staff, were generally available during the week on dayshifts, but not always during the evenings or weekends. Single task workers were found in many facilities and they performed a variety of duties. Most facilities had bath aides who were almost exclusively assigned to the dayshift, although the evening shift also completed a fair number of baths. While many single task workers provided personal hygiene care, other single task workers performed such duties as transfer of residents to and from the dining area, cleaning and refilling water pitchers, and light housekeeping duties.

Management staff were often available in greater numbers during the weekday shifts providing support to the direct care nursing staff by handling staffing situations, unexpected emergencies, dealing with families and, by providing additional supervision. Other non-nursing support staff were present during the day and sometimes into the evening shift. These included ward clerks or unit secretaries, activity staff, dietary assistants, maintenance, and housekeeping. The presence of support staff often positively affected resident care by relieving the nursing staff from responsibilities that they might otherwise have to perform.

In the following case that took place on an Alzheimer/dementia unit, one staff member revealed how welcome the assistance from activity support staff was in monitoring the residents on this unit.

Resident 106 is observed with one leg caught under the footrest of a reclining chair. The resident who is seated in the lounge in a recliner chair has attempted to rise while the nursing assistant is toileting other residents. The study nurse intervenes by extricating the resident's foot. This unit, with a resident census of 19 is routinely staffed by one nursing assistant only. It is at times difficult for the nursing assistant to monitor all the residents especially when routine nursing tasks require her to be in a resident room. On various occasions, activity staff and housekeeping were observed in a supporting capacity by ambulating the residents. One nursing assistant informs the study nurse that the activity staff will be moving off the unit and she expresses her concern for the residents' safety, "They (activity staff) do help considerably." Facility 43; pages 12, 57, 63, 104, 110.

The following example illustrates the negative affects when support staff was unable to provide their assistance.

The study nurse observes many residents on this secured Alzheimer/dementia unit sleeping in chairs/wheelchairs. This occurred frequently during the week that the study nurse conducts her observations. Activities posted on the activity calendar are not conducted and few residents are involved in activities. Activity staff is not permanently assigned to this unit and the nursing assistants are expected to conduct resident activities. However, the nursing staff on this unit consists of two nursing assistants who are fully occupied with nursing responsibilities. They conduct only occasional activities. The activity coordinator indicates, "Help is needed on the assisted living wing this week," and therefore, she is not able to provide all activities. Facility 15; pages 13, 74, 87, 88, 90, 91.

The next example illustrates the difference between the day and the evening shift. While the day shift already has a better nursing assistant to resident ratio, the day shift has the additional benefit of the presence of restorative support staff to assist in the dining room.

Resident S12, residing on the long-term care unit, was admitted over two years ago with a diagnosis of depression among others. She had a one-level eating decline on the most recent MDS assessment. The dietary assessment is excellent and the resident's weight is stable. The resident has been placed in the restorative feeding program since she requires increased assistance with eating. During the day shift, when restorative staff assists in the dining room, resident S12 receives proper cueing and assistance and eats well. However, this is not the case on the evening shift. Resident S12 does not receive any assistance during the evening meal and does not consume any food. On the day shift the nursing assistant to resident ratio is 1:9 with an additional restorative nursing assistant available for fifteen residents. The nursing assistant to resident ratio on the evening shift is 1:15. The two nursing assistants assigned to the restorative dining room during the evening shift are also responsible for the residents who remain in their own rooms during mealtime. The

nursing assistants divide their time between the dining area and the residents who require assistance in their rooms. Facility 40; pages 88, 142.

The presence or absence of support staff affected resident care on all different shifts; however, since their presence is less likely on evening and weekend shifts, resident care was more often negatively affected on these shifts.

Peak Times

Another factor that is not reflected in the nursing staff ratios for particular units during particular shifts is the distribution of staff during peak times. This was most notable during mealtimes. The distribution of staff and the assignment of responsibilities during these times affected the resident care in two ways: 1) residents in the dining area received inadequate assistance or supervision with eating; and/or 2) residents who remained on the unit for any reason received little or no attention to their immediate needs.

In the following two examples, most or all available nursing staff were active with resident transport to or from their mealtime locations. In those instances, residents who remained in their rooms on the units either by choice or because of higher dependency needs received inadequate care.

One observation involves a resident call light not answered for six minutes. One resident asks the study nurse present in the hall to find an aide to help her roommate who needs to be toileted. All nursing assistants are involved in assisting residents back to their rooms after breakfast. There is no aide present on the unit at this time. Facility 53; pages 120-121.

A call light on the long-term care unit is ringing for at least five minutes. In addition to the unanswered call light, a visitor informs the study nurse who is present for observations that an IV unit is beeping. No nursing staff is available for assistance. The LPN in charge of the unit, the unit manager, and the DON are all in a resident room where a resident is being transferred to the hospital. All nursing assistants assigned to the unit are transferring residents to the dining areas. Facility 14; page 247.

The following example demonstrates a facility that has found ways to proportionately distribute nursing staff during the mealtime peak hours.

This facility has two mealtime sittings. Some residents remain in their rooms; some eat in the dining room. All residents receive individual attention. Response to call lights is immediate during meals and at other times. One nursing assistant remains on the floor during mealtimes to answer call lights and telephones. This allows the other aides to assist the residents with their meals without being distracted and/or interrupted. Nurses also assist with meals and do not distribute medication during these times. Facility 43; pages 118, 122.

Allocation to Special Care Units

Alzheimer/dementia units in some facilities were at times exclusively staffed with one or more nursing assistants and no licensed nursing staff. This was not unusual for the night shift, but in at least three of the six facilities with an Alzheimer/dementia unit, this was the case for all shifts. In addition, some of these units were monitored by a Social Service Director instead of nursing staff.

In such instances, an LPN from a nearby unit would administer medication to the residents on the Alzheimer/dementia unit. In addition, the nurse was responsible for the residents' medical and/or behavioral needs on this unit. However, the nurses assigned to supervise these units did not observe the special care unit residents on an ongoing basis. The nursing assistants were responsible for observations of any new symptoms and/or changing conditions and communicating these to the nurse in charge. Even though the nursing assistants may be astute in their observations, medical and/or behavioral needs may not be recognized timely and/or timely interventions may be omitted as demonstrated in the following case.

Resident 6 located on the Alzheimer/dementia unit experiences increased edema to the lower extremities. Resident wears Ted hose, but the nursing assistant is unable to put the Ted hose on. The nursing assistant reports this information timely to the nurse who monitors the residents on this special care unit. No apparent assessment of the resident is completed. The lower extremities of this resident are still very edematous two days later. No elevation of legs is observed. This unit is staffed exclusively with nursing assistants. A nurse on the adjacent unit monitors the residents and administers medication on this special care unit. No follow-up and monitoring by licensed staff of symptoms. Facility 52; pages 6,7, 34, 35, 91, 99.

Many nursing facilities redistributed their available nursing staff when demands on other units necessitated this. Staff from the Alzheimer/dementia units were more likely to be pulled from their location in order to increase staffing levels on other units, most notably the Medicare/sub-acute units. At times, this resulted in the Alzheimer/dementia unit becoming understaffed. Although the risks of compromised resident care when short staffing occurs on the Medicare/sub-acute units were potentially more immediate, care to the residents on the Alzheimer/dementia unit was at times inadequate.

The following case illustrates two negative effects from the redistribution of nursing staff. The Alzheimer unit was left short staffed and in addition, the direct care workers were unfamiliar with the unit, which can be particularly devastating on an Alzheimer unit.

There is a pervasive odor of urine on the Alzheimer/dementia unit throughout one particular Saturday day shift. In addition, many residents look rather unkempt. The study nurse did not observe the unit during breakfast time. However, in the words of the scheduled LPN, "Breakfast time was a mess." The nursing assistants, three of them, were all new to the unit and did not know the residents well. As a result, some residents did not receive the correct diet. Residents were leaving the dining room

area before eating and wandered back into the halls or into their rooms, not receiving adequate assistance. The study nurse who observed this unit during other meals notes this confusion does not occur when regular staff is on. Residents are assisted in a more organized manner with regular staff present. Three families complain regarding the resident care provided during this particular weekend. Call-ins on various units in the facility had necessitated staffing changes. This large facility with several long-term care units and one Medicare/sub-acute unit does not use agency staff. Instead, the facility re-allocates available staff, especially from the various long-term care units to the Medicare units. Facility 14; pages 79-83, 110-115, 105-159, 165, 16, 170, 182.

The cases highlighted in this section on staff allocation demonstrate the complex relationship between staffing and the quality of resident care. Inappropriate staff allocation, which negatively affected resident care on particular units and during particular shifts, was but one variable. In addition, short staffing, particularly resulting from staff absences, appeared in some of the examples as an additional contributing factor.

6.3.3 Staff Absences

Many of the visited nursing facilities had hiring needs at the time of the site visit. The few nursing facilities that had no, or very few hiring needs, were either located in rural areas or offered benefits that were attractive for their staff. The benefits ranged from offering day care and free parking space to generous shift differentials for shifts difficult to staff. Although nursing facilities attempted to fully staff all units, 'short staffing' frequently occurred. Short staffing refers to a unit being staffed with fewer than the routinely or 'ideally' assigned nursing staff: a condition that occurred in many nursing facilities on a regular basis. Short staffing disproportionately affected the evening and the weekend shifts.

Short staffing was often related to 'call-ins': a staff member calling in to cancel for a scheduled shift. Call-ins occurred just a short time before the beginning of a scheduled shift. The direct care nursing staff on the units where short staffing occurred were faced with the same number of residents, who required the same amount of assistance and supervision. To perform the same tasks/responsibilities during the same allotted time, the direct care worker in many instances worked harder, longer hours and/or skipped their breaks. Still, not all the tasks could be done as expected. Observations showed that personal hygiene, grooming, assistance with mealtime, distribution of snacks, toileting, repositioning, and the response to call lights were the most likely care areas to be compromised. Incidents such as falls and resident altercations also appeared to increase.

The following three examples illustrate the negative effects on resident care when short staffing occurred. Note that all situations occurred during weekend shifts, not unusual, since these shifts were disproportionately represented by call-ins. The first two examples involve the same nursing facility and show the safety issues that result when staffing is below a certain minimum threshold. Staff could simply not cope with the overwhelming responsibilities. It is noteworthy that more serious incidents, such as a fall and a resident altercation, occurred under these circumstances.

Resident SAC1 with a history of repeated falls is recently admitted to the skilled unit from the facility's residential wing. The merri walker for which the resident has a MD order is no longer being used, since the resident takes it apart. The resident fell while residing on the skilled unit. The resident, who requires assistance with dressing, is wearing no shoes at the time of the fall from a non-reclining, non-slant chair. The incident occurs on a Sunday morning. Several staff have called in and, on this particular unit, only one nursing assistant reports timely to work. Two nursing assistants are not in at the appointed time, one has called off for the day and the other will come in later. This leaves one nursing assistant to deal with twenty-seven residents during the early morning hours. The nursing assistant is simply unable to provide all residents with the necessary assistance and/or monitor the residents adequately. Facility 55; pages 19, 84-92, 95, 167.

The following observations were made in the same facility during breakfast in the restorative dining room. This happened on the same Sunday morning shift and at this time no additional staff members had appeared for work yet.

One resident is pushing her wheelchair into the table and a male resident is yelling at her to get away. Another resident says, "He's liable to haul off and hit her." This male resident begins to shove the resident in the wheelchair. The unit nursing assistant is occupied ambulating another resident in the hall and is unable to come to the dining room. Two other residents are moving and setting tables in the dining room, as the unit is short staffed. One alert resident comments, "You can sure tell it's Sunday: the tables aren't set, the coffee is not here, there's no one in the dining room in case someone falls. It is a law you know." There is one nursing assistant on the unit out of the scheduled three. Facility 55; pages 84-92, 96, 197.

The following case illustrates similarly a short staffing situation due to call-ins. However, even though resident care was negatively affected, the consequences were less serious because the staffing ratio was not as drastically curtailed as in the previous examples.

Many residents remain undressed/ ungroomed until the noon mealtime on one Sunday morning. The Saturday night shift had one nursing assistant call in and cancel her shift. There was no replacement staff member to substitute for this absentee. Because the night shift was working short and not able to complete the same workload, fewer residents are out of bed, groomed and dressed when the day shift arrives. The day shift is able to provide appropriate assistance and has caught up on their work by noon. Facility 2; page 111.

Interviews with staff in many different facilities confirmed that call-ins mainly occurred on the evening and weekend shifts. Even though the study nurses observed several of these instances for themselves, as the above examples indicate, staff members, from floor staff to administrative staff were often more informative as to the extent of these practices. The number of call-ins was reportedly high (occurring almost daily on at least one of the shifts) in at least nine of the visited facilities. Working short staffed because of call-ins did not seem an uncommon occurrence in these facilities.

In at least two facilities, both rated highly by the study nurses, call-ins were only an occasional occurrence. Both nursing facilities employed a combination of management and enforcement practices to achieve this result. One facility offered generous shift differentials for targeted shifts in combination with flexible scheduling. Strict policies regarding call-ins were in place and the facility had very few problems as a result. The DON was not afraid to terminate nursing employees if their performance required this. This facility was located in an urban area where nursing jobs were at a premium. However, this nursing facility had no problems recruiting nursing staff; in fact, it had a waiting list with prospective candidates. All shifts in this facility were fully covered despite the nursing shortage and the facility did not rely on agency staff. The other facility offered tuition reimbursement for nurses, RNs and LPNs, following completion of a certain amount of time on the job. In addition, there was free parking for staff at this urban facility and in-house day care at very reasonable rates. This facility did have infrequent call-ins, and the facility made use of agency and/or support staff (e.g., bath aides) as needed.

In facilities where short staffing occurred various strategies were employed to replace workers: use of agency staff, redistribution of available scheduled workers, and requesting/mandating staff to work additional hours or double shifts.

6.3.4 Agency

Seven of the investigated nursing facilities worked with agency staff, four did so on a regular basis. The facilities using agencies ranged in quality of nursing care from above average to below average.

Facility staff's perception of the quality of care provided by agency staff is often rather negative. Facility staff at times indicated that the job performance of agency staff was inadequate or insufficient, at a minimum worse than the job performance of regular facility staff. However, this assumption was not borne out in the observations made by the study nurses. In their report, the study nurses rarely connected quality of care specifically to agency staff, negatively or positively. Rather, it appeared that agency staff 'blended in' with facility staff, especially when nursing assistants were concerned. When the facility staff provided excellent resident care, so did agency staff; if the facility staff was slacking or provided inadequate care, so did agency staff.

Facility staff raised concerns regarding familiarity of agency staff with the residents for which they cared. For this reason, some nursing facilities opted to forego use of any agency staff, instead working short staffed or having staff work extended hours or double shifts. Other nursing facilities made use of agency staff on a limited basis. Most facilities using agency staff attempted to counteract this concern by requesting the same agency staff on a repeat basis and some were successful in doing so. However, this strategy did not always avoid the need to reorient agency staff due to long lapses between service, changes in residents' status, and information overload for agency workers who worked in different facilities. Some responsibility of orienting the agency workers to the facility and informing them about the residents' status rests with the facility. In most facilities, the agency workers were expected to follow the same routine as the regular facility staff and no arrangements

were made to accommodate their special status. Report to agency workers was often insufficient to encourage the provision of adequate care. In addition, when agency staff did not receive adequate orientation to the facility and/or sufficient resident information, the direct care nursing staff working with the agency staff experienced an increased workload and additional stress as a result.

In more than one facility, management expressed that the use of agency staff posed a heavy strain on the budget. Although confirmation of these perceptions was beyond the scope of this study, these concerns by management influenced management strategies in dealing with short staffing situations. For example, some facilities attempted to reduce the numbers of agency staff, one facility went as far as declaring their facility 'agency free'. However, this goal was accomplished by requesting or mandating that regular nursing staff increase their working hours. Direct care staff then worked additional hours, extra shifts and/or double shifts.

6.3.5 Extended Work Hours

Double and extra shifts were performed in many nursing facilities on a regular basis. Doubles refer to two consecutive shifts, usually eight hours each. Two double shifts worked on consecutive days on the weekend are often referred to as a Baylor shift or Baylors. Besides doubles and Baylors, nursing staff often worked extra hours in addition to their regular work schedule. The hours in addition to the regular schedule were added to the respective employees' usual schedule or were worked in the form of extra shifts during the week. Extra shifts refer to shifts worked on the employees' scheduled days off. Staff did at times receive additional reimbursement for the performance of Baylor shifts (often an additional eight hours pay). This was less likely if doubles were performed in a similar arrangement during the week. In some facilities, extra shifts/hours were compensated at a higher hourly rate, although in most instances this was not the case.

Most facilities do **not** have explicit policies regarding the maximum number of hours an employee may work in a given pay period. Some facilities limit the practice of working doubles or Baylors because someone in management, often the DON, does not approve. However, the lack of clear and explicit policies governing maximum number of working hours for individual employees can conceivably result in employees working long uninterrupted stretches of sixteen hours or more.

This study did not obtain detailed information about the number of shifts/hours worked in a particular period by facility nursing staff. However, staff were interviewed regarding the number of doubles they had worked in the previous seven days. The practice of performing double shifts appeared pervasive. In thirteen of the seventeen visited nursing facilities at least one nursing staff member, but frequently more, had worked between one to three doubles in the previous seven days. In five of these facilities, at least one staff member had worked between four to seven doubles in the last seven days. Moreover, in one of these, more than a third of the interviewed nursing staff had worked between eight to eleven double shifts in the last fourteen days. What this does not reveal is the practice whereby direct care nursing staff who performed Baylor shifts during the weekend had already completed a full-time work schedule in another facility or at another job in the previous five days. All direct

care nursing staff, RNs, LPN/LVNs, CMAs and nursing assistants, were engaged in these work practices, however nursing assistants performed most of the doubles.

Nursing staff demonstrated varying attitudes regarding extended work hours. Many workers who engaged in these practices were motivated by financial incentives. At other times, staff worked additional hours to help out because, "Someone needs to care for them (the residents)." In other instances, staff felt pressured by management to work additional hours/shifts. As an illustration, some nursing staff revealed to the study nurses that they, "do not pick up the phone" on their days off out of fear they will be summoned to work on their free time. Staffing practices encouraging or mandating additional work hours, especially doubles or extra shifts, often resulted in physical and/or emotional tiredness, at times decreased morale, increased numbers of call-ins and staff turnover.

A direct relationship between poor outcomes and the employee's condition as a result of spending extensive and exhaustive hours on the job was difficult to ascertain. Observation did not reveal whether decreased motivation, irritable behavior and/or obvious mistakes were the result of extensive working hours or whether other factors were the cause. Interviews with nursing staff intimated in several instances a direct relationship between poor job performance and tiredness due to having worked double shifts.

In the following example, as relayed by one of the staff nurses on this particular Alzheimer/dementia unit, poor resident care was directly related to the nursing staff working extended hours.

One RN, who works in a facility where many nursing staff work Baylor shifts, notes the following, "Nursing assistants are short with the residents, especially the last shift of the four-shift stretch." She states, "The residents get snapped at by nursing assistants when they work too many hours. Residents may be told to 'go away' or 'you've already asked that question'." Facility 14; pages 242-244, 309.

In the following example the nurse who committed a medication error excused this mistake referring to a previously worked double shift.

One LPN, working on an Alzheimer/dementia unit, did not administer AM insulin to a resident who subsequently leaves the facility on pass for a visit with family. The family checks the blood sugar level at home; BS level shows as 400. The family places a telephone call to the facility at some time during the day to inquire why the resident's blood sugar is so high. The LPN realizes that she failed to administer insulin. She states that she "feels terrible", but claims that she is "too tired" after working a double shift. Facility 23; page 58.

The incident happened in one of the larger facilities where the policy was to use no agency staff. Staff instead were asked to work additional hours/extra shifts. The nursing staff, both nurses and nursing assistants, worked a substantial number of hours, frequently in the form of double shifts.

6.3.6 Supervision

Supervision was defined as leadership activities including the following:

- providing/requesting relevant information including clear instructions regarding standards of care in general and more specifically regarding a residents' status; delegating/allocating work to appropriate unit staff; acknowledging/reprimanding job performance and enforcing professional standards of care; providing/supporting/assisting/motivating/encouraging staff when needed.

The presence or lack of adequate nursing supervision was studied on two levels: 1) the facility level where management develops management practices and directives for nursing staff throughout the facility; and 2) the unit level where individual nurses direct the nursing activities of the direct care workers on a day-to-day basis.

Facility-Wide Management

The presence or lack of good leadership on the management level had far reaching consequences. Consistent and adequate supervision on the unit level was accomplished when there was strong involvement of management staff most notably from the Director of Nursing (DON). The DON was in the position to identify and address problems concerning the factors influencing the quality of resident care, be they logistical, clinical or managerial. Good leadership at the facility management level was observed in the four nursing facilities where staff provided good to above average nursing care. Good management consisted of clear guidelines and protocols, adequate training and instruction, evaluation of job performance, and consistent enforcement of policies. Inadequate management on this level did not necessarily result in inadequate provision of care, but it became a matter of individual skills and motivation of nursing staff on the different units.

The following two examples demonstrate how strong management enables the staff to perform good resident care. In this first case, strong leadership from management was evident in their regular presence on the units, their willingness to assist staff when needed and the provision of clear instructions and guidelines. This resulted in a cohesive staff willing to deliver good resident care.

Many residents in this nursing facility are at risk for pressure ulcers but only two residents in the long-stay samples had developed pressure ulcers in the previous 90 days. Repositioning is done frequently and timely. In addition, observation showed that nursing assistants assisted ambulatory residents to the restroom for toileting. The residents who have difficulty ambulating are changed every 2-3 hours. When residents wear attends they receive good peri care and regular changes of attends. All staff is truly motivated in this small rural nursing facility. The staff is dedicated to providing excellent care and they succeed to a large degree. The nurses expect a certain level of care from the nursing assistants and the nursing assistants live up to the standards. Management is very involved and often present on the floors. All nursing staff has clear work assignments; specific tasks, such as weighing, vitals etc., are assigned to specific staff on specific days. Assignments are clear and enforced.

Good team work, excellent supervision. Quality of resident care rated as above average by study nurse. Facility 13; pages 17-23, 42, 144.

In this second case, strong supervision from management staff combined with excellent staff training resulted in good staff performance.

In one nursing facility, with a sub-acute isolation unit, mainly for isolation of residents with MRSA, VRE, UTIs, and URIs, most of the residents are admitted with hospital-acquired infections. There is a very strong focus on isolation techniques and excellent monitoring and enforcement. Prevention and screening for infection is adequate, hand washing is consistent, gloves are worn, and antiseptic dispensers are located throughout the facility. Administration/Infection Control provides educational programs to teach staff proper isolation techniques and the facility provides in-services related to isolation precautions for families and friends. Strict policies are in place to enforce compliance with infection control. Anyone who is observed not washing hands or not wearing gloves can be terminated on the spot. Facility has implemented a tracking and trending program for infections. Facility 11; pages 24-26, 39-40, 74, 105, 126, 132, 139, 143, 144.

Unit Management

Supervision of direct care nursing staff influencing the quality of provided care were most effective when carried out on the units. It was on this level that an insufficient adherence to proper procedures, insufficient implementation of care plans, and inappropriate staff-resident interaction could be noticed immediately and corrected. However, the nurses who were assigned with the supervising tasks were often not in the position to provide the needed guidance. Floor nurses, and charge nurses who were mostly in the position of observing what was actually happening with resident care had their own assignments, which involved administering medication and/or providing treatments. Unit managers, who often did not provide direct resident care, had multiple responsibilities from case management to nursing staff management. Faced with their own task the nursing staff on the units often ignored their supervising responsibilities. This was partly due to nursing staff levels as discussed in an earlier section. However, supervising nursing staff on the units differed considerably in their ability to lead their staff.

The following two cases, both recorded in the same nursing facility but on different units, highlights how differences in supervisory skills of the individual nurses in charge, directly affected the quality of care. Inadequate supervision in the first case resulted in poor quality of care. The second case illustrates the positive effects of good nursing supervision.

Female resident XX on the long-term care unit is calling out for help repeatedly. There is initially no response from staff. In addition, many call lights are ringing. The unit manager (in the facility on his day off to catch up on paperwork), the charge LPN and three nursing assistants are all gathered at the nurses' station, visiting with each other. It takes about ten minutes before the LPN directs a nursing assistant to find out who is calling. The nursing assistant reports that resident XX is short of breath, sweaty and "looks kind of gray". The LPN instructs the nursing assistant to do a pulse O2. The nursing assistant completes this as instructed. Pulse O2 is low (82%). The LPN meanwhile has not left the nurses' station and gives no indication

that she will act on this information. The nursing assistant becomes angry, confronts the LPN and tells her, "Do something." The nurse then calls the physician without performing a resident assessment herself. The MD gives new orders for O2 to titrate to 90%, stat CBC and a chest X-ray. The nursing assistant in the meantime has taken appropriate action to relieve the resident's discomfort (HOB elevated). She continues to check on the resident and responds to call lights. Facility 23; pages 19, 113-116.

It was not clear what the reasons were for this inappropriate response to resident needs on the part of the LPN and some nursing assistants. This was a weekend shift and several of the workers had performed one or more double shifts in the previous seven days. However, this was similarly the case on the sub-acute care unit where an RN was present as a supervisor on the same shift. Her performance as a nurse and as a supervisor was quite the opposite and the resulting resident care was similarly different.

Response to call lights is timely on the Medicare unit during the weekend evening shift. All nursing assistants are providing care as needed. The RN on duty is informed by a family member that one resident has edema to the lower extremities. The RN notifies the family member that she has already placed a call to the resident's physician and is awaiting a return call. The nurse informs the family that she will place a repeat call to the MD if she does not receive a return call in the next thirty minutes. The MD calls within the designated period and gives new orders for care. The RN informs the family and instructs the nursing assistant as to the new interventions. This RN is clearly in charge: communicative with nursing assistants and family members, aware of the resident's condition, performing timely assessments and responding appropriately. As a result, the resident receives good care. Facility 23; page 132.

Inadequate supervision on the unit level often resulted in poor implementation of individual resident care plans, clinical guidelines and/or protocols, and unresponsiveness to residents' needs. When adequate supervision on the units was insufficient or lacking, the provision of high quality care rested solely with the individual *nursing assistants*, who were sometimes up to the task and sometimes not.

Resident 13 who resides on the Alzheimer/dementia unit has been noted with a weight loss of 13 lbs. since admission. Care plan interventions specify: carnation with all meals, ice cream with lunch and dinner, and high caloric snacks TID. The resident does not receive carnation with lunch as per care plan, ice cream is offered but the resident refuses. The nursing staff does not encourage the resident to increase his meal intake. The resident consumes just 25 % of his lunch. During this meal, one LPN is on the unit distributing medication. No supervision of nursing assistant staff is observed nor does the nurse give any indication that she is aware of the care plan instructions for this particular resident. Facility 15; pages 74-77, 82, 84.

Management Tools, Protocols, and Standards

Even though nurses who functioned in a supervisory capacity differed in their skills to lead, enforcement of good care practices did not always require their active involvement. Supervision on the unit level was most effective when a system was in place where staff was reminded to accomplish a task and where the supervisor could easily verify its completion. The systems can be more or less sophisticated but they always involved a situation where expectations were clear, standards of care were explicit, and practice guidelines were available. It is at this point that management staff can be important but this is not necessary.

The following example was recorded on a unit where the nursing supervisor did not particularly engage in apparent supervision. The unit, however, ran smoothly and the residents all received good nursing care.

All residents on the Alzheimer/dementia unit are appropriately dressed, clean and groomed at all times. The unit is clean and free of odors. The nursing assistants are observed assisting the residents with hand washing following toileting. A bathlist is posted on the unit and baths are signed off by the nursing assistantss when completed. If a resident refuses on a scheduled bath day, another nursing assistant tries at a later time, if the resident then still refuses the next shift tries. The unit coordinator does not accept postponement of scheduled baths to the next day, the next shift is okay. Nursing assistants are experienced in working with Alzheimer residents; they are observed testing the water temperature before placing a resident's hands under the faucet, cueing a resident to dry her own hands, allowing the resident to maintain skill. There is sufficient staff available on this special care unit. The nurse to resident ratio is 1:24 and the nursing assistant to resident ratio 1:12. The ratios are the same on the day and evening shift, during the week and weekends. The staff is well trained and has tenure between three to five years. Few occurrences of supervision are observed. However, expectations are made very clear, and tools are in place to facilitate easy implementation and enforcement. Facility 17; pages 26-29.

In the next example management found a strategy to increase the likelihood that staff delivered resident care as expected. Observations revealed that this was an effective method.

In this large nursing facility with a sub-acute isolation unit expectations are made very clear. Staff is well trained and family and friends are in-serviced on isolation precautions. Implementation of good care practices is reinforced in several ways. Good hand washing is performed consistently by nursing staff. Soap containers placed throughout the facility are monitored to ensure they are used. Gel dispensers are located on all the halls. Every two hours TEA-time (turn, evaluate and assess) is announced over the loudspeaker reminding the nursing staff of their task. As a result, residents are assessed and repositioned every two hours, even though, this may require staff to don masks and gloves. In addition, a routine for feeding is established ensuring that all residents are fed. Staff performs well in general. The facility is highly rated by the study nurse. Facility 11; pages 25, 26, 59, 105, 126, 132, 139.

Management Training

During interviews, nurses in different professional capacities expressed that they did not feel prepared to supervise or that they felt uncomfortable in that role. In general, the nurses expressed that they did not feel adequately trained. Training on issues of management appeared to be lacking from their professional educational background.

Most nursing facilities did not provide additional training in the form of in-services on the subject. The topic might have been addressed in one-on-one training sessions that some facilities did offer their staff. In only one facility, where supervision was in general very good and resident care was equally above average, both the DON and a unit manager raised the subject of inadequate training.

The DON in an interview with the study nurse indicates, "I observed inadequate supervising skills with nursing staff and I began mentoring and training nurses to supervise." The DON further observes, "This skill is not taught in school and many nurses do not know how to provide adequate and effective supervision. Nurses need to learn how to assume and stay in a supervising role and not assume the role of buddy with staff." That this DON apparently had put her words into practice is reflected in a statement by one of the unit managers in the same facility who indicated that the DON taught her all she knows about supervising. Facility 52; page 17.

Given the relative importance of adequate supervision of nursing staff on the quality of resident care, training on this subject received disproportionately little attention.

6.3.7 Nursing Skills, Expertise and Training

Nursing skill, knowledge and expertise were important factors in the provision of adequate resident care. They influenced the nurses' ability to identify problems, provide timely notification, and intervene appropriately. The assessment skills of all nursing staff, and ancillary disciplines, contributed to a positive or negative quality outcome for the resident.

Nurses relied in many instances on the observation skills of the nursing assistants for early identification of problems or changes in residents' status. In the case studies, nursing assistants frequently reported early symptoms in a timely fashion, however the nurses, LPN or RN, did not always follow up with an appropriate assessment of the reported symptoms. In addition, nurses did not always recognize the symptoms or the seriousness of the symptoms. Thus, the appropriate disciplines would not be notified and timely interventions did not occur.

The following two cases illustrate the importance of communication among nursing staff and between disciplines in the assessment of potentially important symptoms.

Resident S15 has a history of CHF and CRF. The aides on the long-term care unit where the resident is residing note changes to urine color and output, indicating a possible UTI. The nursing assistants report these findings to the LPN who shows the urine to the MD that same day. A C&S is ordered immediately. Good observations by nursing assistants, good communication among nursing staff and between disciplines. Facility 40; pages 99 and 102.

Resident N16 with a diagnosis of CHF resides on the long-term care unit. The resident had a 10 lb. weight gain in the past ninety days. This weight gain is noted by dietary, not by nursing, however nursing noted an increase of edema to the resident's lower extremities. The resident is on Lasix. During a care conference observed by the study nurse, nursing did not indicate awareness of the resident's weight gain, but did notice increased leg edema. Dietitian is not present during care conference. There is evidence of inadequate nursing assessment by not reviewing the weight of this resident. Dietary assessment was adequate, but the communication between the nursing and dietary departments is inadequate. Facility 55; pages 40, 42, 110, 114, 132-134.

Assessment of Acute Illness or Changes in Health Status

Recognition, accurate interpretation and a timely response to early symptoms are of significant importance for the Rehospitalization quality measure. Good nursing assessment skills (or lack there-of) often made a substantial difference in the resident outcome. The following three cases illustrate a lack of assessment skills and knowledge on the part of nursing staff.

Resident LTC07 residing on the long-term care unit has difficulty breathing during one evening meal. The symptoms are reported by the nursing assistant to the charge LVN in a timely fashion. The LVN on duty on the unit that evening proceeds with an auscultation of the lungs and determines that "it is just in the throat". The LVN does not report the symptoms to the physician or the RN house supervisor and, in addition, fails to document the episode in the records. A visiting PA who is in the facility on routine visits the following morning (Saturday) orders nebulizer treatments. The PA orders specify to notify the PA in case of any further wheezing. Even though the LVN had apparent ER experience, her interpretation of this resident's symptoms was clearly insufficient. Facility 13; pages 73-91.

Resident SAC 5 on the long-term care unit was noted with a harsh productive cough and fever of 101F. No further nursing documentation until the MD, who is in the facility for a routine visit one-week later, orders a chest X-ray. The chest X-ray is positive for pneumonia. The resident is sent to the ER and admitted. A new RN, who is still orienting in the facility, reported the initial symptoms but the regular staff failed to follow-up with a nursing assessment and/or monitor the resident. Facility 55; page 61.

Resident 210 on the long-term care unit was sent to the ER for a suspected GI bleed, which was confirmed in the hospital. The resident returned to the nursing facility. Upon return, the facility nurses (ADON, RN and LPN) review the hospital records and express that they are not certain what the lab values mean. A resident assessment is delayed until forty-five minutes after the resident's return from the hospital. The oncoming evening nurse completes the assessment. The evening nurse instructs a nursing assistant to check on the resident "every 30-45 minutes" and "get

vitals pretty soon". In this case, there is inadequate assessment of a resident following an acute episode in addition to heavy reliance on nursing assistants for monitoring of the resident. There is clear evidence that the nursing staff has inadequate knowledge regarding lab values. The staff in this facility seems not prepared for higher acuity residents. There is no sub-acute care unit in facility. Facility 15; pages 41-43, 113-114.

Management staff in many nursing facilities readily acknowledged the lack of adequate assessment skills on the part of the licensed nursing staff. In staff interviews, the DON or Staff Development Coordinator (SDC) would often comment on this factor. However, few facilities targeted this specific area of concern on a regular basis in their in-service sessions. Some facilities provided one-on-one training session to address specific training issues with an individual staff member. It was not clear how frequently nurses' assessment skills were the topic in these sessions. One facility did institute in-services for licensed nursing staff to improve their assessment skills. These 'head to toe assessment' in-services as they were called would be offered as an on-going course to newly hired nurses and were mandated for currently employed licensed nursing staff.

Expertise in Managing Cognitively Impaired Persons

Expertise and skills of the nursing staff were also important in dealing with cognitively impaired residents. Expertise of all staff had a major impact on the resident outcome. This was especially apparent for the quality areas Resisting Care and Unclean/Ungroomed.

The following two cases illustrate how staff-resident interactions affected resident responses.

Resident XY is observed to be calling out for forty-five minutes, "Help me, help me." The only staff intervention involves the nursing assistants making reassuring statements in passing, however the intervention is ineffective. After forty-five minutes, a nurse offers the resident a tape player and headphones. The resident stops calling. There is a clearly insufficient application of appropriate intervention techniques on the part of the nursing assistants and a lack of timely intervention on the part of the nurse. Facility 43; pages 148-149.

Resident 14 who lives on the special care unit wants to scoot the chair along the floor during mealtime, removing himself from the table. The staff repositions the resident's chair twice, which causes the resident to become irritated. The staff takes some time with the resident and redirects his attention. The resident then loses interest in wanting to move from the table and forgets his irritation. Staff uses behavior intervention techniques appropriately and avoids escalating behaviors while still accomplishing the goal to allow the resident to eat at the table. All staff on the special care unit is specially trained. During the site visit, arrangements were made for all nursing staff on the special care unit to attend an Alzheimer conference. Management allowed half of the unit's nursing staff to attend per day so that the unit remained staffed with faces familiar to the residents. In addition, the facility provides special training to staff on special care unit. Facility 17; pages 43, 28.

Training

A fair amount of staff training was provided in the visited facilities. All nursing facilities did provide in-services at least monthly. These in-services were provided for the general nursing home staff and included topics that are important for all staff, such as fire safety and infection control. Few nursing facilities provided only monthly training. A majority of the facilities offered additional in-services specifically for nursing staff in which more facility specific issues were addressed. The topics ranged from preparing for a survey to more nursing specific topics such as pain management, vital signs, and dysphagia. In few facilities, these training sessions included some managerial topics such as teamwork, conflict management. Strong emphasis was placed on training and education in the facilities where the study nurses rated the care as above average. However, even in those facilities, the DONs expressed that training for licensed nursing staff could improve. Insufficient attention appeared to be given to the particular training needs of specific nursing disciplines. These training needs were greatest for the licensed nursing staff and included the training of supervisory staff in management techniques and the training of licensed staff in nursing assessment skills.

6.4 Conclusion

The case studies revealed that the quality of resident care in nursing facilities was clearly influenced by nursing staff levels. The observed ratio of direct care nursing staff (RNs, LPN/LVNs, CMAs, and nursing assistants) to residents on a particular unit at a particular time was frequently a determinant of the observed quality of care provided to particular residents. More specifically, quality of care concerns were found if nursing staff levels fell below reasonable thresholds; staff was simply physically unable to provide all the residents with the required care and/or adequately monitor all the residents. This finding argues for the importance of some minimum staffing ratio to protect nursing home residents

If nursing staff levels were above the minimum necessary levels, quality of care varied. With adequate staffing levels, the quality of resident care was still compromised in certain nursing facilities, but not in others. Variation in quality of resident care appeared to reflect management practices related to the allocation of nursing staff and short staffing, as well as supervision related to implementation of clear resident care protocols, and staff training and development. These findings suggest that to optimize the value of available nursing home staff, we should also address staffing issues beyond minimum nurse staffing levels.

Three issues regarding allocation of nursing staff appeared to contribute to the quality of resident care: (1) the availability of ancillary, management and support staff (e.g. restorative, activity, and housekeeping staff); (2) the distribution of available staff during peak hours; and (3) the allocation of staff to the Alzheimer/dementia units. Ancillary, support, and management staff were present in greater numbers on the day shifts during the week. These staff members relieved the direct care nursing staff of a portion of their duties, enabling nursing staff to take more time with residents and to monitor residents more closely, averting potential quality of care concerns. Inadequate care when observed during the evening and weekend was partly attributed to the fact that fewer non-nursing care staff were available

during these times. Allocating nursing and non-nursing staff during peak hours based on resident needs directly affected the quality of resident care. Solutions at some facilities included: designating one staff member solely to answer residents' call lights, allowing multiple mealtime sittings, and assigning nurses to monitor the dining rooms instead of administering medications during these times. Nonetheless, in many nursing facilities such practices were not instituted.

Allocation of nursing staff to Alzheimer/dementia units was a concern in some nursing facilities. Licensed nursing staff were not present on a continuous basis on the Alzheimer/dementia units; a practice that was routine during the night shift in almost all nursing facilities. However, in some nursing facilities there was no licensed nurse present on the Alzheimer/dementia unit on any shift, other than to administer medications and when called upon for medical and/or behavioral concerns or emergencies. Without licensed nursing staff, nursing assistant supervision was limited and residents were not well monitored such that emerging medical concerns were missed. Another staffing issue occurred on the Alzheimer/dementia unit when short staffing in other parts of the nursing facility necessitated a redistribution of nursing staff. All types of nursing staff from the Alzheimer unit were more likely to be pulled in order to increase staffing levels on other units, most notably the Medicare/sub-acute units, at times leaving the Alzheimer/dementia units significantly understaffed.

Absenteeism or call-ins often exacerbated chronic nursing shortages; a situation that occurred particularly for nursing assistants on the night, evening, and weekend shifts. Working short staffed, with less than the routinely scheduled nursing staff often resulted in poor resident care. Different areas of care were compromised under these circumstances, but most likely the more difficult and/or time consuming tasks were targeted for omission. Preventive care such as repositioning and toileting, dental hygiene, mealtime assistance and/or supervision, the provision of activities were the areas most frequently omitted by nursing assistant staff. Nurses were often not able and in some instances appeared unwilling or unmotivated to provide the nursing assistants with additional help. When the licensed nurses were short staffed, they often concentrated on their immediate direct care nursing tasks and simply omitted supervisory responsibilities. Chronic short staffing due to absenteeism had a negative effect on staff motivation, conceivably resulting in staff vacating their positions.

Requesting or mandating that the nursing staff work additional hours was a frequently used management approach to deal with short staffing. This might include extra hours added on to shifts, extra shifts not routinely scheduled, double shifts, or Baylors (back to back double shifts). This practice appeared to eventually backfire especially when many of the nursing staff worked an extensive number of additional hours or worked additional hours on a regular basis. Staff motivation declined in some cases and job performance often deteriorated leading to quality problems or compromised staff-resident interactions when staff became irritable and/or tired. In addition, nursing staff tended to call in more frequently when over-committed, continuing the short staffing cycle.

More than a third of the visited facilities opted to use agency staff in order to deal with short staffing situations. Of the facilities using agency staff, four did so on a regular, almost daily, basis. In facilities where regular staffing with agency personnel occurred, the same staff was requested on a repeat basis in an effort to provide some continuity of care. In general, job performance of agency staff appeared to match the job performance prevailing on the units where they worked. Agency staff did not generally stand out one way or the other; if the regular nursing staff did a good job, so did the agency staff, and vice versa. This finding was contrary to the negative perception of agency staff by many nursing facility staff, whether they worked with them or not. Negative perceptions at times involved applying higher standards to agency staff than regular staff. However, regular staff working with agency personnel sometimes expressed being 'burdened' by agency staff because they had to answer more questions to orient the agency worker to residents' needs or the facility's care procedures. This appeared to be a valid complaint, particularly when agency staff did not receive special orientation or were not accommodated with relevant additional information regarding the resident status or unit proceedings.

Management in some facilities were able to respond effectively to temporary short staffing conditions. In some facilities management staff assisted with resident care, not only improving quality but boosting morale. Of the several possible responses to deal with conditions of chronic understaffing in a nursing facility, it appeared that the use of agency staff created fewer quality of care concerns for the residents in the visited nursing facilities than nursing staff working extensive and/or frequent additional hours, or working short staffed.

Good management and supervision of the nursing staff were essential to providing high quality care. Good managers/supervisors provided clear and fair guidelines/policies, clear instructions and expectations regarding the standards of care, available material and staffing resources to allow easy implementation of these standards, and consistent follow-up and enforcement of these standards. Strong leadership at the facility management level, especially from the DON, was often associated with good staff morale and good quality of care.

If leadership from facility management was weak and/or divided, resident care was more likely to be compromised. With insufficient or inadequate leadership from facility management, supervision on the unit level became more important. Charge nurses and unit managers showed varying capacities to lead and supervise their direct care staff. If strong leadership was present on the unit level, it had a significant positive effect on the quality of resident care. However, nurses in a charge position on the unit level frequently did not show evidence of leadership. In many instances, the nurses were too preoccupied with their own tasks to be able to provide adequate supervision; they were too busy completing administrative tasks and/or administering medications. In some instances, the nurses clearly lacked the skills; this was apparent from observations and by their own admission.

As we would expect, quality of resident care was influenced to a large extent by the expertise, skills and knowledge of the individual direct care nurses. Nurses' assessment skills

were at times insufficient, leading to poor recognition or misinterpretation of relevant symptoms, such that appropriate follow-up did not occur in a timely manner. Although these assessment skills can help avert hospitalization, nursing facilities often did not provide specific training for nurses to develop these skills. One area where staff expertise and knowledge is especially important is in the interaction with cognitively impaired residents. Good interaction skills seemed to reduce incidents of resistance to care and agitation on the part of the residents. Some staff seemed to possess the skills to interact appropriately with cognitively impaired residents, however more training in behavior modification and management techniques appeared to be required.

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7.0 Training and Education: What is Needed to Prepare Nursing Assistants to Deliver Good Care²

7.1 Introduction

As other chapters in this study have shown clearly, staffing numbers alone have a significant effect on quality of care and quality of life in nursing facilities. Also vitally important to the delivery of good care, however, is ensuring that nursing assistants have the knowledge, preparation, support and supervision necessary to do their jobs with competence and confidence.

This chapter covers what nursing assistants need to know in order to recognize and respond to resident needs, and how they learn to perform tasks of care and work collaboratively with others on a care team. It is based on the following definitions, assumptions, and parameters:

- The purpose of educating nursing assistants is to prepare them to deliver good care to residents and to recognize and respond to resident care needs with confidence and competence.
- A first step to evaluating educational programs is understanding the roles and responsibilities of certified nursing assistants. What are they called upon to do? What kinds of knowledge and thinking skills must they draw upon?
- “Training” is too narrow a word to encompass the wide range of education and reinforcement that a student needs to assume the responsibilities of a nursing assistant. Training prepares a person to perform a task or a job. Education implies knowledge or cognitive ability to recognize and understand abstract concepts.
- Too often, the federally mandated pre-employment certification training is a nursing assistant’s first, last and most substantive exposure to formal education. A comprehensive approach to education provides many ongoing opportunities for different types of learning such as:

² Mary Ann Wilner, PhD, Director of Health Policy, Paraprofessional Healthcare Institute wrote Sections 1, 2 and 17 and parts of Sections 15 and 16 of this chapter and contributed to many others. Sections 3 - 13 and parts of Section 15 and 16 were written by Elise Nakhnikian, Long Term Care Specialist, Paraprofessional Healthcare Institute. Section 14 was written by Susan Joslin of CMS and Donna Hurd of Abt Associates. Susan Joslin also wrote part of Section 16. Genevieve Gipson of Career Nurse Assistants Programs Inc. and the National Network of Career Nursing Assistants contributed to Sections 16 and 17. Joanne Rader and Charlene Boyd also contributed to Section 17. The authors received valuable feedback from a number of sources, most notably Texas-based nursing assistant educator Barbara Accello; Patricia Green and the members of her NursingAssistant@yahoogroups.com listserv; Elma Holder and her colleagues at the National Citizens’ Coalition for Nursing Home Reform; Janet Myder and her colleagues at the American Health Care Association; and Hazel Slocumb, Assistant Chief of the Health Care Personnel Registry for the state of South Carolina.

- Transferring learning from the classroom to the clinical setting;
- Gaining and incorporating new knowledge and skills;
- Receiving support, supervision and feedback to reinforce the learning;
- Teaching and supporting peers; and
- Competency checks and remediation.

With these parameters in mind, the research team sought answers to the following questions:

What effects do educational programs have on care quality and continuity?

- Does a nursing assistant's education affect the quality of care that he or she delivers?
- Does education affect retention and turnover rates?
- Does access to education affect recruitment of potential nursing assistants?

What is currently taught?

- What topics are included in the federally mandated pre-employment training programs?
- How are these curricula taught? What qualifications and training do the teachers have?
- What is included in the mandated 12-hour annual in-service programs?
- How have states added to the federal educational requirements?
- What do CNAs say about the usefulness of existing programs?
- Where do the certification training programs take place? Under whose auspices? Are provisions made for consistent outcomes?
- Who pays for certification training? Is the cost a barrier to entry for nursing assistants, or an undue burden for nursing facilities?

What important areas are not likely to be covered adequately in the course of a nursing assistant's education?

- Orientation and supervision;
- Cross-cultural communication and competence;
- Problem solving;
- Critical thinking;
- Communication with residents and their families, peers and supervisors;
- Leadership;
- Stress management;
- Managing difficult workloads; and
- Serving clients with certain disabilities or diseases.

What role do career advancement programs play?

How common are career ladder programs for nursing assistants, and how do they work?

What could be done to improve the current system?

The chapter concludes with a list of recommendations.

1.0.0 Executive Summary

This chapter looks at nursing assistant education and its effect on resident quality of life and quality of care in nursing facilities.

Education is broadly defined to include not just the certification training and testing required of all new nursing facility nursing assistants or the 12 hours of mandated in-services per year but also an array of other programs and systems that nursing assistants need in order to feel confident and competent in doing their jobs. These include orientation, supervision, organizational support, ongoing education, opportunities for career advancement, support services to prepare marginal workers and those who need to improve their English skills for the workforce, and special training to help workers cope with the multiple physical, emotional and organizational demands of the job.

Although nursing assistant work is often perceived as unskilled, nursing assistants perform a complex and key function in nursing facilities. As Section 7.3 explains, nursing assistants are the most important person in most residents' lives. As such, they must be inclined by nature, prepared by training, and empowered by their facilities to offer not just physical but emotional support. Because nursing assistants are so important to residents' quality of life, frequent turnover in that position can have a significant negative impact. While many factors affect the turnover rate in an average facility, research indicates that adequate training, orientation and supervision play a key role.

As Section 7.6 details, there were no federal requirements for nursing assistant training until the Omnibus Budget Reconciliation Act (OBRA) of 1987 mandated that they have a minimum of 75 hours of training, pass a certification exam and skills test, and follow up with 12 hours a year of in-service education. Many states require more hours, mandate specific topics that must be taught, or both. These rules were passed in reaction to reports from the Institute of Medicine and elsewhere in the 1980s indicating that the quality of nursing home care was seriously deficient, and that nursing assistants were one of the key players in delivering quality care.

Approximately 14 years after the passage of OBRA '87, however, many long term care stakeholders are concluding that its mandates for initial training of nursing assistant training did not go far enough. There is also a general consensus that in-service classes tend to be repetitive and boring, and that they are not tailored to meet the needs of individual nursing assistants, or to reflect the special needs of a facility's population. Perhaps because formal training does not go far enough, evidence points to the fact that nursing assistants learn many crucial skills on the job. In the process, they often learn ways of cutting corners that allow them to shoulder often burdensome workloads but do not account for individual residents' needs or preferences.

Section 7.8 explains how the certification training mandated by OBRA ranges widely in style, quality and content depending on the individual instructor, the requirements of the state in which they are taught, and perhaps the location of the classes. Some classes are taught in nursing facilities; some in community colleges, vocation-technical colleges, or high schools; and some in private schools. The basic curriculum includes personal care skills and certain basic medical procedures, with some time spent on common conditions associated with aging. Some adult education methods are often used to convey the material, but lectures and written texts generally predominate. The curricula often look impressive on paper, but covering all that ground effectively in 75 hours or slightly more is a challenge. In addition, teachers are required to have only minimal preparation other than a background in nursing, and some lack training in adult education.

The tests for certification are developed and administered separately from the curricula for certification classes. As a result, some say, the subject matter does not always jibe, and students may be tested on material they were not taught.

As described in Section 7.9, more problems surface when idealistic new students attempt to transfer their learning to the worksite. Many learn that there is no time to do things the way they were taught, leaving them to weigh the necessity for using shortcuts against their reluctance to compromise resident care or quality of life. Often, these decisions must be made without the help of effective orientation, supervision or organizational support.

The certification and ongoing education mandated by the federal government is supposed to be paid for by the government, but all costs are not always covered, leaving nursing facilities or nursing assistants themselves to pick up some of the expenses. This can create a financial burden for facilities and serve as a barrier for nursing assistant candidates, many of whom are living on the brink of poverty.

Section 7.12 outlines the elements that are commonly missing in preparing nursing assistants for the job, from a failure to recruit the right candidates to a lack of English as a Second Language (ESL) classes and other support services to enable others to attend classes to an absence of key content areas in most training that leaves new nursing assistants poorly prepared for the realities of the job. For instance, few certification classes teach problem solving and critical thinking, how to communicate with residents and their families, how to get along with supervisors and peers, and how to manage a difficult workload, although these are all skills most nursing assistant must draw on daily.

Section 7.13 looks at career ladders for nursing assistants, outlining how they are defined and what elements they tend to include and noting that they are more the exception than the rule, although evidence indicates that they help retain nursing assistants by providing motivation and recognition for learning skills or acquiring knowledge beyond the basics. Sections 7.14 through 7.16 offer examples of current training programs and related initiatives sponsored by states, providers, trade unions and others. While the researchers were unable to do an exhaustive search for the best practices in the field, these programs provide a variety of examples of promising practices, which other facilities may be able to adapt.

In Section 7.17, recommendations for improving nursing assistant education and ongoing training are formulated by the Paraprofessional Healthcare Institute. Divided into recommendations for the Centers for Medicare and Medicaid Services (CMS), for states, and for nursing facilities, these describe an educational approach, structural framework and set of relationships that need to be in place in order to develop and sustain training and educational opportunities that will prepare nursing assistants to deliver good care to nursing home residents.

In general, the recommendations focus on expanding the training requirements for CNAs. “Raising the bar” for entrance into the nursing assistance field might seem counter-intuitive at a time of such widespread vacancies throughout the industry, but these recommendations are based on an assessment that *retention* of nursing assistants once in the field is the primary solution to addressing vacancies—not simply attracting more, less prepared, new applicants.

7.2 Methods

Relatively few articles in peer-reviewed medical or professional journals have focused on nursing assistant education. Of those, most describe a program with a narrow focus, such as incontinence or dementia care, which was implemented in one or two facilities and may not be easy to replicate.

Literature review

A search of PubMed brought up a number of relevant articles. Other books, articles and unpublished papers and studies were recommended by key contacts (see below). Citations in these articles led to other material of interest, all of which is listed in the bibliography following this chapter.

Key contacts

A number of key contacts reviewed our initial outline or shared their insights into some or all of the material covered. Most also recommended promising educational programs and relevant literature. These contacts included nursing assistants, researchers, nursing facility administrators, trade association staff, nursing assistant educators, state nursing assistant education supervisors, and consumer advocates.

Site visits

Visits to federally mandated certification training programs in the Baltimore, Philadelphia and Boston regions helped illustrate variations in class content and teaching methods.

Promising practices

Recommended by our key informants, the promising programs described in Sections 7.15 and 7.16 represent a range of intriguing possibilities sponsored by nursing facilities, community colleges, state and county governments, unions, educational institutions, and other non-profit entities.

State requirements

The research team collected data on state mandates from earlier studies and examples of state-approved programs from key informants.

It is anticipated that additional information on this topic will be available shortly from the Office of Inspector General of the Department of Health and Human Services, which is conducting a 50-state survey of CNA educational and training requirements, including extensive interviews in New York, Washington, Louisiana, Minnesota, and Florida.

7.3 Nursing Assistant Profile

“We’ve continued to look at NAs for years as an amorphous mass of people who do what nobody else wants to do. And how do you get any kind of satisfaction out of having a job like that? How do you feel valued?”³

1. 7.3.1 What Nursing Assistants Do on the Job

Nursing assistants constitute the largest group of workers in nursing facilities (approximately 43 percent).⁴ They interact more with residents than any other members of the staff, providing approximately 90 percent of the hands-on care⁵⁻⁶ and serving as the “eyes and ears” of the nurses they report to.

The job is physically demanding as well. Nursing assistants spend hours on their feet, often lifting or transferring incapacitated residents. They are frequently exposed to hazardous chemicals and blood borne pathogens. And residents with dementia often strike out at nursing

assistants. As a result, nursing facility nursing assistants have one of the highest on-the-job injury rates of any type of U.S. worker,⁷ totaling 15.9 percent in the most recent government survey.⁸

Their responsibilities vary depending on state regulations and facility policy, but virtually all nursing assistants watch for significant changes in a resident’s condition, including signs of depression, mental confusion, or incumbent pressure ulcers. They help residents eat, dress and

³ Genevieve Gipson as quoted in Pair power: For veteran nursing assistants, partnerships with peers provide support and stability. *Contemporary Long Term Care*, February 1996.

⁴ U.S. General Accounting Office (GAO, May 17, 2001). Nursing workforce: Recruitment and retention of nurses and nurse aides is a growing concern, Figure 4. Testimony before the Committee on Health, Education, Labor and Pensions, U.S. Senate

⁵ Waxman HM, Carner EA, Berkenstock G. (1984). Job turnover and job satisfaction among nursing home aides. *Gerontologist* 24: 503-509

⁶ Bowers B; Becker M. (June 1992) Nurse's aides in nursing homes: the relationship between organization and quality. *Gerontologist* 32(3):360-6

⁷ Service Employees International Union (1997). Caring till it hurts: How nursing home work is becoming the most dangerous job in America. Washington, D.C.

⁸ U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses, 1997. <http://www.osha.gov/oshstats/bls/serv7.html>.

undress, bathe, transfer, ambulate, and maintain range of motion. They help with toileting; care for residents' mouths, skin and nails; and reposition residents who can't move. They fill out paperwork documenting much of what they do. And they take temperature, pulse, respiration and blood pressure readings; record intake and output of fluids; make beds and clean rooms; and provide postmortem care. Another responsibility is rarely included in official lists of what nursing assistants do, but it may be their most important one: forming relationships with residents.

The work of a nursing assistant is emotionally demanding. Caring nursing assistants grow close to at least some of "their" residents only to watch them suffer losses and indignities, grow sicker, or die. As one nursing assistant recently wrote to a listserv in welcoming a new member to the profession: "If you think it's easy, think again. It's demanding and overwhelming, especially your first day. EVERYTHING will hurt ... including your heart."⁹

The work is emotionally rewarding as well. The main reason nursing assistants stay in the field is their commitment to the residents they care for.¹⁰ Of all the complex, often volatile relationships to be found in nursing facilities, the relationships between nursing assistants and residents are paramount to most nursing assistants—and most residents.

2. 7.3.2 The Importance of Nursing Assistants to Residents

For a 1985 study, the National Citizens' Coalition for Nursing Home Reform (NCCNHR) asked 455 nursing facility residents to talk about what factors had the most influence on their quality of care and quality of life. The most important single factor, the residents agreed, was well-trained staff who were friendly, cheerful, competent and polite. The study participants discussed all level of staff, but they mentioned nursing assistants most often.¹¹ Those findings have been borne out by other studies of residents¹²⁻¹³ and their family members.¹⁴

Improving the Quality of Care in Nursing Homes, an Institute of Medicine report, noted that "[n]ursing homes are 'total institutions' in which caregivers, particularly nurse's aides, represent a large part of the social world of nursing home residents and control their daily schedules and activities. This is the total environment for many nursing home residents for the duration of their stay, which may be several years."¹⁵

⁹ Jessica Helms, message to NursingAssistant@yahoogroups.com.

¹⁰ Iowa CareGivers Association (December 2000). Certified nursing assistant recruitment and retention project final report summary. Iowa Department of Human Services, contracts 99-040 and 2000-008.

¹¹ Spalding J. (1985) A consumer perspective on quality care: The residents' point of view. National Citizens' Coalition for Nursing Home Reform (Washington, DC).

¹² Grau L, Chandler B, Saunders C. (1995) Nursing home residents' perceptions of the quality of their care. *Journal of Psychosocial Nursing Mental Health Services* 33: 34-43.

¹³ Deutschmann (August 2001). Redefining quality & excellence in the nursing home culture. *Journal of Gerontological Nursing*.

¹⁴ Duncan M, Morgan D. (1994) Sharing the caring: Family caregivers' views of their relationships with nursing home staff. *Gerontologist* 34; 235-244.

¹⁵ Institute of Medicine, Committee on Nursing Home Regulation (1986). *Improving the quality of care in nursing homes*. National Academy Press (Washington, DC).

Because of the intimate nature of their relationship to residents and the degree to which most residents depend on them for even the most basic needs, a thoughtless or incompetent nursing assistant can do much to erode residents' quality of life. Jackie Coombs, a nursing facility resident, listed 28 of those ways for NCCNHR. Coombs' list includes both sins of commission, such as "Watching TV while working on resident or standing in front of TV so resident can't see it," and sins of omission, such as "Not drawing privacy curtains in warm weather. Residents in bed partially nude."¹⁶

Pillemer and Moore (1989) identified more serious forms of abuse and neglect in a study that concluded the following: "[I]t does not appear that maltreatment only occurs in isolated, well-publicized incidents, but that it may instead be a common part of institutional life."¹⁷ In a survey of 577 randomly selected nursing assistants and nurses who worked in nursing facilities, the researchers asked questions by phone, guaranteed respondents anonymity, and asked them to report other people's behavior as well as their own in an attempt to encourage candor. Even so, they noted, it was likely that abusive incidents were underreported to some extent. Yet 36 percent reported having seen a colleague physically abuse a resident in the preceding year, 10 percent said they themselves had committed such an act. Psychological abuse was even more rampant, with fully 81 percent of the respondents saying they had witnessed psychological abuse and 40 percent saying they had perpetrated it.

The most common types of physical abuse were excessive use of restraints (witnessed by 21 percent and committed by 6 percent); pushing, grabbing, shoving or pinching a resident (witnessed by 17 percent and committed by 3 percent); and slapping or hitting a resident (witnessed by 12 percent and committed by 3 percent). The most common acts of psychological abuse were yelling at a resident in anger (seen by 70 percent and done by 33 percent), insulting or swearing at a resident (seen by 50 percent and done by 10 percent), isolating a resident inappropriately (seen by 23 percent and done by 4 percent), threatening to hit a resident or throw something at him or her (seen by 15 percent and done by 2 percent) and denying food or privileges (seen by 13 percent and done by 4 percent).

Conversely, a simple act of kindness or care means more than it would in a less "total" environment. As researcher Sallie Tisdale pointed out in *Harvest Moon: Portrait of a Nursing Home*: "Ordinary, even familial things happen here, though often unwitnessed. Wounds are healed, muscles strengthened, faces washed, and hands held. Each small movement is tiny in its fruition, huge in its absence."¹⁸

The National Council of State Boards of Nursing (NCSBN) has also acknowledged the importance of the care nursing assistants provide, both mental and physical. The NCSBN, which administers licensing exams for nursing assistants, says nursing assistants should be proficient in

¹⁶ Coombs, Jackie. What nursing assistants do and do not do. National Citizens' Coalition for Nursing Home Reform (Washington, DC).

¹⁷ Pillemer, Karl and Moore, David W. (June 1989) Abuse of patients in nursing homes: findings from a survey of staff. *Gerontologist* 29(3):314-20.

¹⁸ Tisdale, Sallie (1987). *Harvest moon: Portrait of a nursing home*. New York: Henry Holt and Company.

five areas: mental health and social service needs, resident rights, basic nursing skills, basic restorative services, and personal care skills.¹⁹

But steadily increasing average resident acuity levels²⁰ and heavy workloads leave most nursing assistants hard pressed to attend to residents' mental health and social service needs. Even basic care needs often go unmet, as nursing assistants take shortcuts on some tasks and leave others undone altogether.²¹

This creates an ethical dilemma for conscientious nursing assistants, who often feel that they cannot provide the care that their residents need and deserve. As one nursing assistant recently wrote to other members of a listserv: "The amount of work you're expected to do in the time allotted is unreasonable. It's unsafe for yourself and it's unsafe for the resident.... [F]amilies put their loved ones in these facilities thinking they will get the love and care they for some reason can't provide. If they actually knew how these people are rushed to bed, rushed to eat, rushed to pee, and the little things they miss like oral hygiene and lipstick. It's a shame the shortcuts people can be forced to take. Then as CNAs we go home with a heavy heart, feeling that our job wasn't performed right, that we let them down."²²

The Effect of Nursing Assistant Education on Quality of Care and Quality of Life

As Kramer and Smith (2000) noted, "[r]elatively few studies have attempted to assess the effectiveness of nursing assistant training programs in increasing the participants' knowledge and improving the care they give to nursing home residents."²³

It is particularly difficult to find research evaluating the effects of OBRA's mandated education, perhaps because it was implemented so recently. Bernard Gross (July 1995) asked 352 long-term care professionals to evaluate quality of care in Pennsylvania's nursing facilities, rating 15 key areas ranging from "effective observation, assessment and reporting skills" to "provision of kind, gentle and caring service." Respondents were asked how well all 15 services were delivered during two time periods: shortly before OBRA's nursing assistant certification and testing mandate when into effect and five years later. They rated all 15 areas as improved after the mandate was enacted, all but two of them (work ethics and reduction in resident abuse) by a significant margin.²⁴

¹⁹ National Council of State Boards of Nursing, Inc. (1989) Nurse aide competency evaluation program (NACEP). The Psychological Corporation (San Antonio).

²⁰ National Nursing Home Survey, National Center for Health Statistics, U.S. Department of Health and Human Services, 1977 and 1997.

²¹ Foner, Nancy. (1994) *The caregiving dilemma: Work in an American nursing home*. University of California Press (Berkeley/Los Angeles/London).

²² Message from nursing assistant Melissa Lothrop to NursingAssistant@yahoogroups.com.

²³ Kramer and Smith, 2000.

²⁴ Gross, Bernard M. (July 1995) *Quality of care defined: An analysis of the impact of nurse aide training and competency testing programs on quality of care of residents of long-term care facilities in Pennsylvania*. Pennsylvania Department of Education, Bureau of Vocational-Technical Education, Harrisburg, PA.

Other research has linked improved outcomes to training programs that target a specific area, most often dementia care.

McCallion et al. (1999)²⁵ found that a group of nursing assistants who attended a series of personalized training, practice and feedback sessions on dementia care were better able afterward to manage “verbally aggressive behaviors such as yelling, physically nonaggressive behaviors such as wandering, and aggressive behaviors such as hitting.” The demented residents cared for by these nursing assistants exhibited significantly fewer depressive symptoms at both three and six months after the training, even as they became more disoriented due to the progression of the disease.

Wilner and Shenkman (1993) found a connection between support groups for nursing assistants and resident outcomes. Nursing assistants in 16 facilities participated in support groups for eight months, discussing teamwork and how to communicate with supervisors and peers, as well as technical information about resident care. At the end of the study period, nursing directors in several participating facilities reported that the residents assigned to CNAs who attended the groups experienced fewer problems. One supervisor noted that the “teamwork and consistency of care [of CNAs who participated in the groups] did increase. There was the same quality of work every day.”

Beck et al. (March 1999)²⁶ summarize the findings of 15 publications reporting on nine separate studies of dementia training programs for nursing assistants. Of the nine, they found, only one reported no improvements in resident behaviors and/or staff knowledge after nursing assistants underwent some form of specialized training in dementia care. Of the other studies, four reported a decrease in combative or otherwise problematic behaviors by residents. Others reported improvements in residents’ intellectual status, motor skills, mental condition (exhibiting less depression, agitation and confusion), and ability to function independently.

Two of the studies incorporated formal monitoring and feedback by supervisors after completion of training, and reported that this combination produced better results than training alone. Other studies have also shown that training cannot significantly improve care quality unless it is paired with effective supervision and organizational support systems (see Section 7.9).

7.4 Who Nursing Assistants Are

Just under 700,000 nursing assistants work in nursing facilities in the United States.²⁷ About nine in every 10 are women. Nationally, one in nine (11.1 percent) are foreign-born and just over half (56.6 percent) are non-Hispanic whites. African-Americans account for a larger percentage of nursing assistants than of the population in general, but they remain a minority at 31.8 percent.

²⁵ McCallion P, Toseland RW, Lacey D, Banks S (October 1999). Educating nursing assistants to communicate more effectively with nursing home residents with dementia. *Gerontologist* 39(5):546-58.

²⁶ Beck C, Ortigara A, Mercer S, Shue V (March 1999). Enabling and empowering certified nursing assistants for quality dementia care. *International Journal of Geriatric Psychiatry* 14(3):197-211; discussion 211-2.

²⁷ 1999 employment and wages for selected health care occupations and industries. Bureau of Labor Statistics, Occupational Employment Statistics, Washington, DC.

The percentage of black, Hispanic and/or foreign-born nursing assistants is much higher in cities than in rural areas.

Widespread stereotypes about women in general, and nonwhite and foreign-born women in particular, probably account for some of the tendency to dismiss nursing assistants as unskilled workers. As Wilner and Wyatt (1998) put it: “Home care aides especially, but CNAs as well, face a constant struggle against those who perceive or treat them as ‘girls’ or ‘maids.’ ‘This struggle reflects deep-seated prejudices about poor and working class women, especially African-American and Latin women. Since most workers choose this field as a health-related position, it is particularly frustrating for them to be perceived as glorified domestic service workers.’ (Surpin & Grumm, 1990)”²⁸

Just over half of all nursing assistants (51.5 percent) are between the ages of 25 and 44. More than a quarter (27.4 percent) attended at least some college. Most nursing assistants are their family’s primary wage earners. Only 39.4 percent are married, yet over half (56.3 percent) have children under the age of 18. About one in three (32.4 percent) are unmarried with children. Yet wages are low.

The median hourly wage for nursing assistants, orderlies and attendants was \$8.29 in 1999.²⁹ As a result, many workers live in poverty. Eighteen percent of all nursing facility nursing assistants have family incomes below the federal poverty level, 13.5 percent use food stamps, and 56 percent live at less than twice the poverty level.³⁰ The median annual salary for a nursing facility nursing assistant is \$13,287, just 120 percent of the poverty level for a family of two.³¹

Health insurance is out of reach for many. According to Wilner and Wyatt (1998), only 36 percent of all frontline workers have the option of getting health insurance through their jobs, and 28.5 percent have no health insurance at all.³² Nursing assistants who work in nursing facilities may be offered health insurance more often than their peers in home care, but even those whose employers offer the benefit often cannot afford it. In a report based on a survey of 900 nursing assistants who work in nursing facilities, the Service Employees International Union found that 22 percent of all workers in long term care are uninsured, compared to just 14.5 percent of workers nationwide. “Close to 20 percent of CNAs surveyed don’t even have access to healthcare coverage by their employer, while another 25 percent of those who are offered health plans cannot afford them,” noted the report.³³

²⁸ Wilner, Mary Ann, and Wyatt, Ann. (1998) Paraprofessionals on the front lines: Improving their jobs—improving the quality of long-term care, September 10-11, 1998. A conference background paper prepared for the AARP long-term care initiative. AARP (Washington, DC).

²⁹ American Federation of State, County and Municipal Employees. 2001. *Cheating Dignity. The Direct Care Wage Crisis in America*. AFSCME. Washington, DC.

³⁰ Center for Workforce Studies, University of Albany, 2001 analysis of CPS data, 1997,1998, 1999.

³¹ GAO, May 17, 2001.

³² Wilner and Wyatt 1998.

³³ Service Employees International Union (1998). A crisis for caregivers: Health insurance out of reach for nursing home workers.

3. 7.4.1 Stayers and Leavers

Genevieve Gipson, the founder of Career Nurse Assistants Programs Inc. and the National Network of Career Nursing Assistants, cautions against lumping all nursing assistants together in this and other statistical analyses. At one end of the scale, she says, are those who last less than a year in the profession, increasing turnover rates and changing the overall demographic profile. At the other extreme are the veterans she calls “career nurse assistants,” who stay for years and see what they do as a calling, not just a job. In their Ohio Teaching Network studies, Gipson and colleagues found that more than half the nursing assistants they surveyed had at least two years of service, just over a quarter (28 percent) had more than five, and one in eight had between 10 and 42 years.³⁴

Maun, Lind, and Efta (2001) report a similar finding, based on consulting work done in a number of nursing facilities: “Without exception, in every client facility, we find that 60% to 80% of the staff have been there two years or longer, many since the doors opened. The other 20% to 40% fill jobs that routinely turn over five and six times per year.... Turnover rates exceeding 100% generate from as few as 20% of total positions.”³⁵

Although there are no national statistics on stayers, they appear to have somewhat different characteristics³⁶ than their shorter-term colleagues.³⁷ Career nursing assistants appear to be a bit older than other nursing assistants (55.9 percent are between 31 and 50). They are somewhat less likely to have gone to college, with 86.1 percent having completed their formal education at the level of high school graduation or less. As Peacock (2000) pointed out, “This profile may be an artifact of perceived or real opportunities available.”³⁸

Another significant difference is the stability of their primary relationships. More than half (54.3 percent) of the stayers surveyed by Gipson et al. are married, compared to less than 40 percent of all nursing assistants.

4. 7.4.2 Strivers and Endurers

Tellis-Nayak and Tellis-Nayak (1989) proposed another way to differentiate between nursing assistants. Like Gipson and colleagues, they divided nursing assistants into two broad categories, but these categories, which the Tellis-Nayaks labeled “Strivers” and “Endurers,” were based on attitude toward the job rather than years of service.³⁹ In the Tellis-Nayaks’ estimation, nursing

³⁴ Gipson G.A. and Garland T. N. (June 29, 1998) Final Report: Training Experienced Nurse Assistants in Long Term Care.

³⁵ Maun C., Lind D, Efta G (2001). Workforce 21: Recruitment, selection and retention of top quality staff in the 21st century. Maun-Lemke Inc. (Omaha, NE).

³⁶ Gipson and Garland 1998.

³⁷ GAO, May 17, 2001.

³⁸ Brian Peacock Consulting Inc. (January 2000) Recruitment, training, employment and retention: Report on certified nursing assistants in Florida’s nursing homes. Florida Department of Elder Affairs (Tallahassee, FL).

³⁹ Tellis-Nayak, V. and Tellis-Nayak Mary (1989). Quality of care and the burden of two cultures: When the world of the nurse’s aide enters the world of the nursing home. *Gerontologist* 29(3): 307-313.

assistants who stay on the job for years often do so only because they cannot envision or attain a more desirable alternative.

The Tellis-Nayaks noted that all nursing assistants “share a common denominator: their socioeconomic class. They are mostly women and belong to the lowest rung of the health care labor market: they are the least educated, the least skilled, and the least paid, often barely above the minimum wage, and they endure a low occupational status. They share the lower class lifestyle, perched precariously, as most of them are, just above the poverty line, straddling that uneasy fence that separates the two lowest classes, the working class and the lower class.”

But Strivers and Endurers react very differently to their shared circumstances. Strivers work hard to overcome adversity, sometimes with help from family members or others, but and always “[w]ith sheer effort, with singular determination and at a heavy price.” Endurers “continue to live precariously on the edge, some caught in exploitative marriages or heartless liaisons, some as single parents valiantly seeking a better future for their children, some full of dreams but with few skills to match their hopes, and others turned cynical because, being realists, they have little hope left. Many of them had looked elsewhere for a job, but they all ended up at the nursing home. The nursing home is always short of nurse’s aides.”

The authors noted that no statistics clearly showed which of those types of workers predominated in nursing facilities, but added that “the data support the common impression that nursing homes hire Strivers far more than the Endurers, perhaps by a margin of 2 to 1. But because the Strivers keep their sights high, they often make up the great nursing home staff exodus. Thus, at any one time, Strivers form only a minority among the nurse’s aides in a given nursing home.”

7.5 The Link Between Education and Retention

5. 7.5.1 The Importance of Turnover

The rate of turnover for this group is notorious. The lack of a standardized formula for computing turnover and retention data makes it difficult to compare data, but estimates range from 38 percent to 143 percent a year, depending on the sample studied and the method used.⁴⁰

Some turnover among nursing assistants is inevitable—perhaps even healthy. The high rates common in nursing facilities, however, have a negative effect on residents. Constant turnover means that residents are frequently being cared for by new hires, and even seasoned nursing assistants are at a disadvantage during their first few months at a new job. The better nursing assistants know the residents they care for, the better they can identify changes in mental or physical conditions. Time on the job also allows nursing assistants and residents to develop the emotional ties that are key to residents’ quality of life.

Furthermore, frequent turnover may affect the morale and workload of those who stay behind. Researcher Karl Pillemer pointed out that frequent turnover hurts morale by weakening the sense of belonging people get from “a stable group of work friends whom they know and trust,” thus starting a vicious cycle. The more nursing assistants leave, “the less content are those staff

⁴⁰ American Health Care Association (February 2001), Health Services Research and Evaluation. Staffing of nursing services in long term care: Present issues and prospects for the future. AHCA, Washington, DC.

persons who stay. Then these staff themselves become likely to leave. And of course, chronic staff shortages led to increased work load for nursing assistants, and more job stress.”⁴¹

As Straker and Atchley (June 1999) summed up, “At the minimum, turnover affects continuity of care and care recipient relationships. In addition, staff turnover can often result in staffing shortages that require the remaining staff to do too much work in too little time.”⁴²

6. 7.5.2 The Effect of Nursing Assistant Education on Turnover

Several studies indicate that education is one of several significant factors that affect nursing assistant turnover rates, although other factors are believed to have a greater influence.

High turnover rates have been linked to insufficient or ineffective orientation,⁴³ ineffective supervision,⁴⁴ failure to attend to nursing assistants’ emotional needs,⁴⁵ strong economies that offer a variety of job opportunities,⁴⁶ and autocratic management systems that allow nursing assistants little control over their daily routines or input into resident care plans.⁴⁷⁻⁴⁸ As a May 2001 GAO report summarizes: “The 2000 IOM study of quality in long-term care identified several environmental and job design factors that directly affect nurse aide turnover, including:

- adequacy of training;
- methods for managing workload and schedules;
- opportunities for career advancements;
- respect from administrators;
- organizational recognition;
- workloads and staffing levels;
- clarity of roles; and
- participation in decision making.”⁴⁹

⁴¹ Pillemer K. The revolving door (and why it turns) (fall 1996). *Journal of Long Term Care Administration*. 24(3):46-9.

⁴² Straker, Jane Karnes and Atchley, Robert C. (June 1999) Recruiting and retaining frontline workers in long-term care: Usual organizational practices in Ohio. Scripps Gerontology Center, Miami University (Oxford, Ohio).

⁴³ Tynan, C. and Witherell, J.(1984) Good orientation cuts turnover. *Geriatric Nursing* 5(3): 173-175.

⁴⁴ Garland, N, Oyabu, N., and Gipson, G. (1989) Job Satisfaction among nurse assistants employed in nursing homes: An analysis of selected job characteristics. *Journal of Aging Studies* 3(4): 369-181.

⁴⁵ Tellis-Nayak V. and Tellis-Nayak M. (1989).

⁴⁶ Banaszak-Holl, Jane and Hines, M. A. (1996) Factors associated with nursing home staff turnover. *Gerontologist*. 36(4).

⁴⁷ Streit, A and Brannon, D. (1994) The effect of primary nursing job design dimensions on caregiving technology and job performance in nursing homes. *Health Services Management Research*, 7: 271-278.

⁴⁸ Aroskar, Mila Ann; Urv-Wong, E.K. and Kane, R.A. (1990) Building an Effective Caregiving Staff: Transforming the Nursing Service in Kane,R. and Caplan, A.L. (eds.) *Everyday Ethics: Resolving Dilemmas in Nursing Home Life*. New York: Springer Publishing.

⁴⁹ GAO, May 17, 2001.

As review of existing literature for a recent Pennsylvania study notes, “Training is believed to be related to turnover, but little hard data is available to support this proposition. Some studies have found that training programs in nursing homes did not have much of an effect on the performance by nurse aides.”⁵⁰⁻⁵¹ However, the researchers found a strong relationship between retention rates and the number of hours of training provided, supporting “the idea that more training has a positive effect on retention.”

Another study of nursing assistants in two nursing facilities found that those who were assigned at random to an educational program on dementia care had lower turnover rates at three months and six months after the training than the control group. The researchers posited that the CNAs who attended the classes may have felt more empowered and better able to communicate with the residents they cared for.⁵²

But the strongest link between turnover rates and education does not appear to be what nursing assistants are taught. Instead, it may be what they are *not* taught. Crucial skills such as critical thinking and time management are rarely covered in class (see Section 7.12). Little or no time is typically spent on teaching how to communicate with people with dementia, although 70.9 percent of all nursing facility residents have long-term and/or short-term memory problems, 72.9 percent have problems with orientation, and the ability to make daily decisions is impaired or severely impaired in 80.6 percent.⁵³ And regardless of what is taught in class, newly minted nursing assistants generally find that getting things done takes precedence over doing them right.

With one nursing assistant commonly responsible for nine or more residents on the day shift and twice as many at night,⁵⁴ time management often degenerates into triage. Baths and meals are given on a tight schedule and at the convenience of the home’s routine rather than the residents, leading to things like waking residents in the middle of the night for showers. Call lights are left unanswered, nonessential tasks such as nail care are neglected, and practices are often adopted that endanger either residents or staff.⁵⁵

“The training I got had a lot of good ideas,” said nursing assistant Shirley Rosser.⁵⁶ “Some I still think about, especially ways of lifting, universal precautions, things that are not really hands-on

⁵⁰ Brannon D. and Smyer M.A. (1994) Good work and good caring in nursing homes. *Generations* 18:34-38.

⁵¹ Smyer M., Brannon D. and Cohn M. (1992) Improving nursing home care through training and job redesign. *Gerontologist* 32: 327-333.

⁵² McMallion P et al. (1999) Educating nursing assistants to communicate more effectively with nursing home residents with dementia.” *Gerontologist* 39(3): 546-558.

⁵³ Krauss MA and Altman BM. Characteristics of Nursing Home Residents—1996. Agency for Healthcare Policy and Research 1998, MEPS Research Findings No. 5, AHCPR Publication No. 99-0006 (Rockwell, MD).

⁵⁴ Stakeholder perceptions of appropriate nursing home minimum staffing: Report on focus groups with nurse aides (Summer 2000). Report to Congress: Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes, Volume I, Chapter 5. Health Care Financing Administration, Washington, DC.

⁵⁵ Bowers and Becker 1992.

⁵⁶ Personal communication.

care. When it comes to that, you are too busy to ‘do it right’; you just need to get it done. Isn’t that a shame, to treat our residents like that? Yet it is the only way to get done before the end of the shift.”

Researcher Karl Pillemer found that 40 to 50 percent of all nursing assistants leave during orientation and training,⁵⁷ often because they don’t know where to turn for help in prioritizing a competing list of demands. “Frustration with their inability to get everything done leads to low self-esteem, high stress levels and disillusionment with their job,” he wrote. “The new CNA graduates generally have not had enough experience to gain good organizational, prioritizing, and time management skills.”

Robert Atchley reported similar findings. “Nursing home workers often quit early in their tenure, some in response to the heavy demands of the job, some to pursue better opportunities, and some from disillusionment caused by the gap between when they saw as the ideal of frontline care and the realities of work in many nursing homes,” he wrote.⁵⁸ “Of course,” he added, “others leave because they do not like the work or are discharged because they are not doing an adequate job.”

For those who stay, a lack of time management skills may lead to inadequate care, according to one study of nurses’ perceptions of the role played by nursing assistants. One contributor to poor care, they said, was that “nurse assistants often do not receive enough practical experience in their training and are therefore too frequently ill-prepared for ‘real world’ conditions.”⁵⁹

7.6 The History of Current Educational Requirements

7.6.1 1986 IOM Study and the History Behind OBRA 87

Prior to the Omnibus Budget Reconciliation Act of 1987 (OBRA ’87), there were no federal requirements concerning the qualifications of nursing assistants.

A 1986 study by the Institute of Medicine⁶⁰ found that nursing assistants provided approximately 90 percent of the care received by nursing home residents, and that federal regulations allowed nursing assistants to deliver care without the supervision of a registered, licensed, or vocational nurse from 3 p.m. to 7 a.m. Yet these key caregivers were generally inexperienced and inadequately trained to perform their duties.

The study reported that only one-third of the states (17) mandated training programs for nursing assistants, and their requirements varied widely. Some required only 20 hours, while

⁵⁷ Pillemer (Fall 1996).

⁵⁸ Atchley, Robert C. Frontline workers in long-term care: Recruitment, retention, and turnover issues in an era of rapid growth. Scripps Gerontology Center, Miami University (Oxford, OH), September 1996.

⁵⁹ Shirm, V and Garland, T.N. (1997) Nurses’ Perceptions of the role of nurse assistants in delivery of quality care in the nursing home. Presented at the annual meeting of the Midwest Sociological Society, Des Moines, Iowa, April 3-6, 1997.

⁶⁰ Institute of Medicine, Committee on Nursing Home Regulation. 1986. *Improving the Quality of Care In Nursing Homes*. Washington, D.C.: National Academy Press.

others required 150, comprised of 50 hours of classroom and 100 of clinical training. There was no consistency in format or course content.

The study's recommendations, which provided the basis for much of OBRA 87, included a call for federal standards for nursing assistant training. IOM recommended that, as part of the administration conditions of participation in Medicare or Medicaid, nursing homes must employ only nursing assistants who have completed a state-approved training program in a state-accredited institution such as a community college.

Federal regulations

The federal regulations concerning certification training for nursing assistants address virtually all aspects of administration and testing of the programs. They do not contain instructor-to-student ratios, but some states have established these ratios on their own. In addition, many states have increased the minimum number of training hours. California, for instance, requires at least 150 hours of training.

The provisions of the OBRA '87⁶¹ legislation were implemented through regulations and guidelines. The Social Security Act added new provisions relating to nurse aide competency evaluation programs (CEPs) and nurse aide training and competency evaluation programs (NATCEPs). Sections 1819(b)(5), 1819(e)(1), and 1819(f)(2), 1919(b)(5), 1919(e)(1), and 1919(f)(2) of the Act established the following:

- Facilities participating in Medicare and Medicaid may not employ anyone as a nursing assistant for more than four months unless the individual has completed a NATCEP or a CEP approved by the state and is competent to provide such services.
- The Secretary must establish standards for the training and competency evaluation of nurse aides.
- States may approve only of CEPs and NATCEPs that met the standards established by the Secretary.
- States may not approve a program offered by or in a nursing facility that has been determined to be out of compliance with federal long-term care facility requirements within the previous two years.
- Facilities may not employ temporary nursing assistants who have not completed a NATCEP or CEP approved by the state.

Federal regulations established basic curriculum requirements for a nursing assistant training program.⁶² While states and individual instructors were welcome to include more, they were required to include the following:

⁶¹ Federal Register 42CFR Part 431 et al. *Medicare and Medicaid; Requirements for Long Term Care Facilities; Final Rule 56(187)*: September 26, 1991

⁶² Federal Regulations, Title 42, Part 483, Subpart D, Section 483.152

- At least 16 hours of training prior to any direct contact with a resident, which must incorporate
 - communication and interpersonal skills
 - infection control
 - safety and emergency procedures, including the Heimlich maneuver
 - promoting residents' independence
 - respecting resident's rights.
- Basic nursing skills, including
 - taking and recording vital signs
 - measuring and recording height and weight
 - caring for the residents' environment
 - recognizing abnormal changes in body functioning
 - reporting such changes to a supervisor
 - caring for residents when death is imminent.
- Personal care skills, including
 - bathing
 - grooming, including mouth care
 - dressing
 - toileting
 - assisting with eating and hydration
 - proper feeding techniques
 - skin care
 - transfers, positioning, and turning.
- Mental health and social service needs, including
 - modifying one's own behavior in response to residents' behavior
 - awareness of developmental tasks associated with the aging process
 - allowing residents to make personal choices
 - providing and reinforcing other behavior consistent with the resident's dignity
 - using the resident's family as a source of emotional support.
- Care of cognitively impaired residents, including
 - techniques for addressing the needs and behaviors of individual with Alzheimer's disease and other dementias
 - communicating with cognitively impaired residents
 - understanding the behavior of cognitively impaired residents
 - appropriate responses to the behavior of cognitively impaired residents
 - methods of reducing the effects of cognitive impairments.
- Basic restorative services, including
 - training residents in self care to the fullest extent possible
 - use of assistive devices in transferring, ambulation, eating, and dressing
 - maintaining residents/ range of motion
 - proper turning and positioning in bed and chair
 - bowel and bladder training
 - care and use of prosthetic and orthotic devices.

- Residents' rights, including
 - providing privacy and maintaining confidentiality
 - promoting the residents' right to make personal choices to accommodate their needs
 - giving assistance in resolving grievances and disputes
 - providing needed assistance in participating in resident and family groups and other activities
 - maintaining care and security of residents' personal possessions
 - promoting the resident's right to be free from abuse, mistreatment, and neglect
 - reporting instances of such treatment to appropriate facility staff
 - avoiding the need for restraints in accordance with current professional standards.

Section 483.152 also specifies who must pay for nursing assistant training, stating the following: "(1) No nurse aide who is employed by, or who has received an offer of employment from, a facility on the date on which the aide begins a nurse aide training and competency evaluation program may be charged for any portion of the program (including any fees for textbooks or other required course materials).

(2) If an individual who is not employed, or does not have an offer to be employed, as a nurse aide becomes employed by, or receives an offer of employment from, a facility not later than 12 months after completing a nurse aide training and competency evaluation program, the State must provide for the reimbursement of costs incurred in completing the program on a pro rata basis during the period in which the individual is employed as a nurse aide."

Finally, federal regulations⁶³ establish the following guidelines for state approval of a NATCEP or CEP:

- The state must respond to a request for approval within 90 days.
- The state must make at least one on-site visit to the entity providing the training or performing the competency evaluation.
- State approval of a program is granted for a two-year period.
- A program must consist of no less than 75 hours of training and include at least 16 hours of supervised practical training. Practical training is defined as training in a clinical setting in which the trainee demonstrates knowledge while performing tasks on an individual under the direct supervision of a registered nurse (RN) or a licensed practical nurse (LPN).
- Training must be performed by, or under the general supervision of, an RN who has a minimum two years of nursing experience, at least one year of which must be in the provision of long-term care services. In a facility-based program, that function may be performed by the director of nursing.

⁶³ Federal Register 42CFR Part 431 et al. *Medicare and Medicaid; Requirements for Long Term Care Facilities; Final Rule 56(187)*: September 26, 1991

- A NATCEP must employ the competency evaluation procedures specified in 483.154, which details such matters as how the evaluation must address each course requirement listed above and the importance of using a system that prevents disclosure of the answers.

Why current educational requirements may not be sufficient

As was the case when IOM published its 1986 study, CNAs continue to provide approximately 90 percent of the care to nursing home residents. In the past 15 years, however, the average acuity level of nursing home residents has risen, requiring nursing assistants to deliver more complex care. Yet the training provided to CNAs has not changed with this change in resident acuity.

In addition, there is little consistency nationwide in the content of nursing assistant training programs or the number of hours of certification training required, although these programs appear to meet federal requirements. In-services and other educational programs also vary widely in content and format.

Finally, there is growing evidence that the minimum federal requirements may not be adequate to meet the educational needs of nursing assistants. More hours of certification training and a greater focus on orientation for new workers and supervision and ongoing education for both new and experienced CNAs may be needed to prepare nursing assistants for the complex demands of their job.

7.7 Effective Teaching Methods

7. 7.7.1 How Nursing Assistants Learn Job Skills

Nursing assistants value their formal educations. Shirm et al. (2000) noted that “many nursing assistants felt there is no substitute for experience in learning how best to meet residents’ needs, [but] they also frequently commented that formal training was necessary for learning how to provide good care.”⁶⁴ Deutschmann (2001) asked nursing facility administrators, directors of nursing, nursing assistants, social workers, family members and surveyors about obstacles to quality care. When asked to name opportunities for change, “Training, orientation or education” tied for first place, mentioned by more respondents than anything else other than “improve communication.”⁶⁵

Yet their formal training and education receives poor marks from many nursing assistants. In a 1998 study of nursing assistants, 86 percent of the respondents rated education and training to do their job better as “very important,” but more than a third (37 percent) said their training had not prepared them to do the job well. As one said: “I figure a lot out on my own because of my

⁶⁴ Schirm, Victoria, Albanese, Terry, Garland, T. Neal, Gipson, Genevieve and Blackmon, Dorothy J. (August 2000) Caregiving in nursing homes. *Clinical Nursing Research*, 9(3): 280-297.

⁶⁵ Deutschmann, Marian (August 2001).

background, but I feel all of us would benefit from timely and complete training at the beginning of our employment.”⁶⁶

To be effective, “timely and complete” training must not be limited to the classroom. Classroom teaching, noted Robert Atchley in a 1996 study, “is often negatively evaluated by frontline workers in long-term care, often because it is either ‘above their heads’ or has no obvious application in their everyday work.”⁶⁷ Respondents to the Iowa Caregivers Association’s focus groups echoed that sentiment, and most agreed that the best way to learn skills was “by being shown what to do, and then practicing ‘hands on’ until they can perform comfortably by themselves.”⁶⁸

In a survey of nursing assistants with relatively long job tenures, Gipson et al (August 1998) found that many of the tasks they considered very important and/or did every day were learned on their own or from others on the job rather than in formal training. These included the following:

- Learn how to train a new nurse assistant (22 percent self-taught; 58 percent taught on the job);
- Check and report on the condition of a resident's skin (20 percent self-taught; more than 50 percent taught on the job);
- Communicate about a resident's condition or behavior to other members of the staff (28 percent self taught; 49 percent taught on the job); and
- Position resident properly in bed (9 percent self-taught; 60 percent taught on the job).⁶⁹

Nursing assistants also teach one another how to do things—not always correctly. “New [nursing assistants] are sometimes berated [by their experienced coworkers] for doing things the right way and not taking shortcuts,” points out nursing assistant educator Barbara Acello. “Many cannot resist the peer pressure and do not stand their ground, so they develop sloppy work habits.”⁷⁰ Researcher Marian Deutschman makes a similar point. “Newcomers learn appropriate (and sometimes inappropriate) behaviors by listening to stories and anecdotes, hearing about rituals and observing the nonverbal behaviors of their peers and supervisors,”⁷¹ she writes.

To reinforce good work habits on the job, some providers combine formal training with formalized, institutionally supported peer supervision. Robert Atchley believes that combination

⁶⁶ Hill Simonton Bell, LC. (December 1998) Certified nursing assistant (CNA) recruitment and retention pilot project. Phase I: Survey results. Iowa Caregivers Association.

⁶⁷ Atchley 1996.

⁶⁸ Hill Simonton Bell, LC. (January 1999) Certified nursing assistant (CNA) recruitment and retention pilot project. Phase II: Focus group study results. Iowa Caregivers Association.

⁶⁹ Gipson, G, Garland, RN and Benedict L (August 1998). Training experienced nursing assistants in long term care: A research report submitted to the National Institute on Aging, Washington, DC.

⁷⁰ Personal communication.

⁷¹ Deutschman Marian. (June 2000) “What you hear when you listen to staff,” Nursing Homes Long Term Care Management.

can be powerful. “[T]raining that emphasizes classroom formats is not nearly as effective as a model that uses senior ‘master CNAs’ to work alongside frontline staff, model effective job performance, and train CNAs as they go,” he says. “In this latter context, material is introduced when it is most relevant and is not disconnected from the activities of the job. Of course, the master CNAs themselves must be trained to be trainers.”⁷²

After researching current methods of training nursing assistants, Kramer and Smith (May 2000) concluded that one of the most effective was “a model which could perhaps best be described as ‘peer-oriented,’ with the focus on nursing assistants teaching and sharing with each other.”⁷³ That method shows promise, they wrote, because it allows nursing assistants to benefit from each other’s “valuable and extensive knowledge base.” The researchers believed that nursing assistants would be more receptive to information and ideas emanating from their peers, more likely to implement them, and perhaps even inclined to “encourage their use and implementation among one another.”

The Cooperative Healthcare Network (CHCN), a group of five agencies and training programs for direct care workers, has documented several essential elements of effective training based on 15 years of experience. Prominent features of the CHCN training program include peer support groups for new workers led by former nursing assistants and a coaching style of supervision, which builds a positive relationship between nursing assistants and their supervisors and encourages nursing assistants to develop and use problem-solving skills while maintaining high standards of care. Although most CHCN providers work with home health aides, the network's approach to training can be applied to preparing direct care workers in any setting. (For details, see Sections 7.7.2 and 7.16.2.)

Peer support groups have also proven effective. In a study of support groups for nursing assistants led by a skilled facilitator in 16 Massachusetts nursing facilities, Wilner and Shenkman (1993) reported: “Participation in the groups helped nursing assistants to work better as a team, to learn from one another, and to develop new skills of coping, communication and problem solving as well as to carry those back to their responsibilities on the floor. Nursing assistants also enhanced their [feelings] of self-confidence.”⁷⁴ Participants who had difficulties with English used the sessions to practice and improve their English language skills. Others reported learning more about teamwork, how to communicate with peers and supervisors, and how to express themselves more effectively. This ability to communicate better also helped reduce their stress on the floor. “Learning how to communicate . . . eased some of the tension,” said one participant. “It also made me feel important because people took the time to listen to you,” said another. In addition, learning emerged from the exchange of technical information about resident care and from practicing skills of communication and problem solving through the group interaction.

⁷² Personal communication.

⁷³ Kramer, N.A. and Smith, M.C. (May 2000). The Effectiveness of a peer-oriented, work-integration dementia care training program for nursing assistants: Final report. New York State Department of Health Dementia Project.

⁷⁴ Wilner, M.A. and Shenkman S (1993). *Evaluation of Nursing Assistant Support Groups in Nursing Homes*. Final Report to National Center for Nursing Research of the National Institutes of Health (Washington, DC).

Long term care employers in the Pioneer Network, a national organization dedicated to changing the culture of aging in America, have designed training programs and a supportive workplace culture that is based on Network and individual organization values. Several of these employers, including Apple Health Care and Providence Mount St. Vincent, are highlighted in more detail throughout this chapter.

From the first day of work, the training emphasis at Network member facilities is on skill building to enter into a caregiving relationship. Tasks are de-emphasized. For example, CNAs are taught to get to know an individual, learn their bathing habits and incorporate this information into the bathing experience the resident will be offered in the nursing home. Nursing assistants enter into relationships with a primary group of residents whom they always care for, so the CNA knows those residents are looking forward to seeing her, depending on her not only for care tasks but for the fact that she knows each resident personally and brings that knowledge into the care. Pioneers seek to engage both elders and experienced CNAs in the training process. Learning from residents directly, and from peers who experience the challenges CNAs face daily, is more effective than being taught by a nurse alone.

Many Pioneer organizations offer their own CNA certification courses. Although state and federal requirements are met with regard to the minimum certification standards, many add communication and on-the-job training. In addition, the Network strongly encourages career ladder opportunities, which enable a CNA to grow within the career of CNA, advancing both job responsibilities and wages. (For more on career ladders, see Section 7.13.)

8. 7.7.2 Adult Learning Methods

Research shows that not everyone learns in the same way.⁷⁵⁻⁷⁶ While some easily absorb information delivered in lectures or books, others tend to tune out a barrage of written or spoken words. In fact, according to researcher David Lazear, everyone learns in multiple ways.

Lazear (1991) divided adult methods of learning into seven types: verbal-linguistic, visual-spatial, logical-mathematical, kinesthetic, musical-rhythmic, interpersonal, intrapersonal, and natural awareness.⁷⁷ To teach a group of adults incorporating various styles of learning, he argued, educators must use a variety of teaching styles, including demonstrations and role playing for the kinesthetic learners, graphics for the visual learners, repetition or rhyme for the musical-rhythmic learners, and so on.

⁷⁵ Kolb, D. (1987) "The process of experiential learning," *Culture and Processes of Adult Learning*. London: Routledge.

⁷⁶ Anderson, J. and Adams, M. (1992) "Acknowledging the learning styles of diverse student populations: Implications for instructional design" *Teaching for Diversity*, 49:23.

⁷⁷ Lazear, D. (1991) *Seven ways of knowing: Teaching to multiple intelligences*. Skylight Publishing (Palatine, IL).

These methods need not replace the traditional lecture. Instead, they can augment it. As one recent paper put it, a lecture is the most effective way of teaching “as long as it is well structured, clearly presented and uses the full range of techniques and visual aids available.”⁷⁸

In addition to differing ways of learning, adult learners have previous life and work experience that may affect the way they process new information. Phillips and Baldwin (1997) noted that nursing facility nursing assistants tend to be older than their peers in acute care and have a significant amount of work experience. As a result, they concluded, “New information must be incorporated into existing knowledge and ideas.” This could be done most effectively, they said, through adult learning methods such as videotaping and then analyzing role-plays, or introducing a new topic by discussing related experiences that the students have had.⁷⁹

Nursing assistant educators often incorporate devices such as role playing and sensory deprivation exercises into nursing assistant training programs, but the success of such methods varies depending on the educator’s charisma and energy level and the extent of his or her formal training in how to teach adults. The biggest hurdle to implementing these innovations may be simply finding the time to fit them in. “We teach the traditional way—lecture and lab in the classroom, 24 hours of clinical,” said one nursing assistant educator of the certification training she offers. “We try to be as innovative as possible with creative teaching techniques, but it is a vast amount of material to cover in a very short time.”⁸⁰

The Cooperative Healthcare Network uses a four-to five-week program to educate its direct care workers, most of whom are home health aides. The program is based on the philosophy that, while adults often resist formal education, everyone continues to learn and incorporate new knowledge throughout their lives. This may be especially true of new recruits to nursing facilities, who may have poor histories in the formal educational system. For details on the CHCN training program, which incorporates various adult teaching techniques, see Section 7.16.

7.8 Certification Education and Testing

9. 7.8.1 What Gets Taught in Certification Classes

The curriculum varies dramatically from state to state. Some mandate only the 75-hour federal minimum of classroom or supervised lab time and require no clinical experience in a nursing home, while others require much more. (For details, see Section 7.6.1.)

Instructors are free to teach more than the mandated minimum, and many do. Certain types of providers may also offer more than others, on average. A Pennsylvania study found that government-operated nursing facilities provided an average of 105 hours of formal education, while privately operated facilities averaged 78 hours.⁸¹

⁷⁸ Adcock, Lesley. (July 2000) Linking basic theory to practice for healthcare assistants. *Journal of Community Nursing*.

⁷⁹ Phillips R and Baldwin BA (Mary/June 1997). Teaching psychosocial care to long-term care nursing assistants. *Journal of Continuing Education in Nursing* 28(3): 130-134

⁸⁰ Personal communication

⁸¹ Pennsylvania’s Frontline Workers, February 2001

Clinical experience is not required in every state. In fact, some states forbid it. Student nursing assistants in Oregon aren't allowed any hands-on experience until they've finished their certification classes, says Oregon-based researcher Joanne Rader. "If these people don't have any [clinical] experience, nothing that's said in the classroom really makes any sense," she notes.⁸²

There may also be some disconnect between what students are taught in certification classes and what they do on the job. In Oregon, Rader points out, students must learn how to use physical restraints, although most facilities in the state don't use them any more."

10. 7.8.2 The Basic Curriculum

At its most basic, the material covers just 75 hours. At least 16 hours must consist of practical training supervised by a registered nurse or licensed practical nurse.

In Texas, which one nursing assistant educator describes as fairly typical of states that require only 75 hours, the mandated material is divided into five sections. Those sections may be taught in any order, but the material within each section must be taught as a unit.

Section One includes the 16 hours on specific topics that OBRA says must be taught before students may have any contact with nursing facility residents. It introduces all the major topics, starting with an overview of nursing facility residents; the nursing assistant's role; communication and interpersonal skills; and good work habits. It covers resident rights and other OBRA regulations, as well as other laws that apply to nursing facilities, such as the Safe Medical Device Act and accident and incident reporting. It touches on infection control and basic nursing skills. It addresses personal care — both attending to one's own physical and mental health and helping residents with bathing, toileting, mouth care and other personal care needs. It covers mental health and social service skills; basic restorative care; and care for the cognitively impaired. It covers creating a safe environment, including fall prevention and what to do in case of a fall, a seizure, vomiting, or choking; and what to do in case of fire or a natural disaster.

Federal law mandates that the Heimlich maneuver must be taught, but CPR generally is not — perhaps because there's no time to fit it in. "This is intense stuff you're squeezing into those 16 hours," points out a nursing assistant educator.

Section Two focuses on delivering personal care to residents, covering grooming, bathing, transfers, positioning, nail care, incontinence and perineal care, nutrition and hydration, care of the resident's environment, oral hygiene and more. Texas requires that 17 hours be spent on this section.

Section Three covers basic nursing skills. Included are measuring and recording blood pressure and other vital signs, use of restraints, measuring height and weight, care of the dead and dying, and procedures for admission, transfer, and discharge. Students are also taught observation skills and told how to report and chart treatments and changes in resident status. This section must last at least eight hours.

⁸² Personal communication

Section Four covers restorative care, including range of motion, ambulation, assisting residents with adaptive or assistive devices and prostheses, and more. This section is important, points out Acello, because “the OBRA requirements are all about maintaining and improving resident functioning, and that’s what restorative care is all about.” Texas requires at least four hours of training in this area.

Section Five, which encompasses mental health and social services, covers Abraham Maslow’s hierarchy of needs, the losses nursing facility residents commonly experience, how to cope with their problematic behaviors, and information about aging, residents’ coping and defense mechanisms, and dementia and other cognitive losses. Texas mandates six hours to cover that material.

7.8.3 Going Beyond the Basics

Texas educators say the curriculum is difficult to cover in just two weeks. One instructor says her community college program includes 144 classroom and 64 clinical hours. The additional hours, she says, give her a chance to get into “critical thinking skills. Instead of just giving a bath, we’re really looking at the individual.”⁸³

The extra time also allows her instructors to teach the crucial communications aspect of care more effectively, even role-playing how to make small talk with residents. “Students go into the clinical scared; they don’t know how to start a conversation with someone they don’t know,” she says. It gives instructors time to explain not just what nursing assistants should do but why. And, she says, because her students understand why it’s important to do things like wash their hands and dress neatly, they’re still doing those things on the job years later.

Other states routinely offer considerably more than 75 hours of training. In Florida, for instance, the minimum number of hours is 120, but programs may last up to three times that long. Private training programs in the state averaged 259.5 hours in 1997-98.⁸⁴

7.8.4 Who Develops the Curriculum

Each state appoints a regulatory body — often the state board of nursing or health department, but sometimes an independent contractor — to develop its guidelines. Sometimes the governing body writes the guidelines, but more often it convenes a group of RNs and other experts to create them. The group may also create a curriculum or approve the use of an existing curriculum.

Nursing assistants are virtually never asked for input into these curricula. One review of programs found that almost all “take their ideas, information, and principles of care from the work of various health care professions, but not from nursing assistants.”⁸⁵

Many educators follow a curriculum developed by the Red Cross. Others use the ProCare curriculum. ProCare was developed in 1988 for the American Health Care Association by Educational

⁸³ Personal communication.

⁸⁴ Brian Peacock Consulting Inc., January 2000.

⁸⁵ Kramer, N. and Smith, M. (2000) Training nursing assistants to care for nursing home residents with dementia, in V. Molinari (Ed.), *Professional psychology in long term care*, NY: Hatherleigh.

Testing Service and Professional Training Systems, Inc., with input from long term care providers, health care educators, state regulators, consumer advocates, and others.

7.8.5 How the Curriculum is Taught

Certification training is usually delivered through a combination of lectures, discussions, videotapes, and supervised hands-on practice. Students typically practice on one another in the classroom, though many states or individual schools also require clinical practice in a nursing facility as part of the curriculum.

Educators may use textbooks, educational CD-ROMs or videotapes to augment their lectures. They may bring in guest lecturers who are expert on a particular subject. They may also use tactics such as empathy training, in which students are temporarily “handicapped,” often with a blindfold, to get a sense of how it feels to live with a disability.

But the traditional style of teaching predominates. “Almost all the manuals and videotapes use a primarily didactic style in which informational material is presented via readings, videotapes, or lectures and the nursing assistant is a passive recipient, expected to maintain close attention and understand and absorb the lesson,” writes Kramer.⁸⁶ Some programs “incorporate other teaching styles to a significant degree, including discussion, role-playing or other exercises, and on-the-job training,” she notes, but only a few use non-didactic styles as their main method of teaching.

Most teaching tends to be “very task-oriented: ‘This is how you wash your hands,’” as one educator puts it.⁸⁷

1.0.0 Teacher Training and Supervision

Federal law requires only that the teaching be “performed by or under the general supervision of a registered nurse who possesses a minimum of two years of nursing experience,” at least one of them in long term care.⁸⁸ Some states require that all instructors be registered nurses, but others allow LPNs to teach, as long as an RN is in charge of the program.

The federal requirements for instructors’ educational backgrounds are loose, requiring teachers only to “have completed a course in teaching adults or have experience in teaching adults or supervising nurse aides.”⁸⁹ Although many states mandate train-the-trainer preparation, these standards are rarely rigorous either. Ohio, for example, requires only that educators attend 28 hours of classes, which cover state laws and standards, resident and nursing assistant demographics, and training in how to use audiovisual equipment.⁹⁰ Any other professional who may teach part of the nursing assistant course, such as a pharmacist, dietitian, fireman, or gerontologist, is required only to have at least one year of experience in his or her field.

⁸⁶ Kramer and Smith, 2000.

⁸⁷ Personal communication.

⁸⁸ Federal Regulations, Title 42, Part 483, Subpart D, Section 483.152 (a)(5)(i).

⁸⁹ Federal Regulations, Title 42, Part 483, Subpart D, Section 483.152 (a)(5)(ii).

⁹⁰ Personal communication, Genevieve Gipson.

As one study sums it up: “[T]he persons responsible for training new workers too often lack formal education and may have only a few months more experience than the persons being trained.”⁹¹

7.8.7 Where Classes are Held

Classes are usually provided by nursing facilities, private schools, vocational-technical schools, or community colleges. Some high schools offer nursing assistant courses as part of their curriculum. Students who don’t attend class at a nursing facility usually spend some time in one for clinical training.

A group of nursing assistants polled in 1988 cited pros and cons for each type of location. Nursing facilities, they pointed out, give students hands-on experience with residents and a more realistic sense of how to handle a typical day’s work. However, they said, the quality of instruction varies widely, with good facilities providing good educations and inadequate facilities providing bad ones. Community colleges and vocational-technical schools are more closely monitored for quality, but they may lack the crucial clinical component. Private, for-profit programs elicited the most criticism, with respondents reporting that some charged “exorbitant fees,” prepared students poorly, and made false promises about employment opportunities after graduation.⁹²

Others contend that the quality of instruction is usually better in licensed schools, pointing out that they are held accountable by the state for the quality of their instructors and instruction, while nursing facilities are not. Furthermore, students taught in nursing facilities may be taken out of class to help care for residents. “If [the facility is] short-staffed, students are pulled to the floor but given credit as if they were in the classroom,” says one nursing assistant educator.⁹³

Castle (2000) found that nursing facilities that provide their own certification training had fewer survey citations for excessive restraint use than facilities that did not do their own training. However, the author cautioned, there may not be a causal relationship between the training and the lower citation rate. Facilities that offered their own training, he hypothesized, may simply be more sophisticated than their peers, and hence likelier to be aware of the need to reduce restraint use.⁹⁴

Facility-based classes are common in most areas, but government officials sometimes prohibit it. No training offered by a facility in Florida or the District of Columbia, for instance, is approved by the state unless the facility is licensed as a school. And in all states, OBRA will not allow a nursing facility to provide certification training and testing if, within the past two years, it has been cited for immediate jeopardy or certain other types of substandard care on an annual survey.

⁹¹ Jacobs, H. (January 22, 1994) A new development in the education of direct care practitioners. SUNY-New Paltz.

⁹² National Citizens’ Coalition for Nursing Home Reform (January 30, 1988). Final report: Nurse aide training symposium. NCCNHR, Washington, D.C.

⁹³ Personal communication.

⁹⁴ Castle, N (2000). Deficiency citations for physical restraint use in nursing homes. *Journal of Gerontology* 55B(1): 533-540.

In some cases, facilities band together to train each other's workers. Seattle-based Providence Mount St. Vincent nursing home, for example, trains nursing assistants for nearby rural facilities that do not have the resources to do their own training. (For details, see 15.2.1) An innovative partnership has developed in Tucson, where the Direct Caregiver Association (DCGA) is bringing together healthcare providers, workers and others to address the caregiver shortage by recruiting, training and retaining caregivers. A nonprofit entity developed by a local home care agency, DCGA trains home health aides not just for its parent agency but for other home health and nursing home providers throughout Tucson. In addition, it operates a resource center that offers career counseling, training, continuing education and professional development to both individuals and organizations providing long-term care.

7.8.8 Certification Testing

“In Maryland, individuals who want to become groomers and handlers of dogs must have a seven-week course (for poodles) or a 14-week course for all breeds ... To deny long-term care workers quality training is insulting to them and those they care for.”⁹⁵

The test consists of two parts, a competency evaluation and a skills demonstration. For the competency portion, the student is allowed to choose either a written or an oral exam, allowing students with poor or no literacy skills to pass. In many states, including Texas, Florida and New Mexico, students may opt to take the oral test in Spanish.

Some states have developed their own tests, while others use a test developed by the Red Cross. A handful use a test by D&S Diversified Technologies. About two-thirds use at least part of the Assessment Services International (ASI) test, some pairing the competency part of ASI's test with a skills test of their own.

The written examination of the ASI test consists of 10 pre-test questions and 60 that are scored. To pass, a candidate must get approximately 80 percent of the scored questions right. To pass the skills test, the candidate must get all the critical element steps correct, along with about 80 percent of the remaining steps within each set of five skills demonstrated.

7.8.9 Pass Rates

While the test inspires dread in nearly all who take it, the great majority pass—although some fail once or twice before succeeding. In Texas, for instance, where the test is given in three different forms, 80 percent of those tested in 2000 passed the written English version, 65.9 percent the oral English, and 52 percent the oral Spanish. And in Florida, the pass rate was 88 percent for all candidates tested during the year starting on July 1, 1997.

Some nursing assistants fault the test for being too easy, too far removed from the skills needed to do the job well. Her own test, notes nursing assistant Patricia Green, was “scary but, in

⁹⁵ Holder, Elma. Paraprofessionals on the front lines: Improving their jobs—improving the quality of long term care. AARP symposium panel, September 10-11, 1998.

hindsight, stupid.... I was observed doing tasks only. I was told to give a bed bath; I did so. I was told to do a set of [vital signs]. Again I did so. Not once was I asked to deal with a demented lady who was having a hard time. Not once was I presented with a hypothetical situation [and asked to] verbalize how I would act.”⁹⁶

Others complain that the test is too arbitrary. Because each state’s tests are developed and administered by a different group than its certification curriculum, the two don’t always cover the same ground, and even the best students may fail if they are tested on material they haven’t been taught.

7.8.10 Who Gives and Evaluates Tests

Each state appoints a governing body to oversee the test. This is not the same group that oversees the certification curriculum.

The testers are often the same people who teach the certification curriculum. According to federal law, a nursing facility employee may proctor the test of one of the home’s own students, but someone else must evaluate and score the test.

7.8.11 “Testing Out”

A clause in the federal regulations allows a nursing assistant to become certified without taking classes if he or she can pass the test. In most states, this is a rare occasion. “I don’t think someone right off the street could walk in and pass,” notes Acello, who teaches in Texas and corresponds with nursing assistant educators nationwide. Those who succeed, she adds, are generally nursing students who want to work as nursing assistants while completing their educations, or former nursing assistants who want to get back on the OBRA-mandated registry of certified and otherwise eligible nursing assistants maintained by each state.⁹⁷

In at least one state, however, there is considerable disagreement over whether candidates should be allowed to take the test if they have not attended an accredited training program. In Florida, this practice is called “challenging the test,” and it is relatively common. Challengers may be certified CNAs who have moved to Florida from another state, people in an approved program who want to take the test before completing the program, or people with related work experience who think they can pass without going through nursing assistant training. In many cases, however, they come from a fourth category: people who attended a training course that was held by one of the state’s nursing facilities. Such courses are not approved by the state department of education, which oversees certification training in Florida.

Many managers of nursing facilities say they wouldn’t have enough good candidates if they relied only on state-approved private schools to supply them. However, as Peacock (2000) noted, “There is substantial division on this issue. Those associated with approved training programs view the challenge as a threat to the quality of care that CNAs provide (due to inadequate training).”⁹⁸

⁹⁶ Personal communication.

⁹⁷ Personal communication.

⁹⁸ Brian Peacock Consulting Inc., January 2000.

7.9 Transferring Learning to the Work Site

*“My vision is to be able to walk into work and see enough well-trained and experienced CNAs to finally give **QUALITY CARE** to our residents! The present conditions for most of us CNAs prevent us from ever being truly well trained! Why? ...[W]e have to skip many steps that should be done just so we can accomplish minimal standards of care! ... Even if we did take and pass all the courses offered us, most of it would be a wasted effort because we could never practice what we learned! Now if we were offered a raise or some sort of bonus for achieving advanced goals and skills? Why not? I would do it! But we don't.*

“These courses would be taught where? At the facility? Cool, but what about working? Oh! On our days off, or we should come in early before work so we could take them? Ok, I will give up my valuable time for a few courses. What? We can't practice what we learned because we have not enough staff? What a surprise! What? Over half the people that showed up for class were pressed into work instead? Wow! What a surprise. ... Good ideas are easy to come by. Good conditions to carry them out are very rare to come by.”⁹⁹

As discussed in Section 7.5.2, the gap between what is taught in certification classes and what nursing assistants learn on the job can be wide. Due to a lack of effective orientation or supervision, newly minted nursing assistants are often left to bridge that gap as best they can. “I know a lot of NAs who feel competent but don't feel confident,” says Genevieve Gipson. “They're always scared. I think part of what's going on is that they never get any effective feedback. They're never really sure they are doing things right.”¹⁰⁰

7.9.1 Orientation

Orienting a new worker to the job takes time. “A good manager knows that an orientation period should last more than a few shifts,” notes nursing assistant Patricia Green. “Orientation needs to cover everything from policies to who to call to what to do in an emergency.”¹⁰¹

In a paper describing the Pioneer Network's philosophy about relationships between residents and workers in nursing facilities, social worker Carter Catlett Williams wrote: “the orientation can be an opportunity to introduce the new staff member into a team which is characterized by mutual support, good communication and a sense of learning together.”¹⁰²

⁹⁹ Message posted by CNA Richard J. Solka to the NursingAssistant@yahoo.com listserv.

¹⁰⁰ Personal communication.

¹⁰¹ Personal communication.

¹⁰² Carter Catlett Williams. Relationship The Heart of Life and Long Term Care. The Pioneer Network. March 2001.

New nursing assistants are not the only ones who need orientation. In Pennsylvania's recent study of nursing assistants, respondents pointed out that orientation "isn't just when you first start in this profession. It's anytime your situation or work environment changes. For example, if you are working in a nursing facility and you are going to move to another wing or hall, you should have an orientation period to get to know the residents, their needs, specific issues, and so on."¹⁰³

The need for this kind of apprenticeship is generally accepted for other healthcare workers. Nurses, for instance, work under close supervision for their first months on the floor and perform only limited duties at first. Yet nursing assistants are usually expected to assume a full patient load and a full set of duties from the start, and they are generally given little guidance.

Orientation in most facilities is restricted to new hires--and even for them, it ends quickly. In a study of nursing assistants by the Iowa CareGivers Association, most respondents said they had had three days of orientation,¹⁰⁴ which all but two of the respondents agreed was not enough. Furthermore, orientation generally consisted simply of working alongside other nursing assistants who were not prepared — or inclined — to train new hires. "People doing the orientation just don't have the gumption, the interest they should have," said one respondent. "They just put you with whoever."

The people charged with orienting new hires often resent the time required of them, for which they rarely receive extra pay, and take out that resentment on the new worker. "Nursing has a tendency to eat their young," says researcher Joanne Rader. "A new aide can come in, wanting very much to do a good job, and not feel welcomed by the other aides, who immediately judge her as not being good enough, not knowing how to do it."¹⁰⁵

11. 7.9.2 Supervision

Effective supervision is an important part of assuring good care. Regular monitoring and input from supervisors helps nursing assistants master and incorporate new procedures and identify and overcome barriers to quality. In the Iowa Caregivers Association nursing assistant poll, respondents noted that they stay at or leave their jobs because of the quality of their relationship with their direct supervisor.¹⁰⁶

A pair of recent studies demonstrates that fact. When Burgio et al. (1994) taught nursing assistants a way of minimizing residents' urinary incontinence through prompted voiding, they built monitoring by specially trained nurse supervisors into the program, convinced that it was of central importance. The program had a positive effect on nursing assistant behavior and residents' continence rates, both of which were maintained over time,¹⁰⁷ but there was no way of

¹⁰³ In their own words: Pennsylvania's frontline workers in long term care. (February 2001) A report to the Pennsylvania intra-governmental council on long term care (Harrisburg, Pennsylvania).

¹⁰⁴ Hill Simonton Bell 1999.

¹⁰⁵ Personal communication.

¹⁰⁶ Hill Simonton Bell 1999.

¹⁰⁷ Burgio, L.D., McCormick, K., Scheve, A., et al (1994). The effects of changing prompted voiding schedules in the treatment of incontinence in nursing home residents. *Journal of the American Geriatrics Society*, 42: 315-320.

separating the effects of the training from those of the supervision. Stevens et al. (1998) then tested the same model in another nursing home. This time, nursing assistants on some units were monitored by trained supervisors, but those on other units were not. Both sets of nursing assistants performed better on certain job measures immediately after they underwent the skills training, but only those on the units with formal management maintained their improvements after four months.¹⁰⁸

Effective supervision is an art, and few people can master it without training, practice, and supervision of their own skills. Nurse supervisors must correct behaviors and enforce good care without being punitive or harsh. At the same time, they must help nursing assistants manage the considerable physical and emotional demands of the job. Good supervisors model the development and maintenance of respectful relationships with staff and residents. They act as advocates for both nursing assistants and residents, helping CNAs solve problems while holding them responsible for maintaining high standards of care. As Williams (2001) put it: “For relationships between supervisor and CNAs to develop and thrive ... CNAs need to know that they *are* recognized, appreciated, cared about, understood, and that there is someone standing in union with them.”

Yet most charge nurses receive no supervisory training, and many are uncomfortable in their role as supervisors. In a report on focus groups with 36 licensed nurses who work in nursing facilities, Schirm et al. (2000) found that their respondents “consistently expressed a dislike for their role as supervisors of nursing assistants and frequently stated they were ill prepared for these responsibilities.”¹⁰⁹

Cultural differences may add to the discomfort. Supervisors are often of a different ethnic group, class, and/or culture than the nursing assistants they supervise. Sometimes they do not even share a primary language. And in the hierarchical world of healthcare, a nurse’s professional license and years of clinical and classroom training confers much greater status than a nursing assistant’s certificate and 75 or so hours of training. These differences are often barriers to good communication and mutual understanding, and can cause nursing assistants to feel disrespected by their supervisors.¹¹⁰

In a poll question posted in July 2001, the moderator of the NursingAssistant@yahoo.com listserv asked members how nurses could show more respect towards CNAs. The following responses illustrate many of the ways in which nursing assistants often feel unappreciated, unfairly treated, or ignored by their supervisors:

- Call me by my name;
- Ask me about my concerns;
- Ask me for input into my assignments;

¹⁰⁸ Stevens A., Burgio, L.D., Bailey, E, Burgio, K.L., Paul P., Capilouto E., Nicovich P. and Hale G. (June 1998). Teaching and maintaining behavior management skills with nursing assistants in a nursing home. *Gerontologist* 38(3): 379-384.

¹⁰⁹ Schirm V., Albanese T, Garland T.N., Gipson G and Blackmon D (August 2000). Caregiving in nursing homes: Views of licensed nurses and nursing assistants. *Clinical Nursing Research* 9(3): 280-297.

¹¹⁰ Tellis-Nayak and Tellis-Nayak 1989.

- Allow me and my peers to make out our own assignments;
- Check in with me during the shift;
- Enable me to attend care plan mtgs;
- Host staff/unit/shift meetings;
- Share important info with me;
- Ask for my input about residents;
- Listen to me when I am worried about residents;
- Help me with setting goals;
- Enable me to go to in-services and seminars;
- Advocate for my work;
- Stick up for me;
- Speak to me with respect and dignity;
- When I make a mistake, let me know right away, privately;
- Help me by answering call bells;
- Assist me with lifts;
- Assist with feeding, bathing;
- Help me when I am in conflict with others;
- Don't play favorites;
- Stay away from cliques;
- Hear all sides first, seek to get facts;
- Act on my concerns about resident health; and
- Assume role of team player vs. BOSS;

Some facilities have reacted to this cultural divide by relieving their nurses of many management duties, appointing a non-licensed unit or program manager to do such things as hire, train, evaluate, discipline and schedule nursing assistants. This leaves the nursing staff free to concentrate on clinical work and documentation, with nursing assistants reporting to them only for matters directly related to care.

Other employers are implementing a coaching model of supervision. Coaching is a style of supervision that focuses on supporting the growth of workers, as opposed to the more traditional “discipline and punish” approach to addressing problems. In addressing job performance concerns, the coach has two roles: the first is to be clear and straightforward about the problem and its consequences; the second is to help the person being coached to reflect on her thinking and behavior, consider different perspectives or possibilities, and actively make decisions to ensure that the problem does not recur. For details, see the description of the Cooperative Healthcare Network in Section 7.16.2.

12. 7.9.3 Organizational Support

Good supervision is important, but it is not enough to guarantee good care. Sheridan et al. (1992) surveyed 558 direct care workers in 25 nursing facilities, including 23 that passed state inspections within a year of the survey and two that failed to meet minimum standards. In looking for characteristics more common to the poorly rated facilities than the others, the only

clear link they found was to organizational climate. The unsuccessful facilities were rated lowest in human relations, their administrative practices having been judged as showing less of an interest in the well being of their employees and doing less to improve staff relations. They were also judged highest on laissez-faire climate (failure by the administration to establish clear objectives, inadequate resource planning, and a lack of incentives for doing a good job) and status orientation (administrative practices that emphasize status difference and create conflicts between departments.) “Administrators cannot blame ineffective staff members or supervisors for poor care,” the authors concluded. “Often the management system is the root cause of poor quality.”¹¹¹

Smyer et al (1992) found that five one-and-one-half-hour classes on causes and management of problem behaviors in residents left a group of nursing assistants more knowledgeable but had no effect on their job performance, as rated by their supervisors. Calling their findings “sobering,” the authors hypothesized that it was due to the fact that the facility did not adequately support the new way of doing things. They concluded that “administrative training and technical assistance support must be pursued at the same time that staff initiatives are undertaken. Without such administrative support we are unlikely to substantially affect the quality of care in nursing homes.”¹¹²

Robert Atchley’s research has led him to a similar conclusion. “The greatest determinant of the quality and effectiveness of training are the attitudes top management have about training,” he says.¹¹³ “Organizational values about the importance of front-line staff, inclusion of front-line staff in care planning, and ongoing training of front-line staff all have to be translated into management behavior rewarding those values or the organization will not show much effectiveness of training, no matter how well-designed the training program is.”

7.10 Ongoing Education

In-service classes are the only form of continuing education nursing assistants are required to have, and the federal regulations regarding what they must consist of are brief. In-service education must be “sufficient to ensure the continuing competence of nurse aides.”¹¹⁴ Most classes should be geared toward a nursing assistant’s areas of weakness as determined in annual performance reviews, although some may address the special needs of a resident or group of residents.

The only specific federal requirement is that nursing assistants who work with the cognitively impaired must attend in-services on how to care for that population, and that all nursing assistants must attend 12 hours of classes a year. Some states require more than 12 hours. Many also mandate that certain subjects must be taught every year.

¹¹¹ Sheridan John E., PhD., White John and Fairchild Thomas J., PhD. (1992) Ineffective staff, ineffective supervision, or ineffective administration? Why some nursing homes fail to provide adequate care. *Gerontologist* 32: 334-341.

¹¹² Smyer M, Brannon D, Cohn M (June 1992). Improving nursing home care through training and job redesign. *Gerontologist* 32(3):327-33.

¹¹³ Personal communication.

¹¹⁴ Federal Regulations, Title 42, Part 433, subpart B, section 483,75 (e)(8)(i, ii and iii).

13. 7.10.1 What's Taught

The verdict on in-service education is close to unanimous—and bleak. As the name implies, the training takes place in the facility, usually while attendees are on the job. Units usually last an hour or less, allowing little time for reflection, and the material is nearly always presented in the form of an uninspired lecture or videotape.

Despite OBRA's mandate that the content be tailored to a nursing assistant's areas of deficiency, few facilities have the resources to present more than a one-size-fits-all agenda, especially in states that require certain topics to be covered each year.

In a review of in-service instructional materials for dementia care, Kramer and Smith (May 2000) found 14 guides, all but four of which relied on the same teaching model. This model, wrote the authors, “could be characterized as having an ‘expert’ who is not a nursing assistant instruct persons who are nursing assistants in principles of dementia care. Implicit in this model is the idea that the students, i.e., nursing assistants, know relatively little about the topic under discussion and will profit most by listening to the instructor. Typically, a non-nursing professional presents information in a relatively didactic style of teaching, with occasional group discussions and periodic presentation of hypothetical cases to support and clarify points made in the lectures.”

Most states require annual sessions on OSHA standards, residents' rights, and fire and safety procedures. Lifting techniques and skin care are also commonly taught. Another common type of in-service is held when a facility buys a complex piece of equipment such as a patient lift or a ventilator, and staff is convened to learn how to use it.

“Most employers cheap out on training; they use poor materials and poor trainers,” says Robert Atchley. “Employers tend to see training as a waste of time and money and a regulatory pain in the neck instead of an opportunity. This sends a negative message to the trainees.”¹¹⁵

Furthermore, the people who develop in-service programs rarely ask nursing assistants what they want to learn. “There's a [false] sense that nursing assistants don't know what they need to know,” notes Genevieve Gipson.¹¹⁶

A “best practices” survey of nursing facilities in Pennsylvania, New York and Illinois uncovered some of the more specialized or advanced topics that may be covered in in-services. Respondents often taught in-services on pain management, joint and musculoskeletal problems, diabetic care, customer service survey etiquette, wound and pressure sore management, residents' rights, advanced nutrition and hydration, restorative care, improving documentation, and skin care. Also

¹¹⁵ Personal communication.

¹¹⁶ Personal communication.

taught, though less often, were topics such as hospice care, cultural diversity, tender touch and sexuality.¹¹⁷

14. 7.10.2 Who Determines the Content

A few nursing facilities have a full-time or part-time employee devoted solely to staff education, but most nursing facilities cannot afford this, or are not willing to assume the expense, as the costs associated with a full-time trainer are not necessarily reimbursed through their Medicaid rate. As a result, most fold those responsibilities into the job of an administrative nurse--usually an already overburdened director of nursing or assistant director of nursing.

Because of the competing demands on their time, heads of in-service generally welcome offers from anyone willing to present a program, and it's generally left up to the volunteer to decide what and how to teach. Representatives of equipment or medical supply companies often conduct in-services, explaining general caregiving procedures along with tips about their products.

15. 7.10.3 Connecting Ongoing Education to Experience on the Job

There is little evidence to prove whether in-services improve nursing assistants' skills and residents' quality of care. In one study, facility managers were asked whether their in-service programs had a positive effect on job retention and care delivery. While the overwhelming majority said yes, more than 80 percent admitted that they based that belief on "impression or anecdotal information." Only a small minority had formal evaluations to back up their claims.¹¹⁸

Meanwhile, nursing assistants and nursing assistant educators tend to be skeptical about the efficacy of in-service training. As noted in Section 7.10.1, in-services often fail to cover what attendees need to know.

Furthermore, the processes taught in in-services are not usually encouraged on the floor. "I think, for the most part, we teach [nursing assistants] right," says Acello. "But then they go back to the floor and do things the way they've always done them. They don't have time to do it the way we teach. In the real world, with staffing shortages the way they are, you've got to hustle."¹¹⁹

Burgio and Burgio (1990) also concluded that follow-up was key after studying training methods in other healthcare settings in order to recommend a model for training nursing assistants in long-term care. Successful in-services, they concluded, included three things. First was "didactic instruction, presented both verbally and in a written format; modeling of the procedure by the trainer (either in-vivo or via videotape); role playing of the procedure by the trainee; and immediate performance feedback by the trainer." Second was "a checklist assessment of skill performance in an analogue situation," giving the trainer an opportunity to provide "immediate, corrective feedback and praise." The third step, which the researchers called "crucial though often overlooked," consisted of assessing the trainee's performance on the job. "These assessments should be conducted immediately following the in-service and at regular intervals

¹¹⁷ Hegeman C. and Lambating F. (April 2000). Best practice survey of nursing home aide continuing education programs. Foundation for Long Term Care (Albany, NY).

¹¹⁸ Hegeman and Lambating, April 2000.

¹¹⁹ Personal communication.

thereafter,” the researchers advised. “If staff perform poorly during these assessments, they should be required to attend remedial training sessions.”¹²⁰

16. 7.10.4 How Much In-service Education Nursing Assistants Get

Our sources were almost unanimous in agreeing that nursing assistants probably attend close to the mandated 12 hours a year. However, several experts question whether nursing assistants always get a full hour of in-service training for every hour logged, noting that students who train in nursing facilities are often called out of class to answer call lights or perform other duties, especially if the facility is short-staffed.

7.11 Who Pays for Education and Testing

17. 7.11.1 OBRA Mandates

Federal law is clear on who should pay for the certification training required of nursing assistants who work in nursing facilities. According to federal regulations, students who are employed by a nursing facility or who have received an offer of employment from one when they begin taking classes may not be charged for “any portion of the program (including any fees for textbooks or other required course materials.”¹²¹ In such cases, the nursing facility that employs or will employ the newly certified nursing assistant must pay for the classes. The state will then reimburse the facility for at least part of its costs. (For details, see Section 7.11.3.)

Some nursing assistants in training pay for their classes and course materials, having had no job or offer of employment at a nursing facility when they started class. The state must also reimburse the cost of training for these students, if they start work at or receive an offer of employment from a nursing facility within 12 months of becoming certified. In such cases, payment is to be made through the nursing facility that hires the new worker, which repays him or her and then applies for reimbursement from the state. Some states direct facilities to repay nursing assistants on a pro rata basis over the course of a year or less, until the full amount is paid off or the worker leaves the facility, whichever comes first.¹²²

Despite these mandates, however, nursing assistants who pay for their certification training and testing are not always repaid, even when they go to work for a nursing facility within a year of getting certified (for details, see Section 7.11.4)

¹²⁰ Burgio L.D. and Burgio K.L. (1990). Institutional staff training and management: A review of the literature and a model for geriatric, long-term-care facilities. *International Journal of Aging and Human Development* 30(4):287-302.

¹²¹ Federal Regulations, Title 42, Part 483, subpart D, section 483.152 (c)(1).

¹²² Federal Regulations, Title 19, Section 1919(f)(2)(a)(iv); Title 18, Section 1819(f)(2)(a)(iv); Title 42, Volume 3, Part 483, subpart D, section 483.152 (c).

18. 7.11.2 The Cost of Initial Certification Education and Testing

The reported cost of certification and training varies widely. According to one decade-old study, the cost for both combined averaged \$1,859.¹²³ A more recent study reported average training costs of \$1,604 for government-operated nursing facilities and \$1,066 at privately operated facilities.¹²⁴ The government facilities tended to provide substantially more hours of training per student, which presumably explains the difference.

The considerable differences between these reported costs may be explained in part by the variation in state requirements (longer courses presumably cost more), where the classes were held (urban classes are probably more expensive than rural ones), and by variations in the formulas used to calculate costs. Other variations include whether the nursing facility pays the students for their time while learning and whether it pays a third party to provide the education.

19. 7.11.3 The Cost to Nursing Facilities

Because nursing facilities employ so many nursing assistants and their turnover rate is usually high, the cost of educating new nursing assistants adds up fast. The annual cost of certification training for Pennsylvania's nursing facilities, for instance, is estimated to be more than \$21 million.¹²⁵ Some facilities are disinclined to invest in training because many trainees leave soon after finishing training, some of them to work in home care or acute care after getting trained free of charge at a nursing facility.

The American Health Care Association, the largest trade association for long-term care providers, performed an informal canvass of its state affiliates for this chapter to ascertain the cost of certification training. The 19 state affiliates responding to AHCA's e-mailed questions reported average per-student costs as low as "between \$150 and \$500 depending on facility and class size" and as high as \$2,000, with the great majority ranging from \$400 to \$1,000.¹²⁶ The higher reported costs were usually associated with licensed schools.

Depending on where they operate, nursing facilities may not be reimbursed the full cost of certification training. Training and competency evaluations are not included in a facility's daily Medicaid reimbursement rate for medical expenditures. Rather, they are considered part of the costs of administering the state's Medicaid program. Facilities pass their training and education expenses directly to Medicaid, which reimburses from the state's administrative cost center. Some states initially add training expenses to the per diem paid to the facility for medical expenses, but when the final cost settlement is made between the state and the facility, the facility passes costs for CNA training on to the state as an administrative expense.

States may impose "reasonable cost guidelines" based on the median cost of training reported by all facilities in the state, or by a pre-determined group of facilities. In such cases, facilities are

¹²³ Zahrt, Linda M. (April 1992) The cost of turnover in a home care agency. *Caring*.

¹²⁴ Pennsylvania's Frontline Workers, February 2001.

¹²⁵ Pennsylvania's Frontline Workers, February 2001.

¹²⁶ Memo to Tom Burke from Janet A. Myder, Director Regulatory Systems. American Health Care Association (AHCA), July 24, 2001.

paid in full for all eligible expenses up to a certain point, which is usually more than the median cost.

States may impose other limits as well. In Oregon, for instance, facilities are reimbursed based on the percent of Medicaid clients served at the facility, so if 75 percent of its residents are Medicaid recipients, a facility will recover 75 percent of its allowable training costs.¹²⁷

20. 7.11.4 The Cost to Nursing Assistants

Feedback from providers and nursing assistants indicates that relatively few nursing assistants pay in full for their education and training, although the percentages appear to be higher in some states than in others.¹²⁸

Nursing assistants in need of certification education have three payment choices: pay in full at a private school, pay part of the cost in a subsidized program, or attend classes at the expense of a nursing home. Even those who initially shoulder the cost are often repaid.

An informal poll of members of the NursingAssistant@yahoogroups.com listserv conducted for this chapter illustrates some of the ways in which nursing assistant educations are subsidized. Over half of the respondents (six) attended classes free of charge at a nursing home. Four paid out of pocket, but half of these were heavily subsidized by scholarships or grants. One paid just \$75 for training, including the cost of textbooks, and another \$50 for testing; the other paid \$75 for training and can't remember what she paid for the test, indicating that its cost as not steep. Costs were substantially higher for the other two. One paid \$40 for a textbook and \$300 for training and testing; the other paid \$450 for training and testing. However, the former was reimbursed when he went to work for a nursing home, and the latter would have been reimbursed by the nursing facility that trained her if she had agreed to work there for at least six months (instead, she opted to work for a hospital).

Some training is subsidized by programs like the federal Workforce Investment Act (WIA), which distributes money to the states for job training. State-funded and other scholarships and grants help pay for nursing assistant training at community and vocational-technical colleges. However, WIA funds typically have not been available to train workers for jobs with such poor wages and benefits.

Although nursing facilities are supposed to reimburse the cost of training for new hires who were certified within the past year (see Section 7.11.1), anecdotal evidence indicates that compliance with this rule varies from facility to facility and possibly from state to state. Three of the key contacts interviewed for this chapter, who are each in regular contact with many nursing assistants nationwide and who live in three different states, all said that they had heard of numerous instances in which facilities did not comply. "Homes generally don't want to fiddle with the paperwork, so they usually pretend they don't know how," said nursing assistant educator Barbara Acello. Ohio-based nursing assistant educator Genevieve Gipson believes that reimbursing eligible new hires is the exception rather than the rule in her state. "It just doesn't

¹²⁷ AHCA memo, July 24, 2001.

¹²⁸ AHCA memo, July 24, 2001.

happen,” she said. Nursing assistant Patricia Green agreed, saying “Many places don’t let CNAs know they can be reimbursed by the state.”

21. 7.11.5 Cost as a Barrier to Entry

The cost of the education is a barrier to some. As outlined above, some students must come up with hundreds of dollars for classes and textbooks — an unattainable sum for many people who live from one paycheck or public assistance check to the next. Even a relatively small amount, such as \$75 for a test, may be more than a mother struggling to feed her children can afford to spend.

The cost of classes and materials is not the only barrier. People living at subsistence level and working two jobs or hurrying home after work to look after young children at home do not always have the time to attend classes unless they are paid for the time spent in training, and most nursing assistant certification classes do not pay students for their time.

Conflicting government policies are another impediment to entry for low-income would-be workers. As Dawson and Surpin (2001) point out: “state and federal employment agencies often preclude the long-term-care industry from participating in training support programs—on the basis that graduates of such programs cannot earn a livable wage as direct care workers.”¹²⁹

The federal requirement that nursing assistants get specialized training also puts the job out of reach of many people who are trying to move from public assistance into the workforce. The 1996 law that restructured welfare includes “a presumption, often referred to as ‘work first,’ that discourages entry-level, skill-based training as a pathway to employment,” the authors explain. That policy endorses “immediate attachment” to a job, which “discourages low-income women from gaining access to training as a pathway to healthcare work.”

22. 7.11.6 Continuing Education and Career Advancement Opportunities

Aside from the OBRA-mandated in-services provided by nursing facilities (see Section 7.10), continuing education for nursing assistants is hard to come by. Perhaps as a result, employers are rarely willing to pay to send nursing assistants to conferences. Nursing assistants are rarely able to shoulder the costs themselves, first because the cost of travel, a hotel room and meals is usually prohibitive and secondly because they must often take the time off without pay. However, a handful of conferences have recently begun to target or include nursing assistants, and a growing number of nursing assistants attend them every year.

The Career Nurse Assistants Program (CNAP)(see Section 7.16 for details) hosts a national nursing assistant leadership conference every fall in conjunction with NCCNHR’s annual meeting, covering travel costs for some nursing assistants who couldn’t otherwise afford to attend. The Direct Care Alliance (DCA), a national network of long-term care consumers, workers and concerned providers, dedicated to ensuring a stable, valued, well-trained direct care workforce, also includes nursing assistants as both participants and presenters in its twice-yearly meetings and conferences, raising funds to pay for their travel expenses. At both DCA’s and

¹²⁹ Dawson, Steven L. and Surpin, Rick. (Spring 2001) Direct-care healthcare workers: You get what you pay for. *Generations* 25(1): 23-28.

CNAP's meetings, nursing assistants practice leadership development, learn and report about public policies affecting long-term care, and exchange information and insights with consumers, providers and workers from other states. The National Association of Geriatric Nursing Assistants (NAGNA), a professional association for nursing assistants, hosts an annual national convention. NAGNA pays travel expenses for the winner of an essay contest each year, but other attendees must cover their own costs. Several states have also held regional or statewide meetings.

At least two publications address nursing assistants' professional concerns as well. *Nursing Assistant Monthly*, an educational program produced by Frontline Publishing (www.frontlinepub.com), addresses the challenges faced by nursing assistants in themed monthly issues, pairing a newsletter for nursing assistants with instructional materials for nurse supervisors (see Section 7.16 for details). Participating nursing facilities pay to have the newsletters sent to all their nursing assistants. *CNA Today*, launched by NAGNA in the summer of 2001, is a quarterly magazine that costs \$25 a year for NAGNA members and \$35 a year for nonmembers (www.nagna.org).

For the most part, nursing assistants who want to further their educations must do so at their own expense or find free sources of information. For the small but steadily growing number with regular access to the Internet, a handful of websites and e-mail listservs for nursing assistants¹³⁰ can provide a good starting point. As nursing assistant Melissa Lothrop recently wrote to the NursingAssistant listserv: "Recently, I got a computer and found this website, just by looking for information in my field... I've learned of magazines and articles and the way the rest of the country works in my field."¹³¹

7.12 What's Often Missing in Preparing Nursing Assistants for the Job

*"We should raise the bar for CNAs regarding training and orientation. For years now we have complied with the regulations, but at the same time lowered our expectations. This has been done because of our immediate and critical need for nursing assistants. There is an urgency to get them 'trained' and through class (usually 75 hours of classroom/instructor) so they can be utilized on the floor. However, because it is such a rushed situation, sometimes there is not a thorough comprehension, there is not mastery of skills... Often orientation in a facility is the same as training: rushed, hurried, unorganized, and chaotic. Many times it is not the best CNA trainer who is doing the orientation."*¹³²

¹³⁰ These include NursingAssistant@yahoogroups.com, <http://www.directcareclearinghouse.org>, <http://network54.com/Forum/11252?it=>, <http://www.homestead.com/nurseassistant/Home.html>, <http://venus.beseen.com/boardroom/i/26493>, <http://www.cna-network.org>, <http://hcassidy.tripod.com/FANA/FANA.html> and <http://www.nagna.org>.

¹³¹ Response to a question from nursing assistant Connie Trendel, who was writing an article for *CNA Today* magazine about nursing assistants taking responsibility for their own educations.

¹³² Personal communication with Lisa Cantrell, RN, C, co-founder and president of the National Association of Geriatric Nursing Assistants (NAGNA).

7.12.1 Recruiting the Right People

Facilities that hire the wrong person cannot erase the mistake with any amount of training. Nobody wants to make that mistake, yet it appears to happen frequently. In a study of nursing assistants who are active registrants in North Carolina's nurse aide registry, Konrad (2001) found that "less than half of the 180,000 North Carolinians trained to work as nursing assistants during the last decade are currently certified to work as a nurse aide. Even among those who are certified, many seem to work only part-time as a nurse aide and supplement this income with earnings from other unrelated jobs in low wage industries. Those who used to be certified as CNAs have mostly left the [long term care] field and appear to have more stable jobs at higher wages in other industries."¹³³

A similar probe by the Florida Education and Training Placement Information Program showed that only 53 percent of the people who had joined the state's CNA registry in the year beginning July 1, 1997, were working in a health-related field up to a year later.¹³⁴

To reduce its approximately 100 percent annual turnover rate among nursing assistants, the Lovington Good Samaritan Center in Lovington, New Mexico, instituted a new hiring and recognition program in March 1997. While the program also includes awards and financial incentives, its core philosophy is "Hire for character and train for skills," and it revolves around a hiring policy in which the employer looks for people who exhibit certain character traits. The facility reports that the program improved staff morale, lowered turnover among CNAs (the rate was 14 percent lower in the first quarter of 1998 than in the first quarter of 1997), saved the facility a considerable sum in sick time, overtime and hiring costs (those costs totaled \$14,600 less in the first quarter of 1998 than in the same quarter the previous year).¹³⁵

23. 7.12.2 What Keeps Candidates Out of Certification Classes

Literacy Skills

With shortages of frontline workers already severe and growing in most parts of the country,¹³⁶ facilities can ill afford to discourage qualified candidates. Yet some interested candidates who would be good at the job simply can't pass the certification test.

In the late 1980s and early '90s, as long term care geared up to implement the certification training and testing mandated by OBRA '87, a number of seasoned nursing assistants feared they would be unable to pass the test. As nursing assistant educator W.H.Heaton reported at the time, "The majority fear taking a written examination because of their inexperience in test-taking."¹³⁷

¹³³ Konrad, T R (2001). Where have all the nurse aides gone? North Carolina Institute on Aging.

¹³⁴ Brian Peacock Consulting Inc., January 2000.

¹³⁵ Brian Peacock Consulting Inc., January 2000.

¹³⁶ Paraprofessional Healthcare Institute (January 2001). Direct-care health workers: The unnecessary crisis in long-term care. The Aspen Institute Domestic Strategy Group, Washington, DC.

¹³⁷ Heaton WH. (March 1989) Examining nurse aide competency evaluations. *Contemporary Long Term Care*. 12(4):23-4, 38.

Apparently, those fears were well founded. Heaton tested about 150 nursing assistants on 100 items that would be covered in the federally mandated curriculum. The subjects were experienced nursing assistants in good standing, averaging eight years on the job. Yet only 10 (6.7 percent) passed the test, and their average score was 58 percent.

The nursing assistants, noted Heaton, did best on “areas that are taught most often in a facility’s in-service training programs—skin care, intake and output, care plans, psychological aspects of dying and restraints.” This indicated, he said, that part of the problem was lack of knowledge, and that more education in specific areas was needed. But for the most part, Heaton believed, the nursing assistants knew what to do on the job; they just didn’t know how to pass written tests. “The majority of those tested have been away from the academic environment for several years and are not familiar with how tests are now administered,” he wrote. “Many indicated that they had a problem with reading comprehension. They simply did not understand the questions. This is not because the questions are difficult, but because the terminology used in formulating the questions is foreign to them.”

Literacy standards may have been too low for nursing assistants before OBRA. Illiteracy can compromise care quality, as some competency in both written and spoken English are needed in order to communicate about complex care needs, chart work done and observations made, and to read and comprehend written instructions. For example, if employees do not understand instructions well enough to learn why it is important they do a specific activity in a certain way — such as place used sharp objects in a “sharps disposal box”— then quality could be compromised. Lack of fluency in English can also create a barrier in communicating with residents, unless most of the residents in the facility speak the nursing assistant’s primary language.

However, Heaton’s findings indicate that current educational and testing requirements eliminate many people who would make good nursing assistants if their language skills could be brought up to speed. For many, the solution would be a graduate equivalency degree (GED) or an English as a second language (ESL) classes, but prospective students generally find these difficult to find, pay for, and graduate from.

Some nursing assistants manage to get certified, learning enough in class to pass the oral exam, and then access ESL classes through their employers. While the researchers for this chapter were unable to investigate the prevalence of such programs, discussions with key contacts uncovered a few. At Providence Mount St. Vincent, for instance, supervisors at the Seattle nursing facility noticed that many of their nursing assistants were neither fluent in English nor proficient in reading and writing in their own language. In response, the facility began to use pictorial presentations on some instruction sheets, and to offer ESL training throughout the year to all interested employees.¹³⁸ (For details on Providence Mount St. Vincent’s training programs, see Section 7.16.)

¹³⁸ Personal communication with Charlene Boyd, Providence Mount St. Vincent administrator.

Other Hurdles

Retaining newly trained employees requires employers to devote serious attention and resources to employee supports. Nursing assistant work often entails off-hour employment, sometimes in more than one site. Therefore, community services such as evening or overnight childcare and transportation must be arranged, most likely through community-based services.

As noted in Section 7.4, most nursing assistants are low-income women. Some straddle the worlds of welfare benefits and health care employment, leaving welfare for work but cycling back to public assistance as soon as the next family crisis hits. Others receive cash, food stamps, and other forms of public assistance even while employed as direct-care workers, because their jobs offered only poverty-level income. Still others lack basic job skills and need education in the importance of showing up on time, dressing professionally, and so on.

A recent report aimed at helping state and local governments transition welfare recipients into the workforce¹³⁹ outlined the following common barriers to employment:

- substance abuse,
- domestic violence,
- physical disabilities and chronic health problems,
- depression and other mental health problems,
- criminal records,
- very low basic skills and learning disabilities, and
- language barriers.

The author estimates that between a quarter and a half of the people currently on welfare probably face at least one of these barriers, some of which — e.g., substance abuse, certain types of criminal records, and certain physical disabilities — would disqualify them from work as a nursing assistant. But, with enough desire and effort on the part of the employer and employee and with help from government programs, most of these barriers could be surmounted.

Government programs would have to go farther than usual, the author notes, providing “additional support services, beyond those traditionally provided by welfare-to-work programs (such as child care and transportation), These include mental health counseling, shelter for victims of domestic violence, and substance abuse treatment.” Employers must also be prepared to make extra provisions, as “[t]he path from welfare to work is not linear. Some problems must be addressed before individuals begin work, others can be addressed while they are working, and still others may not even emerge until after they have begun to work.”

Employers in the Cooperative Healthcare Network, who frequently hire women who are entering or re-entering the workforce after being on public assistance, have found certain approaches effective in helping new employees make the adjustment.¹⁴⁰ For details, see “Easing the transition to work.”

¹³⁹ Brown, Amy (April 2001). *Beyond work first: How to help hard-to-employ individuals get jobs and succeed in the workforce*. Manpower Demonstration Research Corporation.

¹⁴⁰ Paraprofessional Healthcare Institute (1997). *Welfare to work: An employers' dispatch from the front* by the Cooperative Health Care Network. Bronx, New York.

Easing the transition to work

Cooperative Healthcare Network employers use these strategies to help trainees and new employees transition into the workforce.

- Full-time counselors help employees access community supports such as transportation, childcare, children's health insurance, or housing assistance.
- A structured support system responds to employee needs systematically with assistance such as a credit counselor or a small loan fund managed by a committee of employees.
- A "coaching" model of management emphasizes problem solving over disciplinary actions.
- Training is tailored to the individual employee and designed to strengthen the candidate's critical thinking, problem solving and communication abilities, to prepare the trainee for both the content and the performance expectations she will find when she begins work.
- High standards of work performance and professional behavior are rigorously enforced.

24. 7.12.3 What's Missing from Certification Training and In-services

In general, most nursing assistants and nursing assistant educators agree on a few key points. Certification education should last for more than 75 hours and should include a significant clinical component (see Section 7.9.1). In-services should be less repetitive and more tailored to the needs of individual residents and staff members, with more advanced topics covered for the more experienced workers (see Section 7.10.2). As one group of nursing assistants observed, "Deficiency driven [in-service] training is the rule at present, rather than development of knowledge and skills that can prevent deficiencies."¹⁴¹

As to specifics, every topic listed below is covered well by some facilities or schools, as programs vary widely. Overall, however, these areas tend to be either absent or underdeveloped in educational programs for nursing assistants.

25. 7.12.4 Orientation and Supervision

Good supervision and orientation help reinforce learning from the classroom and model the values of the organization. The CNA develops a positive relationship with her supervisor, which becomes an important model for relationship building with residents and other staff in the

¹⁴¹ NCCNHR 1988.

facility. Conversely, not getting along with a supervisor is one of the main concerns nursing assistants cite about their jobs.¹⁴²

Orientation introduces the new CNA to the culture and relationship environment in the facility. It is through this introduction she learns the values of the facility: how staff treat each other and residents and family members, how to work in teams, whether relationship building is important. As Williams (2001) wrote: “We need to fuel each other with the positive energy of regard for the other person. If CNAs do not have that from supervisors and fellow workers, what do they have to give to residents?”

Yet nursing assistants all too often must do without effective, well-organized orientation or supervision (see Sections 7.9.1 and 7.9.2).

26. 7.12.5 Problem Solving and Critical Thinking

Despite the title, nursing assistants are not just assistants to nurses. In fact, some facilities, such as Seattle’s Providence Mount St. Vincent, call their CNAs resident assistants in an effort to emphasize the fact that their role is to help the residents, not the nurses.

Among the many dilemmas nursing assistants face are the following:

- Seeing peers do things they were taught not to do in training;
- Residents responding unfavorably to care, although it is delivered the way they were taught to;
- Peers not responding to requests for help;
- Interacting with a supervisor who you feel is treating you unfairly;
- Handling a resident emergency;
- Being asked by a nurse to do something outside the job description, i.e., give a medication or administer a treatment;
- Being offered money by a family or resident to take special care of them; and
- Being unfairly accused of abuse.

Yet training for nursing assistants rarely prepares them for the psychological challenges they will face.

As Hoffman (1995) points out, “nursing assistants, who often are referred to as ‘unskilled staff,’ are put in situations that require unusually sophisticated interpersonal and communication skills. They are called upon to manage conflict, set limits, make ethical decisions, grieve and help others to grieve, and support other members of the caregiving team. There is little in their training that addresses such complex psychosocial problems.”¹⁴³

¹⁴² Iowa Caregivers Association, December 2000.

¹⁴³ Hoffman, Richard. (November 1995) Training nursing assistants translates into better care. *Brown University Long-Term Care Quality Letter*, 7(21): 6.

27. 7.12.6 Communicating with Residents and Families

For most nursing assistants, relationships with residents and their family members are their greatest source of job satisfaction. But those same relationships are also one of the greatest sources of frustration for most nursing assistants. “Frontline workers must deal with difficult or abusive residents or unhappy families at the same time they respectfully change a resident’s clothes or give a bath,” notes one report. “More emphasis on handling the interpersonal aspects of care could help employees maximize what they view as the best part of their job — relationships with residents and clients.”¹⁴⁴

As Karl Pillemer has documented, lack of preparation can lead to resident abuse. “Work in a nursing home requires interpersonal skills and understanding of psychosocial issues, but staff often do not have the skills to handle the interpersonal aspects of care,” he wrote in a book on how to reduce abusive incidents. “To give an example, a nursing assistant may know all of the technical procedures for giving a resident a bath. But what does she do when the resident cries in fear of the shower, or begs to be left in bed, or cries out for her long-dead mother, or strikes out at the nursing assistant while being washed? It is in these kinds of situations where the risk of inappropriate actions and abuse goes up.”¹⁴⁵

Such situations are common. “Our studies revealed surprisingly high levels of staff-resident conflict,” noted Pillemer in the same book. “For example, the majority of staff reported that they had conflicts at least several times a week over residents’ unwillingness to eat, residents’ personal hygiene, unwillingness to dress, toileting, and other issues. Many staff reported such conflicts every day. It is fair to say that few other occupations involve such a high degree of interpersonal conflict.” Yet classes rarely cover ways of handling such delicate situations. “In most facilities, no such training is ever provided, and how to deal with conflict is not even discussed,” Pillemer noted.

Part of the problem is that many residents can’t communicate through the usual channels. Nursing assistants must learn “how to listen to nonverbal communications, how to talk with the person with hearing deficits, sight deficits, memory deficits, problems of orientation, etc.,” points out Genevieve Gipson.¹⁴⁶

Nursing assistants also feel the need to communicate better with residents’ families. In a roundtable discussion in South Carolina, one participant “told of how a training video on how families deal with grief helped her to better understand the differences between family members of nursing home residents, and increased her tolerance.”¹⁴⁷ And nursing assistants canvassed by Anna Ortigara and her colleagues when they were developing a career ladder program (see section 7.15 for details), talked “a lot about needing better communications skills—with each other, with supervisors and with residents’ families,” says Ortigara.

¹⁴⁴ Straker and Atchley 1999.

¹⁴⁵ Pillemer Karl, Menio Diane A. and Keller Beth Hudson. *Abuse-proofing your facility: A practical guide for preventing abuse in long-term care facilities* (2001). Frontline Publishing (Somerville, MA).

¹⁴⁶ Personal communication.

¹⁴⁷ Painter, William and Kennedy, Beth (Autumn 1999). The evolving role of certified nursing assistants in long term care facilities. Part One: Highlights of nursing home CNA roundtables on career issues for frontline staff. *The Director* 7(4): 142, 146-147.

28. 7.12.7 Communicating with Supervisors

As discussed in Section 7.9.2, differences in ethnicity, class, cultural values and professional status often prevent nursing assistants and supervisors from communicating effectively. Nurse supervisors need to improve their management skills, but nursing assistants would also benefit from learning more effective ways of communicating.

While conducting focus groups with nursing assistants, Anna Ortigara and her colleagues had an unusual reaction to the usual complaints that they heard about nurses. In order to be taken seriously as members of the clinical team, the researchers decided, nursing assistants must learn how to talk to licensed nurses in their own language. As a result, they added a module to the career ladder classes they were developing (see Section 7.16 for details), covering common changes in residents' conditions and the clinical terms nurses and physicians use to describe them.

The nursing assistants attending the pilot program reacted enthusiastically to that module, said Ortigara, because the knowledge they gained allowed them to communicate more effectively with their nurse supervisors. "Language separates people," noted Ortigara. "When someone is using terms and someone else doesn't know them, the person who doesn't know them becomes the 'them.'"¹⁴⁸

29. 7.12.8 Managing Stress

Both on the job and in their personal lives, most nursing assistants contend with a great deal of stress. In one study, nursing assistants listed several non-job-related stressors, including financial worries (54 percent said they "worry about all the money I owe" and 49.6 percent "do not have enough money to cover medical and dental care"), family worries (35.7 percent agreed with the statement "I worry about my family when I'm at work"), and personal health and well-being (22.8 percent agreed that their physical health had declined since they began working as a nursing assistant).¹⁴⁹

Job-related sources of stress included scheduling problems (68.9 percent had been asked to come in early or stay late, and 52.4 percent to come in on a day off), not having been prepared for the reality of the job in initial training (57.6 percent), and problems with a supervisor (49.3 percent agreed with the statement "My supervisor acts better than me," 41.4 percent with "My supervisor talks down to me," and 31.8 percent with "My supervisor ignores my input in developing resident care plans.")

Emotional attachments formed with residents can also cause stress. Nursing assistants often worry about residents who are declining physically or mentally, or who they feel are not receiving proper care. The deaths that are so much a part of life in long-term care also take a heavy toll. In focus groups with 22 nurses in Ohio, one respondent noted that "training needs to

¹⁴⁸ Personal communication.

¹⁴⁹ Noelker, Linda S. What can be done to improve the nursing assistant's job? Section 3: Working conditions, job redesign, and career ladders for paraprofessionals. Benjamin Rose Institute (Cleveland, Ohio).

prepare nurse assistants to handle the emotional aspects of death.”¹⁵⁰ In a support group demonstration project, participating CNAs mentioned several factors that contributed to their stress, including the deaths of favorite residents. In the midst of their grief, they noted, they have the added stress of adjusting to a new resident in the bed of the resident who had just died.¹⁵¹

30. 7.12.9 Managing a Difficult Workload

As outlined above, nursing assistants navigate a heavy schedule of daily duties while responding to a barrage of requests and demands, many of them urgent. Prioritizing tasks is, therefore, a crucial skill.

Nursing assistants are rarely taught how to do this. Yet requiring newly hired nursing assistants to develop time management skills on their own or to flounder without them contributes to the high turnover rate among CNAs—and to inadequate care (see Section 7.5.2).

The experiences of providers like those in the Cooperative Healthcare Network indicate that peer mentoring, an effective orientation program, and a coaching method of supervision can help new CNAs learn how to manage and prioritize workloads (see Section 7.16 for details).

Bowers and Becker (1992) studied three facilities with above-average turnover rates, comparing nursing assistants who stayed past the first few weeks on the job with those who left. Workloads in all three facilities were so heavy, they noted, that “[c]utting corners was necessary to survive as a nurse’s aide, it seemed.”¹⁵²

Those who stayed, the researchers found, found ways to juggle countless competing demands. That often meant instituting taking shortcuts that “could be done extensively without being discovered.” It also meant instituting relatively rigid routines. Those who left were either unable or unwilling to fall into such a routine. Instead, they “tended to respond to each summons [from a resident] as it arose.”

Both methods ultimately proved unresponsive to residents’ individual needs. Residents abandoned by nursing assistants who tried to respond to requests as they arose “could often be found half bathed, half fed, or sitting on a toilet waiting to be taken back to bed,” while residents cared for by nursing assistants with better time management skills “were effectively prevented from altering their usual schedule.”

Bowers and Becker noted that nursing assistants “may simply be caught in an impossible situation.” However, they concluded, “The findings from this study indicate that nurse’s aide orientation programs could be more effective if they incorporated open discussion of how to organize the work.”

¹⁵⁰ Gipson, Genevieve, Albanese, Teresa, Blackmon, Dorothy, Garland, T. Neal, Schirm, Victoria, and Falter, Julie. (September 1997) An empirical comparison of definitions of quality care held by licensed nurses and nursing assistants employed in long-term care in Ohio: Final report.

¹⁵¹ Wilner and Shenkman (1993).

¹⁵² Bowers and Becker 1992.

31. 7.12.10 Clinical Skills and the Nursing Process

Personal care and clinical skills such as taking blood pressure readings and giving baths are the core of a nursing assistant's education. Even so, some crucial areas tend to be overlooked.

Nursing assistants often express a desire to learn more about how to work with people who have dementia or other types of disabilities. Participants in the Iowa Caregivers' Association's focus group, for instance, cited a need for more education about Alzheimer's, "resident behaviors, especially those due to dementia," diabetic care, and "mental health and the elderly." One respondent noted: "I don't think people understand the different types of dementia. They need to be explained better so people are better prepared for what they're going to deal with. You get a new CNA that's never worked in a nursing home and they're going to get bit the first night or hit or kicked or sworn at, and they don't know how to react. It can end up in a bad situation."¹⁵³

Nursing assistant educators also see gaps in teaching. Barbara Acello thinks CPR should be part of all certification classes, along with material on how to recognize and treat pain. She'd like to see in-services cover "a great deal more about disease processes and observations, particularly those suggesting the client is acutely ill" and "a great deal more about [pressure ulcers] and contractures."¹⁵⁴

But clinical information alone is not enough. Nursing assistants are generally taught how to perform certain tasks without being told how their work fits into the goals set by nurses, physical therapists, physicians and other clinicians. Other members of the "caregiving team" are quick to issue orders to nursing assistants, but generally slow to solicit their input into care planning or patient evaluations. As a result, these supposed teammates rarely share information freely, and may develop very different ideas about how a patient is doing or what kind of treatment he or she needs.

This can create conflict. It can also endanger patient care, allowing crucial information about residents' needs or changes in their conditions to fall through the cracks. Noting that nursing assistants were generally the first members of a nursing facility's staff to notice signs of acute illness in residents but that their observations often were not conveyed to nurses or other clinicians who could act on them effectively, Boockvar (2000) devised a measurement instrument to allow nursing assistants to enter their observations into the patient care record. In testing the instrument, he found that nursing assistants recorded signs of acute illnesses an average of five days before any such sign was recorded in the patient's chart.¹⁵⁵ The reason for the delay, Boockvar surmised, is that most nursing facilities provide no standardized route for that kind of information to travel along from CNAs to nurses or other clinicians. "[I]n most nursing homes nursing assistants communicate their observations to medical staff only informally," he noted.

¹⁵³ Hill Simonton Bell 1999.

¹⁵⁴ Personal communication.

¹⁵⁵ Boockvar, Kenneth MD, MS, Brodin, H Daniel MD, Lachs, Mark MD MPH (September 2000). Nursing assistants detect behavior changes in nursing home residents that precede acute illness: Development and validation of an illness warning instrument. *Journal of the American Geriatrics Society*48(9): 1086-1091.

32. 7.12.11 Leadership Skills and Working with Peers

The teamwork that can help or hinder patient care is not limited to communication between nursing assistants and other caregivers. Nursing assistants can support or undermine each other in countless ways. They may try to help coworkers who need to do a two-person lift or remain perpetually unavailable, answer a call bell for a coworker engaged in a time-consuming task or attend only to their assigned residents, share ideas and offer emotional support with their coworkers or criticize and gossip about them. Cooperation is also needed between shifts, as people share information about how a resident is doing or coordinate such things as meals and baths.

When nursing assistants work well together, stress is reduced for nursing assistants and quality of life and of care are improved for residents, yet leadership and teamwork are almost never addressed in class.

33. 7.12.12 Cross-cultural Communication and Competence

Nursing assistants often work with peers or supervisors who come from very different cultural, ethnic, religious or class backgrounds. Wilner and Shenkman (1993), for instance, found that English was not the first spoken language of about one-third of the CNAs in their study of 32 nursing facilities in eastern Massachusetts. The nursing assistants came from Central and South America, Europe, Asia, and Africa. In some of the facilities, as many as six or seven different languages were spoken. Language differences existed not only among nursing assistants but also between CNAs and residents and between CNAs and supervisors.

The participants in that study had a biweekly support group in which to get to know one another, ask about each other's cultures, and gain respect and compassion for each other. Other such programs presumably exist, but this chapter's research team did not discover any. Differences can lead to trouble if they are not openly acknowledged and explored. Nursing assistants from countries where elderly people are highly respected and nearly always cared for at home by family members, for instance, may disapprove of American families who trust their loved ones to nursing homes.

Bonder, Martin and Miracle (2001) noted that it is not clear whether nursing assistants can be taught to be more open-minded, as "research findings are equivocal about whether educational programs can actually alter attitudes or, more important, behavior to any significant extent (Pruegger and Rogers, 1994)."¹⁵⁶ Yet, the authors contend, healthcare workers "must be culturally competent to respond adequately to the needs of each client." That means learning such things as how to interpret signals such as expressions of pain, which vary greatly across cultures, looking for clues in people's body language and tone of voice, and asking their clients to help them understand their value systems, desires, and needs.

¹⁵⁶ Bonder B, Martin L, and Miracle A (Spring 2001) Achieving cultural competence: The challenge for clients and healthcare workers in a multicultural society. *Generations* 25(1): 35-42.

34. 7.12.13 Compassion

We are not used to teaching about “soft” matters such as caring in class, particularly in a clinical setting. Yet compassion is clearly one of the most important traits a nursing assistant can have (see Section 7.3.2). As a result, some think that empathy training should be part of the certification curriculum.

After conducting focus groups with licensed nurses and nursing assistants to discuss the factors that facilitate or interfere with the delivery of quality care, researchers Dorothy J. Blackmon and colleagues concluded: “it would seem reasonable to place strong emphasis on how to be a caring person in training programs for nurse assistants. This may be difficult to do effectively, as many of the respondents in this study felt being a caring person is a characteristic one is born with — a ‘gift,’ so to speak.”¹⁵⁷ But the “gift” of caring for one’s elders, the researchers believed, was developed through experiences such as “participating in church activities with elders and in their neighborhood communities, as well as by sharing living quarters and life experiences with older family members.” As those experiences become less common, they may need to be replaced by formal training in sensitivity to the special needs of older people.

Dillon and Stines (1996) interviewed 130 LPN and nursing assistant students to ask whether they thought caring could be taught, and if so, how. The answer to the first question was affirmative. As to the second, the students agreed that a caring style of teaching and management can foster a caring attitude in a nurse or nursing assistant. “Both LPN and nurses’ aide students saw an attitude of respect for the learner as a unique individual to be a critical prerequisite for an atmosphere of caring,” the authors noted. “Faculty sharing and giving of self is exemplified by such issues as time, remembering the little things, and listening.... Listening attentively and non-judgmentally allows the student to speak freely and think creatively. Ultimately, it is hypothesized that the student who is educated in this humanistic environment has the potential to carry this attitude to his/her practice.”¹⁵⁸

7.13 Career Advancement Linked to Specialized and/or In-depth Knowledge

As Genevieve Gipson and others have pointed out, a great many nursing assistants see their work as a career (see Section 7.4.1). But to many, it is a dead-end job. Because the work done by nursing assistants is generally perceived as unskilled, it is rare for a nursing assistant’s specialized knowledge or experience to be recognized by a significant increase in pay. On the contrary, as staffing shortages make it necessary for employers to offer more to attract frontline workers, some new hires are paid more than their veteran coworkers.¹⁵⁹ Even temporary workers, who bring with them no knowledge of a home’s culture and philosophy, let alone of its individual residents, are usually paid far more than long-time stayers. Veterans are often asked

¹⁵⁷ Blackmon D.J., Garland N, Oyabu-Mathis N and Gipson G (April 1994). Changes in knowledge of care techniques among nurse assistants in a training program: Achievements and failures. Paper presented at the Ohio Network of Educational Consultants in the Field of Aging, King’s Island, Ohio.

¹⁵⁸ Dillon RS and Stines PW (March 1996). A phenomenological study of faculty-student caring interactions. *Journal of Nursing Education* 35(3) 113-118.

¹⁵⁹ Personal communications with members of the NursingAssistant@yahogroups.com listserv.

to take on extra duties such as mentoring and orienting new staff, but given no extra pay or change in title.

In recent years there has been considerable talk among long term care professionals about how to counteract this demoralizing state of affairs and give dedicated nursing assistants a greater incentive to stay. Some nursing facilities offer tuition reimbursement and other incentives for nursing assistants who want to become licensed nurses. While such programs are commendable and may help facilities retain valued employees who want to try something new, they are of no help to the many people who prefer the hands-on care and contact with residents that they get as nursing assistants but want more responsibility, pay, or both in recognition of special knowledge or skills.

To give those people more incentive to stay on the job, and to make better use of their abilities and experience, a growing number of facilities are instituting career ladder programs for nursing assistants. These are sometimes called career paths or career lattices, to distinguish them from the type of career ladder that leads to becoming licensed as an LVN, LPN or RN.

35. 7.13.1 How Career Ladders Work for Nursing Assistants

An article outlining a proposed Red Cross career ladder program summed up the philosophy behind it as follows: “Career ladders increase a CNA’s self esteem on the job by rewarding them [sic] for work well done and providing opportunities to develop both technical and personal skill.”¹⁶⁰

A career ladder is any set of clearly defined steps that allow workers to qualify for more skilled work, usually through education or training. Raises in pay and/or specialized titles are usually associated with each rung of the ladder.

Career ladders for nursing assistants take many different forms, but they generally fall into one of two broad categories. Nursing assistants may advance by gaining specialized clinical skills, taking classes and passing a test to develop expertise in an area such as restorative care or geriatric care, or they may develop leadership skills, studying such things as adult learning style and effective communication skills and often gaining the title of preceptor or mentor.

Some career ladders include rungs for any nursing assistant who stays on the job for a year or two and performs satisfactory work. The model suggested by the Red Cross, for instance, starts with a CNA level 1, open to all new CNAs who pass the certification exam, complete the facility’s orientation, are certified in CPR, and “prove skills validations by passing a skills exam or proving their skills ability during their orientation.” Even level 2 requires only that a nursing assistant have at least two years’ experience, including one year of continuous employment with the facility, “a good performance evaluation and work attendance,” and “good attendance at in-service meetings.”¹⁶¹

¹⁶⁰ Simpson, A. (1998) American Red Cross chapter creates CNA development program. *Insight*, 7(2).

¹⁶¹ Simpson, 1998.

Other programs are designed to reward only more specialized skills and knowledge. For an example, see the descriptions of the LEAP program and Apple Health Care's career ladder in Section 7.16.

36. 7.13.2 Who has Access to Career Ladder Programs

As recently as a decade ago, career ladders for nursing assistants were virtually unheard of. When employees of the Masonic Geriatric Healthcare Center in Wallingford, Connecticut, decided to implement one in the late 1980s, they did a search for information on similar programs and found only two.¹⁶²

The concept has become more widely accepted since then, but most facilities don't offer them yet. "When I go to facilities and do presentations and ask, most people don't have a career advancement program," says researcher Joanne Rader. She thinks that's a mistake she adds, "since many aides think it's a dead-end job." In Pennsylvania's recent report on frontline workers, only 0.5 percent of respondents said they had implemented a career ladder.¹⁶³

7.14 Examples from the Field

7.14.1 Site Visits

Visits to nurse aide training programs in the Baltimore, Boston and Philadelphia areas were conducted to complement information obtained from the literature review and interviews with key industry contacts. A variety of training programs were sought out, including ones sponsored by the American Red Cross (ARC), community colleges, unions, hospitals, nursing facilities and private organizations. The Baltimore, Boston and Philadelphia areas were selected for ease of travel for the research team (based in Baltimore and Boston). At the training programs, administrators and instructors were interviewed as available, regarding the following: structure of the program; curriculum content; teaching methods; materials; costs; and instructor qualifications. Nurse aides in training were interviewed to gain information on educational background, previous work experience, reasons for enrollment and confidence in the program's ability to adequately prepare them for certification. Researchers observed classes in progress to better understand teaching methods, the student population and the learning environment.

Also as part of this task, directors of nursing and staff education coordinators from a sample of nursing facilities were interviewed to determine their experiences with training, hiring and orienting newly certified nursing assistants. Nursing assistants who had completed their training and certification testing within the past 12 months were sought out and interviewed for information on their preparation and initial work experience.

To accomplish the above tasks, two interview forms were devised. One contained questions to be used with training site staff and students and the other for use with directors of nursing

¹⁶² Polio, J.D. (1997) Implementing a career ladder program for the geriatric nursing assistant. *Insight*, 6(3).

¹⁶³ Pennsylvania's Frontline Workers, February 2001.

and nursing assistants. The interview forms were shared with key industry contacts and revised based on their input (see Appendix E-1 for copies of the interviews).

7.14.2 Description of Programs Visited

Researchers identified nursing assistant training programs sponsored by the groups identified above and planned to visit ten different programs. Most training programs approached were willing to participate in the interviews, but scheduling during the summer months was difficult. Additional scheduling problems were encountered when nursing facilities were contacted for interviews. Another difficulty for nursing facilities was that their participation required the identification of nursing assistants who had been trained and certified during the previous twelve months, determining their work schedule and coordinating with the researcher's planned visit. Researchers visited nursing facilities on multiple days and times to interview the nursing assistants on their scheduled shift(s), so as to minimize any data collection burden. Researchers were unable to identify any nursing facilities that were currently providing training programs. Although some were certified by their state agencies as qualified to train nursing assistants, DONs explained that there was not a significant number of persons interested in training and that to run classes for a small number was not cost effective. Although a privately sponsored program was identified, researchers were unable to coordinate with the program administrator to schedule interviews.

The following types of nurse aide training sites were visited:

- American Red Cross training programs (2);
- Community college program;
- Hospital-sponsored program;
- Union-sponsored program; and
- Skilled nursing facilities (2).

Information from the various programs obtained through interviews is presented in Table 7.1, displayed by the following characteristics:

- Program description (types of certification offered);
- Course length in hours;
- Approximate cost;
- Class size and ratios of instructors to students;
- Pre-testing and prerequisites for enrollment;
- Materials utilized;
- Teaching methods;
- Lab Facilities;
- Instructor qualifications; and
- Support for transition to work.

The remainder of this section will contain an introductory section on the sample states' regulations on nurse aide training instructor qualifications, followed by a description of the training programs. These descriptions are based upon researcher classroom observations and interviews with instructors and students. The final section contains summaries of interviews

with nursing facility directors of nursing, education coordinators and newly certified nursing assistants.

State Regulations Regarding Instructor Qualifications

The federal requirements for instructor qualifications (described earlier in Section 7.8.6) state that nurse aide certification instructors shall have a minimum of two years experience. At least one year of experience must be in long-term care. The educational background required of instructors is only that they complete a course in teaching adults or have experience in teaching adults or supervising nursing assistants.

The Massachusetts and Maryland State regulations on instructor qualifications were reviewed and found to vary significantly. Maryland regulations state that each course instructor must be a registered nurse licensed to practice in Maryland, have a minimum of two years of nursing experience — at least one year of which was in caring for the elderly or chronically

**Table 7.1
Nursing Assistant Training Program Characteristics**

Type of Program	Curriculum	Required Hours	Approximate Cost	Prerequisites	Class Size	Methods	Methods	Lab Facilities	Instructor Qualifications	Transition Support
American Red Cross	Combined CNA and HHA Course	MA - Total 100 hours Clinical - 21 hours MD - Total 127 hours Clinical - 40 hours	\$550 + \$87 Testing Fee	Reading and writing tests, 8 th grade level	Maximum class size is 24; Ratio of instructor to students in the clinical area is 1:6.	ARC Textbook and workbook	Lecture, video, flip charts, team activities, demonstration, return demonstration.	Combined classroom and lab	Lead instructors are all RNs. Clinical instructors RNs and LPNs. Long term care experience required. Only RNs and LPNs utilized as instructors.	Job opportunities posted on classroom bulletin boards
Hospital-Based	CNA	Total 80 hours Clinical - 21 hours	\$425	No pre-testing. Program based on 9 th grade reading level.	Class ranges in size from 6 - 20 students. Ratio of instructor to students in the clinical area is 1:6.	Textbook only	Lecture, video, demonstration, practice, reading assignments from textbook.	Combined classroom and lab	Program coordinator RN with BA degree in education and experience in long term care. Primary instructor LPN. Physical therapist teaches certain modules and assists in clinical area.	Job opportunities posted on classroom bulletin boards
Community College	GNA Geriatric Nurse Assistant	Total 200 hours Clinical - 75 hours	Tuition - \$700, Fees \$100 Books and supplies \$200 Total \$1000	High school graduate or GED and Basic Cardiac Life Support Certification	Same as MD state requirements	Textbook and workbook	Lecture	Combined classroom and lab	Same as MD state requirements	No information available
Union-Sponsored	CNA	Welfare-to- work - 480 hours Clinical-160 hours Other program Total 110 hours Clinical -40 hours	Welfare-to-work - No charge Other programs supplemented by union benefits programs for union members, also open to non-union members for reasonable tuition and fees	Welfare-to -work - pre-testing at the 6 th grade level. Other program pre-testing at the 8 th grade level.	Maximum size 20 students	Textbook only	Lecture, video, demonstration, return demonstration, role playing	Separate classroom and lab	RN instructors with LPNs to assist in the lab and clinical areas. RNs must be certified to teach in the state, have at least 1 year experience in LTC and 5 years experience as an RN. LPNs must have 3 years experience as a nurse.	Students assisted with job placement and continuing support after employed. The programs are described as a "life long resource."

ill in the past five years, and complete a course with a minimum of 16 hours of instruction in the principles of adult education or have a minimum of two years of teaching experience.¹⁶⁴

In contrast, Massachusetts requires that the instructor be a registered nurse with either one year's experience in teaching or the equivalent of 24 continuing education units in curriculum development, and familiarity with the use of teaching strategies for adult learners. No specific requirement regarding the extent of nursing experience is noted. If the instructor does not meet these qualifications, regulatory compliance may be achieved by having a written agreement between the instructor and a registered nurse consultant who meets the above qualifications. This consultant must consult with the instructor at set intervals during the course while the instructor attends the required continuing education programs. Both education and experience qualifications noted above may be waived by the state if the proposed instructor has "obtained sufficient experience in the care of long-term care residents and in teaching adults how to provide such health care to ensure that he or she may train nurses' aides to perform the objectives outlined in the minimum standard curriculum described."¹⁶⁵ No specific information as the definition of "sufficient experience" is offered.

Program Descriptions

American Red Cross programs in Boston and Baltimore combine nursing facility certified nursing assistant training with home health aide (HHA) training. In Boston, the total length of the program is 100 hours, with 21 hours designated for training in the clinical area. Nurse aide training takes place in ARC classrooms with clinical training at local nursing facilities. Baltimore programs are longer, requiring 127 hours for the combined CNA/HHA class. Maryland regulations require 100 hours of training, of which 72 hours are provided in the classroom and 42 hours in the clinical area. Massachusetts adheres to the federal mandate of 75 hours of training. Maryland regulations require that students be CPR-certified, while Massachusetts has no CPR requirement. Students must pass a reading and writing examination, based on 8th grade level, to gain entrance into the class. The cost of training in both Boston and Baltimore is approximately \$550 plus fees for testing. Partial payment is allowed. Classroom instructors are all RNs. Clinical instructors are RNs and LPNs. Boston instructors are required to have long-term care but not education experience. Completion of the Boston program may be applied toward six credits at three local community colleges. Students must pass with an 80 percent, and there are two quizzes and a final exam.

The hospital-based program examined by the research team is a nursing assistant training program and does not include the home health aide segment. The program is 80 hours in length, of which 21 hours is spent in the clinical area. Clinical skills are taught at one of several area nursing facilities. The instructor at this program explained that interest in the dual program (CNA/HHA) has diminished in the past years and on occasion, when there is a demonstrated interest, she does provide the additional hours. The hospital-based program is based on a 9th grade reading level and does not require any pre-testing. The program has a very strict policy regarding minimum test scores that students need to maintain to continue in the program. Three failed tests and the student is ejected from the program. Program

¹⁶⁴ Maryland Register, Subtitle 39 Board of Registration - Certified Nursing Assistants 10.39.01 Certification of Nursing Assistants, Vol 28, Issue 2, 1/26/01.

¹⁶⁵ Commonwealth of Massachusetts, 105 CMR: Department of Public Health, 156.210 (A). 4/1/94.

instructors strongly encourage nursing facilities sponsoring students for training to conduct their own pre-testing. Cost is approximately \$425. The program coordinator is an RN with a Bachelors' degree in education and experience in long-term care. The primary instructor is an LPN. The program utilizes a physical therapist, in addition to licensed nurses, in both the classroom and clinical areas.

The community college program is 200 hours in length, of which 75 hours is spent in the clinical area. When complete, students are eligible to take the nursing assistant certification examination, known in Maryland as Geriatric Nursing Assistant (GNA) certification. Students must be high school graduates or have received a general education diploma (GED) and be CPR-certified. Total cost for the community college program is nearly \$1000, which includes \$700 for tuition, \$200 for books, supplies and uniforms and \$100 in testing fees.

The union-sponsored program offers two different tracks, a full-time welfare-to-work program and a part-time program for dislocated and incumbent healthcare workers and community participants. The welfare-to-work program consists of 320 hours of classroom instruction and 160 hours in the clinical setting over 16 weeks. The part-time program is 110 hours over 12 weeks. Pennsylvania adheres to the federal 75 hour requirement of training. Instructors are RNs with LPNs providing assistance with the clinical and lab components. Students are pre-screened for enrollment in the welfare to work program with 6th grade level reading and math tests. Students in the part-time program are pre-tested at the 8th grade reading and math level. A GED is not required for enrollment in either program. Tests are administered during the training and students are expected to maintain a 75 percent average. Students scoring below the 75 percentile are allowed to continue in the program and are provided with supportive tutoring. Students in the welfare-to-work program are provided with CPR training, but it is not a requirement for enrollment in either program. There is no cost associated with the welfare-to-work program. These programs are provided to union members, but are open to non-union members as well. For union members, the cost of the part-time program with associated fees may be covered by union benefit programs, with the student contributing to the cost for books and uniforms. The part-time program is also open to members of the local community for a reasonable tuition charge, which includes tuition and books; uniforms and testing fee are additional.

Classroom Observations

In order to better understand the various nurse aide training curricula, researchers visited the four program types for several hours at a time, usually on more than one occasion. It is important to note that these observations represent only a brief glimpse into the total program training activities.

Classrooms in ARC, hospital-based and community college programs combine classroom and laboratory facilities. Classrooms appeared crowded, but well supplied with hand-washing sinks, hospital beds, bedside tables, over-the-bed tables, wheelchairs, walkers, mechanical lifts, upright scales, commodes, folding screens, linens, and personal care equipment. The union-sponsored program utilizes separate classroom and lab facilities.

Most instruction is given via lecture, with videotapes, posters and textbook used to supplement material presented. Student participation varied among the programs. In AMR programs, students were observed to participate by reading from textbooks and engaging in

discussion to clarify important points and to draw from personal experience. The community college program was observed to be taught primarily via lecture. Students are regularly assigned homework. Skills training involves a demonstration by the instructor with return demonstrations from students working in small groups. Students practice on each other, and are required to demonstrate how to knock on doors, introduce themselves and explain a procedure before beginning. Students are frequently reminded to talk to the residents, explain what they are doing, and ask if residents are comfortable.

During skills training, instructors were observed on several occasions in two of the programs to teach different procedures for the same task; one that the student would be expected to demonstrate to pass the certification test and the other the "real" way that would be done when employed in a nursing facility. For example, when the students were instructed on how to offer a bedpan to a nursing facility resident, they were told that during the certification test, their partner (someone who accompanies the student to the skills segment of the exam) would be allowed to lift themselves off the bed so that the student could easily slip the bedpan under them. The instructor explained that elderly nursing facility residents would not be able to do that and demonstrated how to turn the resident on his/her side, place the bedpan appropriately and then have the resident turn on their back.

In combined nursing assistant and home health aide training programs, material applicable to either or both programs was observed to be presented concurrently throughout the classes. For example, one class observed by a researcher covered the topic of safety and included both toddler and infant safety as well as safety issues applicable to the nursing facility. In this same segment, students were provided with and were responsible for information on positioning an infant to prevent Sudden Infant Death Syndrome, recognizing the signs and symptoms of heart attack, and emergency care and first aid for choking, poisoning and seizures. In this class, the instructor demonstrated the Heimlich maneuver and then had students practice with a partner. Students were then observed and "passed" on this skill by the instructor.

Instructor Interviews

Interview questions posed to the instructors focused on whether the number of state required hours were adequate (in their opinion) to prepare nursing assistants for employment and what supports they would recommend for newly certified and newly-hired aides. Instructors at both the ARC and hospital-based programs believed that students were adequately prepared for entry level work but that a comprehensive orientation program was key to making a successful transition from student to practitioner role. Nursing assistants are prepared to perform basic tasks, but are not prepared to accomplish the level of organization necessary to accept a full resident assignment. The ARC instructor stated that students should not have a full resident assignment until they've been employed for four to five weeks and that their responsibilities for residents should be gradually increased over this period. She also stated that newly certified nursing assistants need six months of support and/or mentoring during their first job.

If any changes were to be proposed, ARC instructors advised increasing the required time in the clinical area or adding a requirement that nursing facilities put aides in a one-on-one mentoring or support relationship for at least the first few weeks following certification.

The instructor in the hospital-based program stated that students involved in clinical training in her program started out providing an aspect of care for one resident with a partner and then gradually advanced to the point of being able to provide care for one resident by themselves. This instructor stated that students are often initially uncomfortable and anxious in the nursing facility setting and that having a partner alleviates some of this discomfort.

When questioned about the make-up of the student population currently and in the past, instructors noted that language is an issue for many more students now than in the past. They explained that pre-testing students with reading and writing tests helps to identify those students who would have difficulty with the language level of the textbook and program materials. Inner-city classes include a higher percentage of non-native English speakers, while suburban classes are generally split evenly between students for whom English is their native language and students for whom English is a second language. The ARC offers English as a Second Language classes and will refer students to those classes if they are unable to pass the reading/writing examination. The age of students has not varied significantly over the years, but the number of men enrolling has increased. According to instructors in the ARC and hospital-based programs, 80 and 50 percent of students respectively pay for the program themselves.

Student interviews

Nine students were interviewed who were enrolled in ARC and hospital-based programs. Students were evenly split between under-25 and the 26-45 age groups. The majority were female and described themselves as Black/African American. Three were currently enrolled in college programs and two had been employed as business or healthcare professionals in their own country. Eight of the nine indicated that they were either currently enrolled or planning to attend nursing school in the future. It should be noted that these interviews took place in June 2001 when it is possible that a greater percentage of college students would be enrolled in the programs as they prepare for summer employment.

7.14.3 Nursing Facility Interviews

Interviews were conducted with directors of nursing and educational coordinators who are responsible for the orientation and on-going education of nursing assistants. Nursing assistants who had completed their certification training within the past 12 months were identified and interviewed as time and schedule permitted. Researchers recognized early in the study that the interview protocol for nursing assistants as originally drafted was excessively long and had to be shortened considerably. Because nursing assistants were interviewed at the facility during their shift of duty, they were far too busy to spend more than 10 or 15 minutes with the researcher. The original questions were also noted to be too complex for many nursing assistants, especially those for whom English was not their native language. One of the facilities visited was large (over 100 beds) while the other was small (100 beds or less); one was located in a suburban location, the other in the city. One facility was privately owned while the other was part of a chain.

Directors of Nursing/Education Coordinator Interviews

Directors of nursing (DON) and educational coordinators were questioned on their opinion of the adequacy of the preparation of nursing assistants, variation in training programs and ways that they provide support for the newly certified nursing assistant. Both DONs interviewed

stated that nursing assistants generally need more training, particularly clinical training. One director of nursing had found that the aides were completely overwhelmed by the size of their assignment and the complexity of all that they were expected to do in the course of a shift. They commented that the aides were often unprepared for what the job entailed. They noted several areas where students could benefit from additional training. Students were not always adept at respecting resident rights or talking to residents and/or their families. They also did not know how to operate commonly used equipment, for example mechanical lifts and scales for weighing residents. Furthermore, they were not skillful at certain tasks, like taking blood pressures or transferring and positioning orthopedic residents.

When asked about the variability in level of preparation between various training programs, one DON stated that she has noted a great deal of variability in the competency of the nursing assistants coming from different programs. Some programs, she noted, seem to “pass” everyone, while others seemed too restrictive. This variation seemed to center on language issues. In her experience, she had hired recently trained, but not necessarily certified, nursing assistants. She described these recently trained nursing assistants as having such poor English language reading and writing skills that it was unclear how they could have passed the nurse aide training program and/or state certification examination. On the other hand, uncertified nursing assistants that she had hired and enrolled in a different certification program, had been dropped from that program because they were unable to maintain the required test average. The DON stated that she had confidence that these nursing assistants were caring individuals who would be competent nursing assistants and planned to have them repeat the program.

The other DON stated that she preferred students to be trained on-site at the nursing facilities as she believed that such training considerably shortened their learning curve. They were able to learn the facility environment (e.g., where supplies were kept, procedures for laundry, and required documentation), and develop supportive relationships with other staff during the course of their training. She pointed out that with the increase in acuity of nursing facility residents and the greater number of admissions and discharges, nursing assistants no longer have the opportunity to care for the same resident day after day. Nursing assistants’ assignments change more frequently and thus they do not receive the needed reinforcement of providing the same care techniques daily. By training in the facility, this DON believed that a more consistent environment was achieved and was thus more conducive to learning.

Both facilities indicated that they provide individualized orientation programs designed to provide the appropriate level of orientation based on the newly hired employee's level of experience. All employees receive a standard general orientation, but beyond that the orientation is driven by the employees' needs. Nursing assistants’ skills are evaluated using competency checklists to document that each skill has been successfully demonstrated. Evaluation of the various skills is completed by the nursing assistant, a co-worker, and their supervisor. Each facility stated that they assign a "buddy" or preceptor to new employees and that assignments are initially very light and are gradually increased over time. Both facilities indicated that although the orientation was individualized to the experience of the new employee, generally newly certified aides were in orientation for two weeks. One facility stated that if the orientation goes beyond two weeks, they evaluate the appropriateness of the individual's employment.

Interviews with newly certified nursing assistants

Newly certified nursing assistants were interviewed to determine the type of program they had attended, the curriculum, teaching methods and instructors, and to share information on their initial work experiences. As stated above, it was difficult to obtain all the desired information due to time and language constraints. In many cases, nursing assistants simply did not understand the interview questions.

Five female nursing assistants were interviewed; four from one facility and one who was interviewed at the union-sponsored program. Four described themselves as Black/African American and one described herself as Hispanic-Latino. Three stated their ages as between 26 and 45 years old and two were under 26 years. Two were high school graduates, one had completed two years at the university in her country, one was currently enrolled in the community college nursing program and one was enrolled in a union-sponsored LPN program. Prior to becoming nursing assistants, they had worked as housekeepers, lab assistants, home health aides, at a library and at a fast food chain. Two indicated that they decided to become nursing assistants because they had cared for elderly family members, one had selected it because it would get her a job and two wanted to go to nursing school.

Each one gave good marks to her training program. Four had passed the written and skills test the first time they had taken it, the fifth had had to repeat the training course and take the written test twice, but had passed the skills test the first time around. When questioned as to which teaching methods were most effective, two nursing assistants indicated that the skills practice sessions were most helpful, while one found the textbook helpful and another stated that the "two languages" was good. She explained that her training class was conducted in English, but that if a student didn't understand something, he or she could request that the instructor explain it in their native language.

When describing their orientation to the nursing facility, each nursing assistant stated that she had been assigned a "buddy" and that this person had been very helpful, although it was not always the same person. The nursing assistants reported receiving full resident assignments between one and three weeks after beginning their employment. One stated that she felt she knew her job after two months. Three of the nursing assistants stated that they had learned 50 percent of what was needed to do their job in the training programs and 50 percent on the job. When asked if the way they perform tasks at the nursing facility was different from the way they learned in the training program, two stated that it was very different. One explained that it was because the way they do it at the nursing facility is more tailored to the needs of the residents, while the other stated that it was "completely different from the way it's done in class," but didn't offer any further explanation. These noted differences between the way procedures are done in class and the way they are done on the job impacted the newly hired nursing assistants' perception of the orientation program. When asked to describe their initial days on the job, one answered that, "it wasn't easy, things were very different from the class" and another stated that it was "very difficult as the workplace was not at all like the classes." One nursing assistant explained that no amount of training could have prepared her for "working short", (i.e., low staffing). She stated that, "I don't know how they can train you for that." She expressed that she had used most of the material that had been presented in her class, "some of the stuff I thought I would never use but I have."

7.14.4 Interpretation of Findings

Any conclusions or recommendations put forth in this section are limited by the extremely small sample of programs and nursing facilities reviewed. However, certain themes that were recognized in our interviews parallel testimony offered by industry experts that was noted in the literature review. Classroom observations along with interviews with program instructors, students, nursing facility directors of nursing and newly certified nursing assistants yielded the following key points:

- Time spent in clinical practice is important for improving competency levels at the time of certification and in easing the transition from certification program to work environment. Increasing the mandated number of hours in nursing assistant certification training programs and requiring that a portion of these hours be spent in the clinical practice component or in formal facility orientation programs would improve the competency level of newly certified nursing assistants.
- Communication between training program instructors and nursing facility staff regarding competency levels at the time of certification is needed to bring the level of expectation on the part of the nursing facility in line with the reality of program capabilities. Because facilities are often not aware of the variation in training course content, communication in the form of individual student competency evaluation specific to care tasks should be provided by the certifying program to the hiring agency.
- The amount of material presented to the student and for which the student is held responsible is vast. (For details, see sections 7.6.1 and 7.8.2.) Students, regardless of educational background or employment experience are expected to absorb information on the following:
 - . Basic nursing procedures (e.g., bathing, dressing, feeding, transfers, mouth care, measurement of temperature, pulse, respiration and blood pressure);
 - . Medical information on diseases (e.g., Alzheimer's disease, cancer, diabetes);
 - . First aide and emergency procedures (e.g., poisoning, falls, burns);
 - . Nutrition;
 - . Safety;
 - . Resident rights;
 - . Communication;
 - . Death and dying; and
 - . Infection control.

The majority of the programs examined attempt to accomplish all of the above within the 75 hour minimum required by OBRA '87. If the training program is one that includes both CNA and HHA training, information and procedures applicable to all age groups must be mastered. Increasing the number of hours, especially for students with no previous medical experience would improve competency levels.

- Emphasis should be focused on the special needs of the geriatric population. Because the course content is extensive and often includes both CNA and HHA training, thus covering all age groups, little focus can be spent on the special needs of the elderly, who make up the vast majority of the population needing care.
- Techniques taught should be current to the present nursing facility environment, e.g., nursing facilities do not use upright scales as few residents are able to step up on them, yet training programs teach weight measurement using upright scales.

The responses by newly certified nursing assistants that 50 percent of what they currently know about their job they learned in the training program and other 50 percent they learned on the job agrees with data from a survey referenced in Section 7.7.1 (Gipson et al, 1998). These observations made by nursing assistants are interesting and at the same time rather distressing. Nursing facilities appear to focus their attention during the orientation process on the verification of skills that these nursing assistants should have learned in training programs. They recognize the need to teach nursing assistants and all new employees the policies and procedures that are unique to their facility, but do not appear to see their role as providing much more than general orientation and skill verification. The newly certified nursing assistants expressed great appreciation to their "buddies" and charge nurses who helped them learn during those initial weeks on the job. If it is indeed true that half of the learning is taking place at the facility, then the majority of this teaching is being provided by nursing assistants, which is putting considerable burden and responsibility on individuals who themselves have had minimal preparation. Furthermore, half of nursing assistants' preparation is taking place in an environment that is not aware that this practice is occurring nor acknowledging this task as their responsibility. More investigation into the interaction between training programs and work environment is needed.

7.15 Innovations from States

7.15.1 State Initiatives to Support Nursing Assistant Education

Several states are authorizing new sources of funds to support education, recruitment and retention of CNAs. Some initiatives are developing or evaluating programs that foster career development for CNAs. Others are preparing nursing assistants for certification, teaching them about specific diseases, or offering ESL or GED classes.

More detailed information will be available soon from the Office of Inspector General (OIG) of the Department of Health and Human Services, which is conducting a survey of all nursing assistant educational requirements in each state. The OIG's study, which will include data about which states are adding to or deleting from their mandated requirements, is due to be released in late 2001 or early 2002.

37. 7.15.2 Michigan

The Michigan Department of Community Health has authorized \$7 million of tobacco grant funds over three years to enhance training in health careers. Among many funded projects are the following:

- “Staff development and training” awards for a dementia training project intended to help family and paid caregivers provide care to people with dementia.
- Funds to help the American Red Cross of Southeastern Michigan develop, test, and refine a curriculum to prepare direct care staff to work in various long-term care settings.
- A service organization in the Upper Peninsula of Michigan will receive \$150,000 for the "Home Care Assistant Training Program," a partnership with several community and state colleges and Michigan Works!, the state's workforce investment agency. The program will be implemented throughout the Upper Peninsula for existing in-home providers, workers and caregivers to address area direct care recruitment and retention.
- Alpena General Hospital in Alpena will receive \$50,000 for the "Certified Nurse Aide/Certified Home Health Aide Training Project," in partnership with Alpena Community College in several rural counties in northeast lower Michigan. The project is expected to reduce the cost and improve the quality of nursing facility and home care services.
- MidMichigan Gladwin Pines, of Gladwin, will receive \$70,268 for the "Staff Development & Training Project," to partner with Michigan Works!, a regional Community College, a county extension program, a Regional Education Service District, a family service agency and several long-term care providers. The project will result in a community strategic recruitment plan, more stabilized work force and greater recruitment of staff to the facility.
- American Red Cross Southeastern Michigan Chapter, of Detroit, will receive \$100,000 for the "Nurse Assistant Training, Recruitment, and Retention Program," to develop, test, and refine a direct care curriculum which prepares direct care staff to work in a variety of long term care settings.
- Huntington's Disease Society of America - Michigan Chapter, of Lansing, will receive \$48,645 for the "Specialized Community/Individualized Care Planning," project to engage in a public/private partnership with Tendercare Corporation to provide Huntington's Disease training and consultation program within several Tendercare facilities to better handle associated behavioral symptoms and meet the long-term care needs of consumers with this form of dementia. The project will provide individualized care and planning with consumers in these facilities with Huntington's, family members, facility staff and other long-term care community providers.
- Tendercare Regional Office, of Okemos, will receive \$150,000 for the "Advanced Health Care Provider Training Program." The training will go beyond physical treatment practices to include outcomes that are consumer driven. The staff training models will include segments related to assisting customers in making informed choices related to their care as well as the available resources in their community to meet all of their needs.

38. 7.15.3 Massachusetts

A Nursing Home Quality Initiative, passed by the Massachusetts legislature in FY01 and signed by the governor, was designed to improve the quality of long-term care by directing resources toward improving the quality and stability of the labor force. The budget included the following:

- \$35 million for an across-the-board wage pass-through for CNAs;
- \$1 million for a scholarship program for entry-level CNA and home health aide training;
- \$1 million for ESL and adult basic education (ABE) training for workers to develop the skills needed to enter a CNA training program; and
- \$5 million for the Extended Care Career Ladders Initiative (ECCLI).

ECCLI takes as its premise that long-term care providers must change how they value, train, and promote direct-care workers to compete for labor in today's economy. It awarded three rounds of funding during FY 01.

In two of those rounds, 24 nursing facilities were awarded up to \$100,000 each for initiatives that offered direct-care workers opportunities for skill development and career advancement. These took many forms, from ladders that emphasized leadership development to English classes for speakers of other languages. All allowed low-wage staff to move to more senior direct-care positions that offer greater responsibility and increases in wages.

A third round of funding offered nursing facilities from \$100,000 to \$500,000 to form partnerships with other long-term care facilities or home care providers, workforce development agencies, and community colleges. In each case, training for direct-care workers had to be linked to changes in work organization and care giving practices. Providers were asked to examine the quality of life for their residents, develop specific plans for improving care giving and workplace practices, and tie their career ladder curricula to the changes they proposed. Program components included changing supervision and management methods, instituting employee supports, and developing soft skills such as problem solving and communication.

Seven partnerships were funded, each including at least two long-term care providers, with a total of 27 nursing facilities and 3 home care agencies participating. Each consortium is developing a career ladder program. In some cases, housekeeping and dietary staff are encouraged to participate in ESL and ABE programs that provide the basic skills needed to enter a CNA training program. Many career ladders include mentoring and leadership components, which are complemented by supervisory training that emphasizes a "coaching" style of management (for details, see Section 7.16.3). A number of the programs provide employee supports, career counseling, and case management services.

In addition to career ladders, participants are engaging in other practices designed to expand the pool of workers and improve retention. One consortium, for example, is developing a

shared curriculum for home health aides and CNAs, so workers can be cross-trained and can supplement their part-time home-based jobs with work at facilities during peak hours.

The legislature and the governor have proposed to continue funding for workforce development in long-term care in the FY02 budget. In its next phase, the program will include workers providing home-based care. The budget proposals maintain the wage increase and continue the scholarship program and resources for ESL, ABE, and employment supports.

7.16 Promising Practices from Providers and Other Non-governmental Entities

In the limited time available to research and write this chapter, the research team was unable to conduct a comprehensive review of the many programs nationwide intended to recruit and train new nursing home nursing assistants or offer career advancement opportunities to experienced NAs. Most of the programs outlined below have not been evaluated formally, if at all. They were, however, recommended by program developers, researchers, and other key informants who believe them to be innovative and effective.

39. 7.16.1 Dementia Care Training

Due to the prevalence of dementia among nursing home residents and the special challenges posed by the condition, many educational programs for nursing assistants focus on some form of dementia care. Promising approaches include the following:

- Bathing. Being given a bath or shower often causes people with dementia to become agitated, striking out physically or verbally at their caregivers. In a pilot project at two Oregon nursing homes, researchers Joanne Rader and colleagues identified a number of ways in which nursing assistants could reduce aggressive behavior and make the experience more pleasant and less stressful for the residents.¹⁶⁶
- Adult education methods for teaching dementia care. A method of dementia care training disseminated by the Eastern North Carolina chapter of the Alzheimer's Association teaches both direct caregivers and their managers effective ways of working with people with dementia. The training itself incorporates many concrete suggestions, such as approaching people from where they can see you, not from behind, giving them time to realize and adjust to what's happening, staying at eye level rather than towering over them, offering a hand but letting the resident initiate contact, and keeping messages simple.

The content is taught in a variety of methods calculated to get through to all types of adult learners (for details on adult learning methods, see Section 7.7.2). "Our experience

¹⁶⁶ Rader J, Lavelle M, Hoeffler B, McKenzie D (March 1996). Maintaining Cleanliness: An individualized approach. *Journal of Gerontological Nursing* 22(3) 32-38.

indicates this training approach and our techniques result in better content integration into practice, improved caregiver understanding of resident behavior, use of new and more effective intervention techniques ... and fewer episodes of negative resident-caregiver interactions around caregiving,” writes Teepa Snow, one of the developers of the program and the program director for the Durham Technical Community College OTA program and restorative care offerings.¹⁶⁷

- Music and touch therapy. Kramer, Smith and Dabney (1996-1997)¹⁶⁸ trained nursing assistants and family members to use these two types of therapy on residents with advanced dementia. Touch therapy concentrated on stimulation of the hand and arm, using such techniques as a light comforting touch, light hand massage and acupressure. The music therapy involved caregivers using techniques such as singing, humming, playing familiar or soothing music, moving rhythmically and playing instruments. Caregivers were taught each intervention in time spans of between 30 minutes and half a day over the course of several weeks.

The researchers found evidence that both types of interventions “can have a strong positive impact on nursing home residents with severe dementia,” with touch typically calming agitated residents and music eliciting increased arousal and interest. Both interventions caused residents to exhibit less sadness and depression.

Noting that it was difficult for nursing assistants to find the time for the additional training, the researchers concluded that “a more important consideration for training than establishing a uniform schedule which has to be followed by everyone is assuring that each caregiver can devote about eight hours overall to the training process.”

40. 7.16.2 Programs Offered by Individual Facilities or Chains

Providence Mount St. Vincent

Providence Mount St. Vincent (PMSV) is a large nursing home in Seattle, Washington, that has reorganized its staffing to facilitate the development of relationships between residents and resident assistants (its title for nursing assistants). To foster this Pioneer philosophy, nurses no longer manage resident units. For each “neighborhood” of care, PMSV has hired more resident assistants. The resident assistants have increased authority and responsibility and more time to spend with residents to provide individualized care, while licensed nurses have more time to conduct nursing assessments and treatments.

PMSV recently developed its own in-house training program because its managers felt that CNAs trained elsewhere were not prepared to do the work or be familiar with the PMSV philosophy of resident-directed care and management. It also provides training for several rural nursing homes who lack the funds and infrastructure to train their own staff.

¹⁶⁷ Personal communication.

¹⁶⁸ Kramer NA, Smith M, Dabney J (January 1996-December 1997). Final report: Effects of specialized training of family and nursing home caregivers in the use of music and touch with nursing home residents with advanced dementia.

The training program comprises 134.5 hours including 74.5 hours of clinical practice. The curriculum includes components about conflict resolution, communication and multicultural issues in addition to segments on the aging process, death and dying and cognitive impairment. PMSV establishes “extra” days during which students can return to practice skills prior to taking their exams, since the exam is often scheduled a month or two after they have completed the training.

The entire facility is invested in the training program. Although two full-time RNs direct the training program, other staff, including members of the management team, are often called on to teach specific segments.

PMSV encourages most employees to take the training so everyone is certified to provide resident care. The course is tuition-free, and PMSV pays all transportation costs. PMSV also pays wages to existing employees and holds their jobs while they take the resident assistant course.

In addition, PMSV provides English as a Second Language courses for interested employees. Employees who take ESL training take three hours of class a week. PMSV pays them for half that time.

Experienced resident assistants become preceptors to RAs in training and to those newly certified and assigned to neighborhoods. Under supervision from managers, preceptors work with the new RAs as long as necessary to help teach the resident-directed philosophy, oversee technical skills, and model the relationship building that is the core of the work. Preceptors are given a raise in salary. PMSV also offers financial credit for experience gained outside the facility that relates to an employee’s job responsibilities.

Nurse Managers supervise the students during their clinical hours on the neighborhoods, and the training staff meets quarterly with preceptors to train them in identified areas and have them demonstrate their skills. In addition, PMSV periodically sponsors extended training for supervisors to develop their skills at supervision.

PMSV has a part-time counselor to help students succeed in the training program and access an Employee Assistance Program if necessary. The facility also provides support to students after they complete the training, whether they are employed at PMSV or elsewhere. In focus groups with employees held in 2001 to learn what kinds of support they need, PMSV learned that they want certain types of assistance in order to be able to work full-time or overtime. In response, PMSV is arranging for assistance such as late night childcare, food delivery and transportation.

PMSV is reimbursed for partial costs of its training program. Based on its Medicaid population, Medicaid pays 50 percent of the cost for teachers, expenses and supplies, but none of the wages paid to staff in training.

Apple Health Care

Apple Health Care is a small chain of 21 nursing facilities in Connecticut, Rhode Island and Massachusetts. As part of a corporate-wide culture change process, Apple addressed its high

turnover of CNAs through a holistic approach that redesigned hiring, orientation, advancement, and workplace culture practices.

To increase retention, Apple refined its selection process to ensure the hiring of candidates who believed in its quality-of-life mission. It then enhanced its orientation program and developed a career ladder program.

CNAs eligible for the Career Path program must be employed by Apple at least one year, be an employee in good standing, and be recommended by the administrator and director of nursing. CNAs earn quarterly bonuses of \$75, \$150 and \$250 respectively after completing each of three modules. (CNAs said they preferred getting the money as a bonus rather than as part of their wage packages.) The bonuses continue as long as the CNA remains employed.

Each module lasts for eight weeks, during which participants attend one two-hour class every week. The modules are Individualized Care, Pioneering Approaches to Quality of Life, and Leadership. Sample class titles from the first module include “From ‘Difficult Behavior’ to ‘Meaningful Communication,’” “Care Plans that Know the Resident,” and “Food is NOT Medicine!” The module on leadership includes classes on effective communication, understanding change, becoming a preceptor, and stress reduction, among other topics.

Apple’s revamped orientation program partners a trained mentor (a level 3 Career Path CNA) with a new hire whenever possible. New CNAs go through on-the-job training, which is time spent directly with residents, before working on their own. This orientation period may be lengthened if the mentor and supervisors believe the employee is showing progress but needs more time. Mentors work with new aides holistically, teaching not just how to perform caregiving tasks but how to communicate effectively as well.

Apple also instituted a “Better Life” program to give paraprofessionals a voice in overall workplace culture. Joint committees of workers and residents suggest ways to make the home a better place to work and live. The committees have representation from a variety of shifts and have suggested many improvements that have been implemented.

The Cooperative Healthcare Network

The Paraprofessional Healthcare Institute has fostered a network of employee—centered enterprise and training programs modeled after Cooperative Home Care Associates, a worker-owned home care agency employing more than 600 direct-care workers in the South Bronx. The Cooperative Healthcare Network (CHCN) also includes two other worker-owned home health agencies, and two worker-centered training programs.

Although most CHCN providers work with home health aides, the network’s approach to training has also been successfully applied to preparing nursing assistants for work in nursing facilities. The network has documented the following essential elements of effective training, based on 15 years of experience.

- Apply adult-learner training techniques throughout the curriculum. To accommodate different methods of learning, the CHN training program incorporates a range of teaching techniques, including the following:

- Case studies
 - Learning team discussions
 - Role plays, theatre and other simulations
 - Interactive lectures
 - Homework that stimulates questions and discussion
 - Recycling (repeating) information in different contexts and forms
 - Interactive review/assessment activities.
- Adapt clinical and personal care skills curriculum to the specific needs of the resident base.
 - Add work-readiness skills such as communication, critical thinking and interpersonal problem solving to the curriculum. These skills are introduced early and then woven into clinical and personal care skills units. (For example, a bathing unit is used to practice communication skills.) Appropriate workplace behaviors are also covered, including such matters as case assignments, hours, expectations for professional dress and behavior, and time sheets.
 - Integrate learning about appropriate workplace behaviors into the training program. These may include such topics as case assignments, hours, expectations for professional dress and behavior, and time sheets.
 - Extend training into the first 90 days of employment (this may be a probationary period), through a combination of close supervision and with the following:
 - A comprehensive orientation program that refreshes skills, improves communication and problem-solving skills, and introduces aides to the full range of staff they will interact with in the organization.
 - An on-the-job training program for the first three to six months.
 - Peer support. Larger employers who hire a number of workers at one time convene peer-mentoring groups bi-weekly, ideally with an outside facilitator to help identify issues that need to be brought to supervisors or care managers. Smaller organizations that hire employees one at a time are encouraged to set up more flexible and informal mentoring relationships.
 - Frequent in-service training to reinforce problem-solving skills through discussing on-the-job experiences. When possible, these are held bi-weekly, with peer-support sessions on alternating weeks.

Learning about appropriate workplace behaviors and understanding company policies is integrated throughout the training program. This is accomplished through on-the-job training to support workers in their first three to six months on the job, extensive orientation, regular in-services that are responsive to student needs, peer support and mentoring programs, and a coaching style of supervision.

The coaching method uses one-on-one sessions to build a trusting relationship. Issues to be addressed are identified, and the coach seeks to understand how the nursing assistant sees her

world, what her thinking and problem-solving process is, what she understands as her goals, and what barriers might be in the way of achieving these goals.

When there is a shift from “blaming” direct-care staff for problems such as absenteeism or “poor attitude” toward supporting growth and development and good problem solving skills, nurses and supervisors can begin to listen more carefully and improve communication with CNAs. Rancor and tension are reduced, and CNAs who might have left the organization may become prized employees. Sanctions are still used when necessary, but the goal is to replace the traditional “discipline and punish” method of supervision with a more effective "problem-solving" method.

Coaches are taught to communicate clearly with workers about each problem and its potential consequences, to come to an agreement about what the problem is and what caused it (here, the worker is expected ultimately to “accept ownership of the problem”) and to help the worker resolve both the problem and its underlying cause.

CHCN members report marked reductions in turnover after instituting this method of training.

Genesis ElderCare

Genesis ElderCare, the skilled nursing and assisted living branch of Kennett Square, Pennsylvania-based Genesis Health Ventures, offers an advanced title to qualified nursing assistants who want to earn additional duties and pay while remaining NAs. Geriatric nursing assistant specialist (GNAS). classes last for 108 hours and cover seven topic areas, including advanced communication skills, conflict resolution and customer service, and the problems, signs and symptoms of common disorders in the elderly. GNAS graduates get a \$1.25 an hour boost in pay and are assigned special duties, which may include greeting new residents and their families, helping to orient new nursing assistants, overseeing a nutrition, hydration, or weight management program, or serving on a facility’s performance improvement committee.

While the program has not been formally evaluated, Genesis reports that nursing assistant turnover has decreased since it was implemented more than a decade ago.

The Towson Maryland Regional Office for Genesis ElderCare is approaching the shortage of nursing staff through what they characterize as a "re-engineering" of the nursing staff. The first step in this re-engineering process involved a thorough review of the responsibilities, duties and tasks performed by all levels of the nursing staff, both licensed and unlicensed staff. Based upon this review, Genesis was able to identify the most time-consuming tasks as well as a number of functions that could be performed by non-healthcare workers. Using their findings, Genesis implemented the following changes: 1) creation of new positions and re-allocation of time consuming tasks to these positions, 2) streamlining of the admission process, and 3) expansion of career ladder programs for nursing assistants.

Specific examples of staffing changes include the addition of an evening non-clinical manager. This person assumes responsibility for all issues that do not require the expertise of a licensed nurse such as staffing shortages, physical plant problems, and resident or family non-medical questions. Because many residents receive IV therapy, which requires significant nursing time to monitor, a separate IV team was assembled to deal with IV administration on a 24-hour basis. Lastly, Genesis instituted the creation of a new position,

called the Dignity Specialist. The Dignity Specialist is a certified nursing assistant assigned to each unit who devotes his or her time to bathing and showering residents in a "spa-like" atmosphere. This has proven to be a very successful practice for both staff and residents. The Dignity Specialist coordinates the scheduling of baths and showers and is able to provide a relaxing and private bathing experience for residents.

Wellspring

Developed by 11 not-for-profit long term care organizations in Eastern Wisconsin, Wellspring Innovation Solutions, Inc. is a multifaceted approach to improving care quality and reducing turnover. Each participating home is encouraged to tailor the program to its own needs, but all must agree to send all eligible staff to Wellspring's eight training modules and to collect data and analyze it on a quarterly basis. A geriatric nurse practitioner (GNP) oversees and implements training for all member facilities.

The philosophy behind Wellspring is to empower nursing assistants and all other staff to make decisions that improve the quality of resident care and the work environment, to foster networking between departments within a facility and staff at different facilities, and to use data on resident outcomes to measure progress and identify areas in need of improvement.

Six modules include nursing assistants. Training begins with a two-day off-site session, in which care resource teams consisting of nursing assistants and other staff study one of the modules. The team then teaches all other staff at the facility what they have learned. The GNP visits the facility three months later to reinforce what the team has learned, and conducts a one-way workshop six months after the training for team members. The process is repeated for each of the modules, with different staff members involved in each care resource team.

The topics are as follows:

- Elimination/continence. The entire nursing staff explores causes, assessment techniques, treatment options and ongoing evaluation as it relates to incontinence. The contributions of every department, from housekeeping to dietary, are explored.
- Skin care. A nurse practitioner and enterostomal therapist teach how to prevent, identify, and treat pressure ulcers.
- Behavior management. The social worker generally leads this module, which focuses on how to identify and treat such problems as depression, anxiety, delirium, dementia and wandering.
- Falls and restraint reduction. The entire facility staff is involved in this module, which stresses ways of identifying frequent fallers and maintaining safety without using restraints.
- Restorative care. Nursing, restorative and activities staff discuss how to keep residents at their highest level of functional, emotional and cognitive ability. Use of assistive devices is demonstrated, and the impact of resident immobility on function is explored.

- Nutrition. A dietician and a nurse practitioner explain how aging affects nutritional needs, with a focus on preventing dehydration and malnutrition. All care team members, including activities staff and therapists, are included in discussions of creative fluid management techniques.

In addition, a management module helps managers learn to adopt a coaching and mentoring style in the interest of empowering frontline staff, and a physical assessment module encourages RNs and LPNs to check their documentation systems for efficiency and accuracy and to eliminate redundancy, as well as teaching clinical observation, assessment, and critical thinking skills.

As Reinhard and Stone noted,¹⁶⁹ “The Wellspring model is particularly compelling because of its attention to the day-to-day work of frontline staff, particularly the CNAs. The stated philosophy is that top management sets policies for quality, and the workers who know the residents best decide how to implement those policies.”

The American Association of Homes and Services for the Aging’s Institute for the Future of Aging Services is evaluating the program in a report expected out in fall 2001. Meanwhile, noted Reinhard and Stone (2001): “Preliminary empirical evidence suggests that the Wellspring model may be producing improvements in quality. Yet because it is a multifaceted approach, implementation is not easy, according to top management. Aside from initial start-up costs in hiring the GNP and developing data systems and training programs, there can be ‘psychic costs’ associated with broad organizational change. Mid-management nurses and staff who are accustomed to a certain level of authority can sometimes be stumbling blocks to creating an environment in which CNAs and other front-line staff have a more substantive role in resident care and purchasing decisions.”

St. Martin’s

The St. Martin’s Outreach Certified Nursing Assistant Program in Hartford, Connecticut, is a state-licensed nursing assistant training program developed by St. Martin’s Episcopal Church and the Seabury Retirement Community. Classes and clinical training are held at Seabury, which encompasses both skilled nursing and assisted living.

The program is an apparently successful effort to do two things: develop viable nursing assistant candidates and offer job opportunities to the primarily low-income West Indian population in the area. The majority of its graduates remain employed as home care, assisted living or nursing home nursing assistants, and the program had a 200-person waiting list as of the end of 1999.

41. 7.16.3 Programs Developed by Trade Unions, Associations, and Other Private Entities

Supervisor Training

Three organizations in New York City have partnered since 1996 to develop a tuition-free college certificate program for direct care workers and their supervisors.

¹⁶⁹ Reinhard S. and Stone R (January 2001). Promoting quality in nursing homes: The Wellspring model. The Commonwealth Fund (New York City).

The Paraprofessional Healthcare Institute and the College of Adult Learning of Lehman College and the JFK Jr. Center for Worker Education, both at the City University of New York, have received support from the United Hospital Fund to develop these programs, which are aimed at improving competency and retention of home health aides. The curricula, however, can be used for nursing home staff as well.

To earn a Certificate in Home Care, home health aides attend the following three-credit college-level courses:

- Introduction to Gerontology,
- Introduction to Disabilities,
- Introduction to Rehabilitation, and
- The Home Care System - Sociology, Politics and Economics.

Students meet for three hours a week for 14 weeks, take tests, and develop a final paper or presentation that requires interviews with clients, staff and health providers in their communities.

The Certificate Program for Supervisors in Home Care focuses on the direct care worker's immediate supervisor, who is often the reason she remains at or leaves her position. (See 8.2) This program combines some of the academic work and readings from the Certificate in Home Care course, but focuses on building supervisory skills among staff from different New York City agencies. One course focuses on coaching as an effective method of supervision. (For details on the coaching method, see the description of the Cooperative Healthcare Network in 15.2). For each course students bring to the class experiences from their work settings.

All courses are taught in an interactive mode, using small group discussion and regular feedback. Teachers include college professors, home care agency directors, staff training directors and social workers in addition to outside speakers who represent consumers, workers and providers in the home care system. The courses also emphasize the development of reading and writing skills. Staff associated with the program recognize that students who had taken a basic preparatory course in reading and writing perform better in the courses. Materials for this preparatory course include readings from the health care world are of interest to students. Taking this course has become a requirement for admission to the program.

Although the course is for supervisors of home health aides, much of the material offered is applicable to CNA supervisors in nursing facilities. The course curricula will be available through the National Clearinghouse on the Direct Care Workforce at www.directcareclearinghouse.org.

1199 Training Institute

District 1199C Training and Upgrading Fund is a union-management educational trust fund composed of 61 of the major healthcare providers in the Philadelphia region and the National Union of Hospital and Healthcare Employees. The Fund is governed by a Board of Trustees composed of half management and half union representatives. The Fund is supported by management contributions of 1.5% of gross payroll and grants from a variety of public and private sources with an annual budget of \$5 million. Most classes are housed in a 37,000 square foot training center adjacent to City Hall in downtown Philadelphia. Additional classes are held in satellite sites around the city and in Southern New Jersey.

For 25 years, the Fund has offered training programs for every healthcare sector. In support of the skilled training areas, the Fund offers a wide variety of remedial and preparatory programs including adult basic education, GED, English as a Second Language, Pre-Nursing and assistance for the learning disabled. The Fund is also a public site for the nurse aide certification examination and the GED test. The Fund serves both union members and the general public, approximately 15,000 people a year.

One of the largest training segments is the nurse aide program. Approximately 200 students graduate annually. The students come from different sources, union members seeking additional training, welfare recipients, dislocated workers, and the general public. There are several formats in which the course is offered depending on the background of the students and their healthcare experience. If graduates need employment, it is provided by the union hiring hall and cooperating employers.

The Training Fund staff is also involved with the broader healthcare community and is involved in public policy. Staff hold positions on PA Quality Assurance Council, the Intragovernmental Council on Long Term Care Council, the Long Term Care Council on Cultural Change and the Pennsylvania Adult Basic Education Coordinating Council.

The Fund's basic commitment is to developing career ladders to provide opportunities for advancement and to stabilize the workforce. The nurse aide graduates are offered easy access to a part time Licensed Practical Nurse program offered by the Fund. The program is designed for workers and offered in the evening and on weekends. In most cases, nurse aides can attend on scholarship and expect to double their salary upon completion. The next step is registered nursing. The Fund has trained about 500 nurses and has developed a plan to end the nursing shortage by reaching out to new populations, entry level healthcare workers, minorities and immigrants.

Career Nurse Assistants Programs Inc. and National Network of Career Nursing Assistants

Based in Norton, Ohio, and founded by Genevieve Gipson, RN, these related programs offer educational programs, leadership training and recognition programs for nursing assistants.

The Career Nurse Assistant Program's (CNAP) workshops include the following:

- Clinical Teaching Skills for Instructors, Supervisors and Nursing Assistant Mentors. This 12-hour course covers adult learning methods and clinical teaching skills. Instructors who train new NAs and NAs' on-the job supervisors are taught to work as an effective team, helping new nursing assistants to transfer the skills taught in class to the clinical setting.
- The WH2O Patrol. This three-hour course on preventing dehydration teaches ways of assuring adequate fluid intake by residents.
- Encouragement: The Language of Caring. In a three-to five-hour session, students discuss and practice ways of communicating that convey both self-confidence and respect for other people's perceptions and beliefs.

- National Leadership Training Program for Nursing Assistants. This 12-hour course focuses on leadership skills to prepare nursing assistants to serve on facility committees or work with their peers. A related course, Working with Groups and Committees, provides training for nursing assistants who want to be members or facilitators of a facility's care planning, safety, purchasing or other committee.

CNAP provides recognition by inducting new members each year into its Twenty Year Club for nursing assistants with 20 years or more of service. In addition, it sponsors national CNA day and week in June, publicizing the dates and offering facilities materials, guidelines and suggestions to help them honor their employees.

The Institute for Caregiver Education

Based in Chambersburg, Pennsylvania, the Institute for Caregiver Education offers a number of programs to educate nursing assistants and their supervisors. These include:

- A career development series. This career path is open to all nursing assistants, but aimed primarily at new hires. It covers job skills that are needed by all nursing assistants but are not always taught. The training consists of 13 two-hour modules with such titles as "Walk a Mile in My Slippers," "He Said, She Said, Go Figure," and "Survey Savvy."
- The Nursing Assistant Specialist for Elders curriculum. In this program, which consists of 84 hours of advanced skills training for nursing assistants with at least six months' experience, classes are typically taught in three-hour segments meeting twice a week for 14 weeks. It consists of four modules: Needs of the Elderly; Depression, Cognitive Impairment and Behavioral Management; Aspects of Aging; and Common Disorders of the Elderly.
- An English as a Second Language program. Geared toward people who want to work in elder care, this course begins with students meeting three times a week for three months with an ESL instructor. They then attend an eight-day course that covers non-medical skills needed by nursing assistants, such as communication skills, stress management, conflict resolution, basic math, and medical terminology. And finally, they spend three weeks learning hands-on skills and other knowledge needed to prepare them for the certification exam. The classes have been taught to about 25 students so far, most of them Spanish-speaking immigrants from Peru, Brazil, Ecuador, Mexico or Puerto Rico. The Institute estimates that 70 to 80 percent of the students have passed the state competency exam. According to Carol Tschop, chairman and president of the Institute, "the workers have proven to be quite responsible when placed in CNA positions."
- Leadership training for supervisors. The Institute recently introduced a 40-hour, 10-week program to enhance the leadership and supervisory skills of unit managers, charge nurses, and RN supervisors.

LEAP for a 21st Century Long Term Care Workforce

The acronym in the title stands for “Learn, Empower, Achieve, Produce,” and the program was co-developed by Life Services Network in Hinsdale, Illinois and Linda Hollinger-Smith, PhD, RN, of the Mather Institute of Aging.

Currently being tested in Mather Lifeways in Evanston, Illinois, and three other sites, it consists of four pieces:

- Organization and team-building. This is the foundation on which the rest is built, stresses co-developer Anna Ortigara of Life Services Network, who says change cannot be implemented in a facility unless employees from all departments and shifts work together. ¹⁷⁰ “People don’t know each other; they don’t have a chance to learn about other departments.”
- An educational program. At this six-day workshop on communication and team-building, staff from all parts of the facility participate. “People love it,” says Ortigara. “It’s nothing new, really, but it’s new in this setting [long-term care].”
- A CNA career ladder. This has two levels, says Ortigara. The material taught in the first level is more basic, but getting into Level two “is a real audition. You have to have references, you have to apply, and you’re told you’ll have an expanded role with expanded responsibilities.” The program was designed that way to ensure that it “changes the scope and responsibility of the CNA job.”
- Mentoring for new CNAs. To ensure that new nursing assistants do not feel alienated from the facility, certain experienced CNAs are trained as peer mentors.
- Leadership development for nurse supervisors. Nurses are taught communication and management skills.

The researchers are refining the program based on initial feedback and expect to have their final materials available by January 2002.

The Learning Network for Senior Services

This is a collaborative initiative sponsored by the American Association of Homes and Services for the Aging with seven of its state affiliates (Illinois, Kansas, Michigan, Minnesota, New Jersey, New York, and Wisconsin) and Professional Mentoring, an electronic publishing company based in Manhattan, Kansas. The network uses technology-based tools to provide educational programming for nursing assistants and other staff.

States and facilities are encouraged to use the information to develop site-specific training. As of late summer 2001, additional states were testing the program, which is called The Learning Network (TLN) for Senior Services (<http://www.tlnpartners.com>).

¹⁷⁰ Personal communication.

Training programs include the following:

- On-line continuing education credits for administrators in various areas, including supervision, team building, communication, and hiring and retention of staff. Students can learn through written materials, corresponding with other students through e-mail or an on-line discussion group.
- A CD ROM-based program for nursing assistants covering 14 topics that can fulfill mandatory in-service requirements. Staff can take the course through an audio component in which the material is read to them or they can page through on a computer screen. A ten-point quiz follows each segment. The program tracks which components the staff person has studied, tested and completed and then creates a certificate for completion. A comprehensive tracking system also documents all non-TLN courses completed.

Curriculum components include residents' rights and psychosocial needs, infection control, lowering stress levels, death and dying, confidentiality, communication, dementia, preventing burnout, abuse and neglect, and more.

- A more advanced leadership training module includes segments on such topics as authority and control, change, dealing with groups, customer relations, decision-making, ethics, fear of failure, management, mistakes, money, motivation, professional growth, and more.

This segment includes a presenter's guide, which educators can use to supplement their in-house training programs. It also includes more than 1,000 articles on leadership, supervision and professional growth, allowing staff to search for and instantly receive relevant information. Employees at all levels of the facility can make use of the database, and trainers can package some of the articles for use in a course curriculum.

Collecting and Publishing the Wisdom of Nursing Assistants

In the course of researching dementia care training for nursing assistants, Nanette A. Kramer, Michael C. Smith, Janice Dabney and Tony Yang-Lewis were struck by the number of good ideas that came from the nursing assistants themselves. The researchers collected and organized those ideas, summarized each set of comments with a paragraph discussing what they have in common and how they can be put into practice, and paired them with high-quality black and white photographs of nursing assistants and residents with dementia.

The resulting manual, *Speaking from Experience: Nursing assistants share their knowledge of dementia care*, is published on high-quality paper with easy to read type. Accessible and elegant, it conveys a sense of professionalism, while the photographs give it emotional weight. Published in 1997 by Cobble Hill Health Center (Brooklyn, NY), the manual comes

with a four-page trainer's guide on how to help nursing assistants use the ideas in the book or generate and act on their own.

Kramer and Smith (2000) noted that the reactions of nursing assistants at various nursing homes to the manual were "strong and consistently very positive." Nursing assistants, they wrote, "spoke about how good it felt to have their knowledge as well as their feelings validated," and said they were eager to show the manual to friends, family, and other staff.

CNAP (see Section 7.16.3) has created a similar series of booklets, *Tips*, *Tips 2*, *Tips 3* and *Tips 4*. Each consists of tips offered by experienced nursing assistants, organized into topics such as "working with the new nurse assistant" and "Nursing assistants: making quality care happen through teamwork." Most are published through CNAP in Norton, Ohio, although a *Best of Tips* compilation is available through Hartman Publishing, Inc., in Albuquerque, New Mexico.

Frontline Publishing

Based in Somerville, Massachusetts, Frontline offers several employee training and development programs for nursing assistants in nursing homes and other settings. These include the following:

- The CareWorks career ladder. Developed by Frontline and customized for the long term care employers that institute it, the CareWorks career ladders consists of two levels comprising nine modules. In level one, as practiced in Integrated Health Services (IHS) facilities, nursing assistants get 30 hours of combined classroom and hands-on education in psychosocial and professional aspects of caregiving. Upon graduation, nursing assistants are given the title of Caregiver I. Level two offers advanced training in many key clinical areas, with graduates earning the title of Caregiver II. Training modules, each of which recommends two to three hours of instruction, cover topics such as customer service, arthritis and the musculoskeletal system, hydration and nutrition, pain management, and residents' rights. Students must pass a mid-term exam and complete a final exam in the form of a project in one of five areas: department shadowing, resident care planning, conducting an in-service, marketing the facility, or family or resident council presentation. Caregiver II status must be renewed yearly by completion of another project in one of the areas not already covered.

The CareWorks instruction manual strongly urges facilities to give raises of no less than a dollar an hour to those who graduate from the program, or to award a one-time cash bonus of no less than \$250 per graduate, noting that "anything short of a significant pay increase or cash bonus will undercut the seriousness and credibility of your entire program."

According to Frontline, IHS facilities say the career ladder program has decreased nursing assistants' turnover by 25 to 30 percent.

- The CareWorks mentoring program. To reduce turnover during the first three months on the job, this program helps facilities identify experienced nursing assistants to help orient new workers. It provides a curriculum for training those candidates, in six one-hour modules with such titles as “Mentor as Teacher,” “Mentor as Leader,” and “Communication Skills.” And it offers advice on how to reward graduates with certificates, enhanced status, and increased responsibilities.

Some facilities include a second phase, called Team Works, for those who supervise nursing assistants.

- Nursing Assistant Monthly. This monthly educational tool consists of a newsletter for nursing assistants and a companion instructional guide for staff development directors. Each month, the newsletter covers a topic of importance to nursing assistants, such as managing conflict between residents or creative approaches to Alzheimer’s care. Staff educators may base their monthly in-service programs on the material in the newsletter and facilitator’s guide, or pass out a quiz included in the guide and allow nursing assistants to read the newsletter and take the quiz on their own in place of attending the in-service session.

SEUI Local 150

This Oakland, California-based branch of the Service Employees International Union instituted a program to train welfare recipients for work as nursing assistants in 1997. Four local corporations, each of which owns several nursing facilities, currently employ graduates of the classes, which are held in the Oakland/East Bay area and will expand in the fall of 2001 to include San Francisco and Sacramento as well. The trainers identify candidates and send them to one of the participating facilities for an interview. If a facility agrees to hire the candidate, he or she is enrolled in the program and guaranteed a job upon completing the training and passing the certification exam.

Candidates have been on public assistance for at least five years, so trainers screen in order to find the people likeliest to be able to handle the responsibilities of the job. Local 250 Education Director Joan Braconi says they look for people who can read and comprehend and do basic math. “People who’ve done some form of care, even just taking care of a grandparent or a sick child or a sick relative, are going to be much more successful. People who come from a family of healthcare providers tend to be more successful.” Perhaps the most common reason their candidates lose jobs, she adds, is that they simply don’t show up or show up very late, so her program screens for that. “Are they showing up for their appointments with their caseworkers on time? If they’re not showing up or calling, or they’re showing up on the wrong day — which is pretty common — that’s a warning sign that they’re not really ready.”

Providing support is crucial as well. Local 250 holds Saturday study groups for nursing assistants in training, where they can go over the places where “people are getting stuck.” They assign a caseworker to each student, who follows up throughout the training and for at least six months after graduation. And they help set up basic support services, as people whose lives are extremely chaotic may be unable to complete the course even if they’re

otherwise good job candidates. “Housing, childcare and transportation needs to be really nailed down,” says Braconi. “They need to have backup child care.”

The program begins with three weeks of 35-hour-a-week training in job readiness, including basic life skills, employment skills, and an introduction to the subject matter to be covered, such as taking vital signs and practicing infection control. That training is unpaid.

Those who complete it go on to eight weeks of 40-hour-a-week nursing assistant training. (The SEIU originally proposed six weeks of training, says Braconi, but the employers they were working with requested more.) The nursing assistant training takes place at the facility where the student will be working. The facilities pay the students for their time but agree not to use them on the floor, except when they are doing clinical practice supervised by an instructor. The students’ caseworkers visit the facilities weekly during training to meet with instructors and students.

Braconi estimates that 25 to 30 percent of the students drop out over the course of the training, but the pass rate on the certification exam is extremely high for those who make it all the way through — “close to 100 percent by the third try, and 80 to 90 percent on the first try.”

She credits the success rate with the fact that only three weeks of training are unpaid, and those who enter into the paid training are guaranteed a job, “probably for life because of the demand,” if they complete the training and become certified. “A lot of community college programs are a semester long, and then they still need to go look for a job,” she notes. “that’s a daunting task for people [on public assistance] who don’t have good job search skills.”

The Iowa CareGivers Association

After surveying nursing assistants and the licensed nurses who supervise them to determine what kind of education programming was needed for nursing assistants, the Des Moines-based Iowa CareGivers Association (ICA) developed the following:

- Support groups and recognition programs for nursing assistants. A planning committee consisting of long term care consumers, family members, advocates, educators, providers, regulators, and others as well as direct care workers came up with programs to increase community awareness of the importance of the nursing assistant’s role. Facilities and community groups held recognition programs, and CNA support groups were set up and facilitated by the local community college.
- CNA mentor training program. A joint effort between a community college, facilities, and the ICA, this two-day program was available to CNAs who met their facilities’ criteria and filed an application. Facilities created their own implementation guidelines, with some but not all increasing wages, creating new name badges and titles, and including mentors in care plan meetings. Quarterly CNA Mentor reunion meetings were held to help new mentors solve challenges they faced in their new roles.

- In-service trainings on topics selected by CNAs. These included conflict resolution, Alzheimer's care, communicating with dying residents and their families, and communicating and team-building with coworkers.

Eight facilities received the interventions, while three did not, serving as control groups. Those implementing the programs experienced nearly twice the retention rate of those that did not (19 months versus 10 months.)

Peer Mentoring

The certified nursing assistant peer mentor training program is part of a three-year research project conducted by the Foundation for Long Term Care, the research and education affiliate of the New York Association of Homes and Services for the Aging. Project findings and a training manual for facilities will be disseminated through the Internet, conferences and publications.

The goal of the project is to create an effective, replicable, and sustainable peer-mentoring program for new nursing assistants, based on peer mentoring programs that have shown promise in nursing homes across the country.

The project directors anticipate three outcomes:

- the peer mentoring program will reduce turnover;
- the cost of implementing the project for each facility will be far less than the cost of doing nothing about the retention problem; and
- the train-the-trainer format will allow for nursing homes to sustain the project independently.

Project staff have completed the guide for facility trainers to use to institute the peer mentoring program in the demonstration facilities. It contains theoretical as well as practical information regarding teaching, communication, problem solving, and many other topics. The manual uses a variety of teaching tools including mini-lectures; brainstorming exercises; small group exercises; case discussions; role plays; informational handouts; power point slides; and trainer instructions.

Modules include the following:

- the role of the mentor;
- tools for successful mentoring such as attitude, communication skills and compassion;
- leadership skills; and
- knowledge and tutoring strategies.

The project is funded by a grant from the Fan Fox and Leslie R. Samuels Foundation.

7.17 Training Recommendations

The recommendations below were written for this report by the Paraprofessional Healthcare Institute. In addition to outlining specific content areas to be covered, they describe the educational approach, structural framework and set of relationships needed to prepare nursing assistants to deliver good care to nursing home residents. They are divided into five sections: recommendations for CMS; recommendations for states; recommendations for nursing facilities; course content, testing and training methods recommendations; and recommendations for further study.

The main recommendation to state agencies overseeing long-term care is to pay facilities the full costs of all allowable and required training expenses, abolishing cost limits on Medicaid reimbursement for training.

Of the actions recommended to CMS, the main ones are these:

- Require more than 75 hours of certification training to give students more time to absorb all the material covered in the classroom and to include sufficient clinical training;
- Add “soft skills” training, such as communication, problem solving and cultural sensitivity, to the curriculum requirements; and
- Develop a multi-agency task force at the federal and state levels across DOL, HHS, and DOE to address training issues such as curricula, certification, payment for training and access to public supports.

The primary changes recommended to facilities are as follows:

- Invest in workers for the long term, with incentives such as career ladders and peer mentors or other support systems;
- Ensure that trainers are trained in adult education methods and supervisors are trained in effective supervision techniques; and
- Strengthen connections with community colleges, private schools and other community-based trainers to ensure a smooth transition between the skills and information that are taught in class and those that are needed on the job.

The main recommendations for course content are:

- Teach “soft” skills, as outlined in the recommendations to CMS;

- Teach CNAs about disability and the aging process in general and ensure that they have contact with nursing home residents during training. Encourage them to treat individuals rather than diseases; and
- Incorporate extensive field experience into pre-certification training to prepare students realistically for the demands of the job, and follow up with ongoing training geared to individual CNAs' learning needs.

The main areas recommended for further study are:

- Evaluate provider practices aimed at improving recruitment or retention of nursing assistants, identifying which methods appear to be successful
- Find out what makes nursing assistants leave the field
- Identify effective ways of transferring learning from the classroom to the worksite.

The full text of the recommendations may be found in Appendix E-2.

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1.0 Adequacy of Nursing Workforce to Meet Higher Minimum Nurse Staffing Requirements¹⁷¹

1.0 Introduction

An important issue in considering the appropriateness of minimum nurse staffing levels is whether the nursing workforce will be adequate to meet higher workforce requirements that would result from adoption of a staffing requirement. While the available data limit the extent to which we can measure the size of any current nursing shortage, there are good reasons for believing that a nursing shortage does currently exist and is likely to become worse over the next few years.

- Several factors, including nurses' decreased levels of job satisfaction, may cause some nurses to leave the profession. These factors may also affect future entry into nursing. Job satisfaction is likely related to the current recruitment and retention problems experienced by many nursing homes. (See chapter 5 for a discussion of turnover in nursing facilities.)
- The licensed nurse workforce is aging, and the average age of a registered nurse (RN) increased from 37 years in 1983 to 42 in 1998. Enrollment in registered nursing programs has declined over the past 5 years.
- Because of population changes, the demand for nursing care is expected to steadily increase. There is expected to be rapid growth of the elderly population — the number of individuals aged 85 and over, those most in need of nursing care, is expected to more than double over the next 30 years.
- Population trends suggest that the number of individuals entering the nursing profession will increase only slightly. The projected size of the female population between the ages of 25 and 54, the group which has traditionally filled most nurse aide positions, is expected to remain relatively unchanged between 2000 and 2030, limiting likely entry into nursing.

The nursing shortage may have a real impact on the feasibility and costs of implementing a minimum nurse staffing level. Some facilities would need to make large increases in their nursing workforce in order to staff at the minimum levels identified in Chapter 2. It may mean that the staffing requirement needs to be phased in over a multi-year period to give providers the opportunity to recruit and train the required additional staff. The purpose of this chapter is to assess the feasibility of implementing a new minimum staffing requirement for long term care facilities, given the widespread perception of a nursing shortage.

To support our analysis, we reviewed recent literature on the adequacy of the current and projected future workforce for registered nurses (RNs), licensed practical nurses (LPNs), and nurse aides. Our analyses focused on three primary subject areas:

¹⁷¹ This chapter was written by Alan White, Leighna Kim and Deborah Deitz of Abt Associates.

- Current workforce conditions — is there evidence of a current nursing shortage?
- Factors affecting the future demand for nursing services—How much will demand for nursing services change due to the growth and aging of the population? How would adoption of the minimum staffing ratios identified in Chapter 2 affect the demand for nurses?
- Factors affecting the future supply of nurses—How are demographic and labor market trends and changes in other factors likely to affect the size of the nursing workforce in the future?

2.0 Current Labor Market Conditions

1.0.0 Current Employment of RNs, LPNs, and Nurse Aides.

According to the Bureau of Labor Statistics (BLS), in 1999, there were more than 1.5 million RNs, 250,000 LPNs, and 1.4 million nurse aides employed in the United States. Of these, 150,000 RNs, 208,000 LPNs, and almost 700,000 nurse aides were employed in nursing homes (Table 8.1). The BLS does not include nurses employed in such settings as ambulatory care, nursing education, federal agencies, or other health care associations. The 2000 Survey of Registered Nurses estimates that there were more than 700,000 RNs employed in nursing who did not work in a hospital, nursing home, or home health setting.

According to the 2000 National Sample of Registered Nurses, the number of RNs in the United States increased by 5.4 percent between 1996 and 2000, the smallest increase reported in previous national surveys. The number of RNs increased by 14.2 percent between 1992 and 1996.

**42. Table 8.1
Number of RNs, LPNs, and Nurse Aides by
Employment Setting, 1999**

	Hospital	Nursing Home	Home Health	
RN	1,280,510	150,230	108,310	
LPN		200,030	208,030	44,460
Nurse Aide		388,280	695,570	344,200

Source: Bureau of Labor Statistics, 1999

8.2.2 Studies of Existence of Current Nursing Shortage

A large number of studies have referred to the existence of a current nursing shortage in particular parts of the country, but there is a lack of national data for describing whether the current number of RNs, LPNs, and nurse aides is adequate.

Vacancy rates. A number of recent studies suggest the existence of a current shortage based on analysis of vacancy rates. (Note that because different methods may be used to calculate vacancy rates, caution should be used in comparing vacancy rates across studies).

- A recent survey in Vermont found that nursing homes had RN vacancy rates of 15.9 percent. Hospitals had a vacancy rate of 4.8 percent, up from 1.2 percent in 1996 (GAO, 2001A).
- A survey conducted by the Association of Maryland Hospitals and Health Systems reported a statewide average RN vacancy rate at hospitals of 14.7 percent, up from 3.3 percent in 1997 (GAO, 2001B).
- In Massachusetts, nursing home providers reported an 11 percent vacancy rate in their paraprofessional positions and a 12 percent vacancy rate in their professional nursing positions (Frank et al., 2000).
- According to a June 2001 survey conducted by the American Hospital Association, 11 of the 17 state hospital associations that maintain records on statewide vacancy rates reported an average vacancy rate of 10 percent or higher (GAO, 2001B).
- California reported an average RN vacancy rate of 20 percent (GAO, 2001B), a much higher rate than that reported in 1997, when the state had an RN vacancy rate of 8.5 percent (and 6.9 percent for nursing homes) (GAO, 2001A).

Staffing shortages. According to several studies, a large number of nursing homes are currently experiencing staffing shortages.

- A 2000 study of the nurse aide workforce in Pennsylvania showed that staff shortages were reported by 75 percent of nursing homes (GAO, 2001A).

- A 1999 survey conducted by North Carolina Division of Facilities found that 42 of the 48 continental states reported recruitment and retention problems among their paraprofessional healthcare workforce (Frank and Dawson, 2000).
- In a survey conducted across New York State in 2000 (HANYS, 2000), 92 percent of nursing homes reported worker shortages. 55 percent of nursing homes reported retention difficulties. Continuing care members have identified the shortage of certified nurse aides and licensed practical nurses as the most critical.

Turnover rates. Nursing home turnover levels for a three state sample (California, Kansas, and Wisconsin) are described in detail in Chapter 4. We found that average turnover rates for nurse aides ranged from 76 percent in Wisconsin to 78 percent in California, and 100 percent for Kansas. There was considerable facility level variance in reported turnover rates. Other studies have also reported high turnover levels.

- The American Health Care Association's 1998 Nursing Facility Sourcebook reported average turnover rates of 93 percent for nurse aides and 51 percent for RNs and LPNs. These figures were based on a 1997 survey of for-profit nursing home chains.
- In Massachusetts, reports show annual turnover rates of 70-100 percent among paraprofessionals working in nursing homes (Frank et al., 2000).

Analysis of factors related to nursing home turnover can be found in chapters 4 and 5. Other studies have found that nurse aides are leaving nursing for other employment opportunities of similar or better pay or benefits for less demanding work (Institute of Medicine, 1996).

3.0 Factors Affecting Future Demand for Nursing Services

In this section, we describe the impact that projected population changes and the potential introduction of the minimum nurse staffing ratios identified in Chapter 2 would have on the demand for nursing services.

1.0.0 Population Changes

Growth and aging of the population is expected to be the primary factor driving increased demand for nursing services. Even without a minimum staffing requirement for nursing homes, population changes will almost certainly result in steady increases in the demand for nurses.

The American population is expected to experience major demographic changes over the next 20 years. The U.S. Bureau of the Census projects steady population increases during the period, with total population increasing from 274 million in the year 2000 to 298 million in the year 2010 and 323 million by the year 2020 (Table 8.2).

The projected change in the size of the aged population gives a good proxy for the anticipated increase in demand for nursing services, given that the elderly population is most

in need of nursing home and home health care, and also have a disproportionate share of hospital stays. There is expected to be rapid growth in the size of the elderly population, as the baby boom generation ages:

- The over-65 population is projected to increase from 34 million in the year 2000 to more than 39 million in 2010 and 53 million by the year 2020.
- The number of individuals age 85 or over, those most in need of nursing home care, is expected to more than double between 2000 and 2030.
- By 2030, 2.4 percent of the population is projected to be age 65 or over, compared to 1.5 percent in the year 2000.

This aging of the population will almost certainly result in increased demand for nursing services, although the size of the increase will likely vary across different health care settings depending on the relationship between age and demand. Nursing home occupancy rates have declined in recent years, from 93 percent in 1993 to 90 percent in 1997 (AHCA, 1998).

It is possible that demand for nursing home care may increase at a slower rate than the rate at which the elderly population grows, as the elderly may continue to make greater use of home health care, adult day care, or assisted living facilities. The nursing home population has declined by 18 percent since 1985, despite increases in the elderly population. While the settings in which the aging population seeks care may change, demand for RNs, LPNs and nurse aides is expected to increase substantially due to population changes. The American Health Care Association projects that, between 1990 and 2020, the demand for RNs in nursing homes will increase by 66 percent (AHCA, 2000).

Age category	Population (in thousands) (percentage of total)					
	2000	2005	2010	2015	2020	2030
Total	274,634	285,981	297,716	310,134	322,742	346,899
0-19	78,784 (28.7%)	80,271 (28.1%)	81,514 (27.4%)	83,163 (26.8%)	86,225 (26.8%)	92,867 (26.8%)
20-34	55,490 (20.2%)	56,266 (19.7%)	59,426 (20.0%)	62,960 (20.3%)	64,232 (19.9%)	65,145 (18.8%)
35-44	44,659 (16.3%)	42,165 (14.7%)	38,521 (12.9%)	37,598 (12.1%)	39,612 (12.3%)	44,263 (12.8%)
45-54	37,030 (13.1%)	41,506 (14.5%)	43,564 (14.6%)	41,196 (13.3%)	37,739 (11.7%)	38,897 (11.2%)
55-64	23,961 (8.6%)	29,605 (10.4%)	35,283 (11.9%)	39,650 (12.8%)	41,714 (12.9%)	36,348 (10.5%)
65-74	18,136 (6.7%)	18,369 (6.4%)	21,057 (7.1%)	26,244 (8.5%)	31,385 (9.7%)	37,407 (10.8%)
75-84	12,315 (4.5%)	12,898 (4.5%)	12,681 (4.3%)	13,130 (4.2%)	15,375 (4.8%)	23,517 (6.8%)
85+	4,260 (1.5%)	4,898 (1.6%)	5,671 (1.9%)	6,193 (2.0%)	6,460 (2.0%)	8,455 (2.4%)

Source: U.S. Bureau of the Census, 1999

2.0.0 Impact of Minimum Staffing Requirement on Demand

Either of the two minimum staffing requirements identified by this study would result in a significant increase in the demand for nurses. The following staffing thresholds were identified (see Chapter 2 for further details):

- For the short-stay population, 2.4 hours per resident day and 1.14 hours for licensed staff, including 0.55 RN hours. (We refer to this as the short-stay staffing threshold).
- The thresholds were at 2.8 nurse aide hours and 1.3 hours for licensed staff, including 0.75 hours for RNs (This is referred to as the long-stay staffing threshold).

To estimate the impact that implementation of either of these two potential minimum staffing requirements, we used the 1998 OSCAR data that were used to develop cost estimates for the Phase I report. (Due to time constraints, we were not able to use more recent OSCAR data. Given the relative stability of staffing levels across time, however, estimates based on more current data should differ only slightly from those based on the 1998 data.) Estimates were based on the assumption that all facilities that currently staff below the potential minimum levels would increase staffing to exactly the required level.

Based on this assumption, the short-stay staffing threshold would result in the need for 78,000 more RNs, 28,000 LPNs, and 182,000 nurse aides (Table 8.3).¹⁷² Given 1998 employment levels, this staffing requirement would result in a 52 percent increase in RN staffing, a 13 percent increase in LPN staffing, and a 26 percent increase in nurse aide staffing.

Given the proportion of RNs, LPNs, and nurse aides that work in nursing homes (from Table 8.1), adoption of the short stay staffing threshold would increase total demand (across all employment settings) for RNs by about 5 percent, the demand for LPNs by 6 percent, and the demand for nurse aides by close to 13 percent.

Given the large variation in staffing levels across states, adoption of this minimum staffing level would result in a much larger increase in demand in states such as Oklahoma, Iowa, and Kansas that have low staffing levels (see chapter 3 of the Phase I report for more information on the distribution of staffing levels by state). The impact in states with higher staffing levels would be less.

The staffing thresholds suggested by the long-stay analyses are higher than the short stay thresholds and would thus require larger staffing increases. To meet the long-stay threshold, nursing homes would need to hire an additional 137,000 RNs, 22,000 LPNs, and 310,000 nurse aides to meet the long-stay threshold (Table 8.4). Across all employment settings, adoption of the long-stay staffing threshold would increase demand for nurse aides by 22 percent, the demand for RNs by 9 percent, and the demand for LPNs by 5 percent.

Especially in areas that currently have low staffing levels, many facilities may experience difficulties in increasing staffing to the levels suggested by either the short or long-stay thresholds. For example, adoption of the long-stay threshold would require Oklahoma nursing homes nearly to double nurse aide staffing. On average, Kansas nursing facilities would need to increase nurse aide staffing by 80 percent. The staffing threshold identified by the long stay analyses would require Oklahoma nursing facilities to more than double RN staffing. It may be necessary to phase the staffing requirements in over a period of time to allow facilities gradually to increase staffing to the required level. Staffing increases of this magnitude will also likely require wage rate increases, to attract a sufficient workforce.

¹⁷² Note that these figures are based on the assumption that average hours worked remain unchanged as a result of the staffing requirement. They are also based on the assumption that nurse aides work an average of 29 hours per week, RNs an average of 30 hours per week, and LPNs an average of 32 hours per week. These figures were derived by calculating the total number of hours worked from OSCAR for each type of nurse and dividing by the total number of RNs, LPNs, and nurse aides employed in nursing homes (from Table 1).

Table 8.3
Additional Nurses Required to Staff at Phase II Short Stay Thresholds

Staff Category	Current Employment [†]	Number [■]	Additional Staff Required to Meet Threshold [*]	
			Nursing homes	All Employment Settings
RN	150,230	77,949	51.9%	5.1%
LPN	208,030	27,813	13.4%	6.2%
Nurse Aide	695,570	181,843	26.1%	12.7%

Notes: †: Based on 1999 employment in nursing home figures from Bureau of Labor Statistics.

■: These figures were calculated by determining the number of additional nursing hours required to meet the staffing requirement and then converting this to a number of additional staff required using information from the BLS on total employment and information from OSCAR on total nursing hours. Using this approach, the average nurse aide works 29 hours per week, the average LPN 32 hours, and the average RN 30 hours.

*: Analysis is based on the thresholds identified for the short-stay sample (2.4 hours per resident day for nurse aides, 0.55 hours for RNs, 0.59 for LPNs). RN Director of Nursing hours were not included, except for facilities with fewer than 60 beds.

Facilities identified as having unreliable staffing data were excluded from the analysis, but an adjustment factor was used to account for the excluded facilities.

Sources: OSCAR, Bureau of Labor Statistics

**Table 8.4
Additional Nurses Required to Staff at Phase II Long Stay Thresholds**

Staff Category	Current Employment [†]	Number [■]	Additional Staff Required to Meet Threshold [*]	
			Nursing homes	All Employment Settings
RN	150,230	137,076	91.2%	8.9%
LPN	208,030	22,267	10.7%	4.9%
Nurse Aide	695,570	309,538	44.5%	21.7%

Notes: †: Based on 1999 employment in nursing home figures from Bureau of Labor Statistics.

■: These figures were calculated by determining the number of additional nursing hours required to meet the staffing requirement and then converting this to a number of additional staff required using information from the BLS on total employment and information from OSCAR on total nursing hours. Using this approach, the average nurse aide works 29 hours per week, the average LPN 32 hours, and the average RN 30 hours.

*: Analysis is based on the thresholds identified for the short-stay sample (2.8 hours per resident day for nurse aides, 0.75 hours for RNs, 0.55 for LPNs). RN Director of Nursing hours were not included, except for facilities with fewer than 60 beds.

Facilities identified as having unreliable staffing data were excluded from the analysis, but an adjustment factor was used to account for the excluded facilities.

Sources: OSCAR, Bureau of Labor Statistics

3.0.0 Other Factors That May Affect Future Demand

The demand for nursing services will be affected by the same general trends, including the proportion of the population enrolled in managed care, medical technology, payment policies, and the overall health status of the population, that influence workforce requirements for other types of health care providers. Workforce requirements may also be influenced by future changes in the types of care given by RNs, LPNs, and nurse aides. In addition, if facilities make changes (e.g., higher wage rates, increased benefit levels, adopt different management practices) that reduce turnover or increase retention, then that could reduce the required number of new entrants into the nursing professions.

Because of potential changes in these factors, future workforce requirements may be different from those suggested by population changes. It is not possible to predict with certainty how these other workforce-related factors will change in the future.

4.0 Factors Influencing Supply of Nurses

While there is little recent national data available on the extent of the nursing staff shortage in long term care facilities, many sources identify factors believed to contribute to the nursing shortage. These factors are also expected to affect the future supply of nurses. Issues that have been identified as contributing to the recruitment and retention of both professional and paraprofessional staff are wage rates, labor market trends, demographic trends in the

workforce, and features of the long-term care environment that make the setting unattractive to potential employees.

1.0.0 Impact of Wage Rate Changes on Nursing Supply

Low wage and benefit levels are widely cited as a major reason for the nursing shortage, particularly for nurse aides. In estimating the expected impact of changes in wage rates or benefit levels on the size of the nursing workforce, it is necessary to estimate how sensitive the nurse labor supply is to changes in wage rates. The elasticity of supply is a measure of the percentage change in quantity supplied in response to a one percent change in price. As part of measuring the costs of the staffing thresholds identified in the Phase I report, the CMS Office of the Actuary reviewed the labor economics literature and made assumptions about the long-run elasticity of supply for RNs, LPNs, and nurse aides:

- For RNs, the elasticity of supply was estimated to be between 0.5 and 0.8. This means that each 1 percent increase in RN wage rates increases the amount of labor supplied by RNs (including both increased hours for existing RNs and entry into the profession) by between 0.5 and 0.8 percent.
- Elasticity of supply for LPNs was estimated to be between 0.65 and 0.9, indicating that the LPN labor supply was slightly more responsive to wage changes than the RN workforce. A 1 percent increase in LPN wage rates would be expected to increase the amount of nursing care supplied by LPNs by between 0.65 and 0.9 percent.
- The elasticity of supply for nurse aides was estimated to be between 0.8 and 1.0, indicating that each 1 percent increase in nurse aide wage rates increases the amount of labor supplied by nurse aides by between 0.8 and 1 percent.

Given these elasticity estimates and the increase in demand that would result from the implementation of a minimum staffing requirement, we can estimate the increase in nurses' wage rates that would be required for facilities to be able to increase staffing to the required level. These are intended to be rough estimates, given the uncertainty about the elasticity of supply for RNs, LPNs, and nurse aides. It should be noted that these increases would also affect hospitals, home health agencies, and other employers of nurses, which must compete with nursing homes for nursing staff.

- The short stay threshold would increase RN wage rates by 2.5 to 4 percent, given our estimate that implementation of the threshold would increase total demand for RNs by about 5 percent. Given an average RN wage rate of approximately \$20.00 per hour, the staffing requirement would increase RN wage rates by \$0.50 to \$0.80 per hour.
- The short-stay threshold would increase LPN wage rates by between 4 and 5.6 percent, given the long-run elasticity figures above. Given the Bureau of Labor Statistics (BLS) \$14.40 per hour wage rate figure for LPNs, this represents an increase of between \$0.58 and \$0.81 per hour.
- To attract the nurse aide staff needed to meet the short-stay threshold, average nurse aide compensation would need to increase by between 10 and 12.7 percent, increasing the hourly

wage rate for nurse aides by \$0.86 to \$1.09 per hour, given the BLS \$8.57 per hour estimate of nurse aide wage rates.

The higher thresholds identified based on analysis of the long-stay sample would require a somewhat larger wage rate increase.

- The 8.9 percent increase in demand for RNs would result in a 4.5 to 7 percent increase in RN wage rates, between \$0.90 and \$1.40 per hour given the elasticity figures described above.
- The long-stay threshold has a smaller impact for LPNs, and the resulting increase in demand would increase wage rates by between 3.3 and 4.5 percent.
- Demand for nurse aides would increase by almost 22 percent if the thresholds identified by the long-stay analyses were adopted. In order to meet the higher staffing levels, facilities would need to increase wage rates paid to nurse aides by between 17 and 22 percent, an increase of between \$1.45 and \$1.89 per hour, given an \$8.57 average hourly wage rate for nurse aides.

These figures are national averages, but there would be considerable variance in the impact on wage rates across states.

2.0.0 Factors Affecting RN Workforce

The RN nursing shortage is being driven by fundamental, permanent shifts in the labor market that are unlikely to be reversed over the next few years (Buerhaus et al, 2000). The nation's nursing workforce is aging. Between 1983 and 1998 the average age of working RNs increased by more than four years, from 37.4 to 41.9 years. During this period, the proportion of RNs under age 30 decreased from 30.3 to 12.1 percent. This aging of the RN workforce is expected to continue into the future. Buerhaus et. al. project that the size of the RN workforce is forecast to be nearly 20 percent below projected requirements by 2020.

Previous studies have identified a number of key factors likely to affect the size of the RN workforce in the future.

Decrease in students entering nursing school – Buerhaus et al. (2000) attribute the decreasing number of women entering nursing school to the recent expansion of career opportunities and rising wages for women relative to men, as many women chose to enter other careers. They note that similar trends have occurred in other professions and occupations traditionally dominated by women (e.g. teachers, social workers, secretaries). Researchers believe that the current RN nursing shortage is fundamentally different from previous shortages, in that it is due to structural changes, primarily the combination of an aging population with fewer nurses entering the workforce.

In a recent study, women graduating from high school in the 1990s were 35 percent less likely to become RNs than women who graduated in the 1970s (Buerhaus, et al. June 2000). According to a 1999 Nursing Executive Center Report, between 1993 and 1996, enrollment in diploma programs dropped 42 percent and enrollment in associate degree programs declined 11 percent. Furthermore, between 1995 and 1996, enrollment in baccalaureate

programs declined 19 percent, and enrollment in master's programs decreased 4 percent. Due to resource constraints and emphasis on master's degree preparation of advanced practice nurses, a number of nursing schools have cut back on baccalaureate admissions (Lubin, 1999).

Fewer nursing professionals are remaining in patient care – In March 2000, 18.3 percent of RNs reported not being employed in nursing, up slightly from 17.3 percent in 1992 (GAO, 2001A). The number of full time RNs has been calculated as being about 35 percent lower than that of twenty years earlier (Buerhaus et al., June 2000). Although the majority of nurses continue to work in hospitals, major shifts in nursing are taking place as a result of continuing cost pressures, the growth of managed care, and scientific and technological advances. Nurses have increasingly been working in other settings such as community and public health settings; the growth in this service sector is largely due to the growth in home health care (The National Academy of Sciences, 1996). A recent Federation of Nurses and Health Professionals survey found that half of the currently employed nurses who were surveyed had considered leaving the patient-care field for reasons other than retirement over the past two years (Peter D. Hart Research Associates, 2001). Of this group, 22 percent said that they were concerned about schedules and hours, and 18 percent wanted more money. The most frequent reason, however, cited by 56 percent of respondents, was the desire for a less stressful and physically demanding job.

Fewer RNs are choosing to work in long term care facilities – RNs and LPNs who do choose to remain in direct patient care frequently prefer to work in acute care rather than long term care settings (The National Academy of Sciences, 1996). Acute care is often viewed as more interesting and on the cutting-edge of nursing technology, while long term care nursing is viewed with less favor (Decker et al., 2000). Surveys show that the turnover rates of nurses in nursing homes range from 28 to 59 percent, while in acute care hospitals, turnover rates range only from 12 to 23 percent (Decker et al, 2000).

Public policy may affect the size of the nursing workforce. Recently introduced Federal legislation would prohibit mandatory overtime for licensed health care employees. The impact of such a law on the amount of nursing care provided is uncertain. Eliminating mandatory overtime would presumably decrease the total amount of nursing hours worked, at least in the short run. In the long run, however, such a law may reduce exit from the profession and, by improving working conditions, it may also lead additional individuals to pursue nursing as a career. It is not possible to measure the net impact of this legislation on the nursing workforce.

3.0.0 Factors Affecting Nurse Aide Workforce

Unlike RNs, nurse aides face low barriers to entering their field. In some states, the occupation is open to individuals with little or no formal training.¹⁷³ Because of the low barriers to entry, the potential supply of nurses aides is quite large. This differs from RNs, for whom entry can be measured based on the number of nursing school graduates. There is a great deal of transition in and

¹⁷³ The federal government requires that home health aides that receive reimbursement from Medicare pass a competency test covering 12 areas. Nursing assistants working in nursing facilities must complete a 75-hour training course and pass a certification examination.

out of the nurse aide profession, both due to exit from the labor force and substitution to other types of jobs. To some extent, the relative attractiveness of the types of entry level jobs that might induce nurse aides to leave the profession depends on the overall health of the economy.

Demographic changes -- The number of persons who have traditionally worked in the nursing workforce – women between 25 and 54 years of age – is expected to remain relatively unchanged over the period from 2000 to 2030.¹⁷⁴ This is anticipated to limit the number of individuals who enter the nursing profession, either as licensed staff or nurse aides.

Low compensation -- In 1999, the national average hourly wage for aides working in nursing homes was \$8.29 (Homecare Salary & Benefits Report, 2000). CPS analysis showed that 18 percent of aides working in nursing homes fell below the poverty level. One in three aides working in nursing homes earned less than \$10,000 per year, and 36 percent reported family incomes below \$20,000 (GAO, 2001A). Most nursing homes do not offer pension coverage, and only 21 to 25 percent of aides in these settings are covered (GAO, 2001A). In a Massachusetts survey in 1998, 35 percent of the nursing homes pay less than half of their employees' individual premiums and 56 percent pay less than half the cost of family health insurance. For example, one worker's family health insurance costs \$102 per week while he/she earned \$9.24 per hour. Often, paraprofessionals earn too much for Medicaid, yet too little to afford private insurance premiums (Frank et al., 2000).

Economic conditions. The size of any future nursing shortage will be affected by the strength of the nation's economy. When unemployment rates are low, potential nurses and nurse aides have many more employment alternatives outside of health care. When unemployment rates increase, there are fewer alternatives and the size of the nursing shortage should decline.

There is a great deal of transition in and out of the nurse aide occupation, due to both exit from the labor force and substitution to other types of jobs. This transition depends in part on the relative attractiveness of other entry-level jobs and general economic conditions. For the nurse aide workforce, exit due to transition between jobs or in and out of the labor force is likely to be much more important than exit due to retirement or mortality.

Exit from the profession -- According to Konrad (undated), less than 50 percent of the 180,000 North Carolinians trained to work as nursing aides during the last decade are currently certified to work as nurse aides. Among those who are certified, many apparently work only part-time as a nurse aide and have earnings from other unrelated jobs in low wage industries.

Working conditions -- Nationally, nurses and aides experience more physical injuries than other high-risk occupations (SEIU, 1992). The hazards and physical demands are significant; nursing homes have one of the highest rates of workplace injury, 13 per 100 employees, higher than the construction industry with a rate of 8 per 100 employees. Nurse aide jobs are

¹⁷⁴ According to the preliminary results from the 2000 Survey of Registered Nurses, only 5.4 percent of RNs were men, a slight increase from 4.9 percent in 1996.

physically demanding, often requiring moving patients in and out of bed, long hours of standing and walking, and dealing with patients or residents who may be disoriented or uncooperative (GAO, 2001A). Pressured by administrators to speed up, direct-care workers spend less time with patients and are often required to work overtime and double shifts (Dawson et al., 2001). NAs also lack the opportunities for involvement in care planning or other quality-assurance activities even though they spend the greatest amount of time with patients (Keunen et al., 2000).

Public policy -- The nation's policies related to immigration, welfare, the minimum wage level, and health care reform will impact the size of any future nursing shortage, particularly for nurse aides. Immigration policies can impact the size of both the licensed and unlicensed nursing workforce. Changes to welfare policy or the minimum wage are more likely to impact the nurse aide workforce. Section 8.5 reviews some initiatives for alleviating the nursing shortage.

Lack of opportunities for advancement – There are few opportunities for skill upgrading or advancement for incumbent direct-care workers – thereby limiting their access to career paths or their prospects for long-term employment in the sector (Keunen et al., 2000). Although some nursing homes provide opportunities for NAs to earn increased pay for increased responsibility, for many NAs, the only options for advancement would require leaving nursing home work or obtaining the education to become a licensed or registered nurse. Oftentimes, the latter choice is not an option because many NAs do not have the time, money or interest to pursue this option (NCCNHR, 2001).

Lack of adequate training and supervision – Issues related to training and supervision are discussed in chapter 7.

High turnover rates - Issues related to turnover are discussed in chapters 4 and 5.

5.0 Initiatives and Strategies for Alleviating the Nursing Staff Shortage

In response to concerns about current and projected shortages of nursing facility staff in the long-term care industry, many governmental, public and private organizations have made recommendations for ways to improve the recruitment and retention of staff, and some states and provider groups have experimented with interventions. The focus of these initiatives has been primarily on improving wages and benefits, providing training and opportunities for advancement, and increasing employee supports for nurse aides.

Improving Wages and Benefits - Responding to the finding that wages and benefits have a significant impact on facilities' ability to recruit and retain qualified workers and have been found to have a direct correlation with job tenure, many states have been trying different methods of improving nurse aide compensation. Some options included 1) wage pass-through, which implements an increase that is solely dedicated to wages and/or benefits as an add-on to payment rates; 2) full reimbursement of providers who pay higher wages for afternoon, evening, weekend and holiday shifts, travel time for home health workers, step increases for job tenure, and for career ladders; 3) increasing direct care wages to a higher

earning bracket in a stepped fashion over a period of time and indexing wages to labor market indicators rather than the consumer price index to ensure that health care wages are competitive in the labor market; and 4) public oversight of wage rates – convening key stakeholders to review adequacy of wages based on: vacancies, turnover, overtime, temporary pool use, analysis of wages for comparable jobs, and levels needed for economic self-sufficiency (Frank et al., 2000). As of 2000, 26 states had established some sort of a wage pass-through, wage supplement or related program. (NC Survey). Oklahoma’s reform package set a minimum hourly wage for direct-care workers at \$6.65. Maryland increased Medicaid funding to the nursing cost-center by \$10 million in both 2002 and 2003, and Virginia passed a package to improve NA hourly wages by up to a \$1 per hour (Paraprofessional Healthcare Institute & National Citizens’ Coalition for Nursing Home Reform, 1999-2000). Rhode Island has an enhancement system in place with bonuses ranging from \$.50 per hour to \$2.00 per hour (North Carolina Division of Facility Services, 1999). (See chapter 4 for more information on wage pass-through programs.)

Training and Opportunities for Advancement - Other attempts have been made by states and providers to improve training for direct care workers by proposing different levels of training, with the intent of providing nurse aides with an incentive to continue in the profession such as the Wellspring Program and the California Caregivers Training Initiative. Virginia increased the minimum training hours for the nurse aide program from 80 hours to 120 hours. North Carolina currently requires a minimum of 75 hours of training and a competency test, or only the competency test, in order to be certified to work as a Nurse Aide 1 (North Carolina Division of Facility Services, 1999). Massachusetts initiated state grants to providers that funded \$1 million for scholarship programs to attract new aides, \$5 million for career ladder grant programs for aides, and \$1.1 million in education and job supports for current or former welfare recipients interested in a career as a NA. In 1999, Virginia Nursing Assistant Institute was developed by local officials, associations, and providers to offer comprehensive free or low-cost aide training (Scanlon 2001).

Increased supports – In order to address the problem of guidance and support, there have been several initiatives to provide peer support and networking opportunities for nurse aides. The Virginia Nursing Assistant Institute Initiatives and the Massachusetts Nursing Home Quality Initiative have implemented such developments (Scanlon 2001).

Other Suggested Strategies - Some advocacy groups such as the New York Association of Homes and Services for the Aging and the Paraprofessional Healthcare Institute suggest that nursing homes restructure their systems in order to take advantage of the skills of all workers, as well as allowing non-skilled workers to take over some functions such as feeding patients. Some programs such as that by affiliates with the Cooperative Healthcare Network, have been designed more directly around the paraprofessional employee (Dawson et al., 2000). To reduce work place related injuries and reduce staff turnover, the Paraprofessional Healthcare Institute has recommended increased investment in mechanical lifting equipment that could reduce the hazard to nursing home workers (McDonald, 1998). It has also been suggested that new populations such as former welfare recipient populations and volunteer populations should be tapped to increase the number of nurse aides (North Carolina Division of Facility Services, 1999). Workgroups in Florida and New Mexico have recommended funneling welfare recipients into nurse aide training programs.

Interventions focused on the shortage of professional staff - Strategies suggested for alleviating current and anticipated shortages in the number of RNs and LPNs in nursing home settings fall primarily into three categories. The first is providing increased funds available to encourage entry into nursing, such as scholarship programs and tuition assistance. The second is to encourage students enrolled in nursing programs to consider careers in chronic care settings by increasing emphasis on caring for the elderly in the nursing curriculum, and by including clinical rotations with a focus on geriatrics. Finally, there have been recommendations that the work environment of the chronic care setting be restructured, so that more nurses are available for patient care rather than being occupied with administrative duties.

6.0 Conclusions

An important consideration in evaluating the feasibility of a minimum nurse staffing requirement is whether the size of the nursing workforce is adequate to allow facilities to staff at the higher required levels. While available data limit the extent to which we can measure the size of the nursing shortage, there are good reasons for believing that a shortage currently exists, at least in certain parts of the country. Studies have found large increases in reported vacancy rates in recent years, and many nursing facilities report staff shortages. There are also good reasons for believing that the size of this shortage will increase over time.

Because of population changes, the demand for nursing care is expected to steadily increase. There is expected to be rapid growth of the elderly population—the number of individuals aged 85 and over, those most in need of nursing care, is expected to more than double over the next 30 years. Population trends suggest that the number of individuals entering the nursing profession will increase only slightly.

- Enrollment in schools of nursing has declined in recent years, and, as a result, the average age of the RN workforce has increased.
- The projected size of the female population between the ages of 25 and 54, the group which has traditionally filled most nurse aide positions, is expected to remain relatively unchanged between 2000 and 2030, limiting likely entry into nursing.

The staffing thresholds identified in Chapter 2 would require large staffing increases at some nursing homes. Nationwide, the potential staffing thresholds identified in this report would require facilities to hire an additional 77,000 – 137,000 RNs, 22,000 – 27,000 LPNs, and 181,000 – 310,000 nurse aides. The requirement would increase overall demand (across all employment settings) for nurse aides by 13 – 21 percent and increase overall demand for RNs by between 5 and 9 percent. Depending on overall economic conditions in the country, significant wage rate increases might be required in order for facilities to be able to meet the higher staffing requirements. In states that currently have low staffing levels, the impact would be even larger.

Given assumptions of how sensitive the nurse labor supply is to changes in wage rates, we can estimate the increase in wages that would be required for facilities to staff at the higher levels that would be required under a minimum nurse staffing requirement. These increases would affect not only nursing homes, but also other sectors (hospitals, home health) that

compete with nursing homes for nursing staff. The thresholds identified in Chapter 2 would increase RN wage rates by between 2.5 and 7 percent, an increase of between \$0.50 and \$1.40 per hour, given an average RN wage rate of \$20.00 per hour. For facilities to staff at the higher nurse aide levels that would be required, nurse aide compensation would need to increase by between 10 and 22 percent, an increase of between \$0.86 and \$1.89 per hour. The exact amount depends on the threshold adopted and the sensitivity of the nurse aide workforce to wage rate changes, but implementation of the minimum nurse staffing ratios identified in this report would have a considerable impact on nursing workforce requirements.

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1.0 Development of Improved Nurse Staffing Data Collection and Audit Tool¹⁷⁵

9.1 Background and Purpose

Enforcement of any federal or state proposed minimum staffing requirement for nursing facilities will necessitate an accurate nurse staffing measure that can be used to monitor compliance with the regulation. Even if a minimum staffing requirement is not implemented, accurate staffing data are necessary to provide more information to consumers regarding nursing facility services. For example, consumers could benefit from nurse staffing information were this information to be available on CMS' "Nursing Home Compare" website. The purpose of this task is to develop a mechanism to capture accurate nurse staffing data. The mechanism under consideration is a nurse staffing reporting form and external audit protocol.

The only electronic sources for nursing home nurse staffing data currently available are Medicaid Cost Reports and the Center for Medicare and Medicaid Services' (CMS) Online Survey and Certification Reporting System (OSCAR). Both are limited in their ability to provide an accurate depiction of staffing levels over multiple, distinct time periods. OSCAR data are collected for all Medicare-certified nursing facilities, but represent only one two-week period immediately prior to the annual certification survey. OSCAR staffing measures are not audited, and there is currently no mechanism for assuring their accuracy. The Medicaid Cost Report is a financial report of all facility costs, including those related to staffing, totaled for one year. The Cost Report data are not available for all states and only include facilities that are Medicaid certified. During the first phase of the *Study on Appropriateness of Minimum Nurse Staffing Ratios for Nursing Homes*, payroll data were collected from nursing facilities in Ohio to assess the validity and reliability of staffing measures from OSCAR and Medicaid Cost Report data. The payroll data collection activity was designed to provide a "gold standard" measure for testing the accuracy of these staffing data.

¹⁷⁵ Written by Donna Hurd of Abt Associates for the Centers for Medicare and Medicaid Services (Contract # 500-95-0062 - T.O. #3; Alan White, Abt Associates Project Director; and Marvin Feuerberg, CMS Project Officer). This task was a joint effort between Abt Associates, CMS, Survey Solutions Inc. and Cowles Research Group. Beth Klitch and Kay Webb of Survey Solutions, Inc., developed and revised the data collection tool based on comments from Marvin Feuerberg and Susan Joslin, Project Officers, Donna Hurd and Alan White of Abt Associates, and Mick Cowles of Cowles Research Group. Testing of the tool was coordinated by Survey Solutions Inc. Valuable comments on the tool's design and testing were provided by Terry Moore of Abt Associates. Editorial assistance was provided by Marvin Feuerberg, Project Officer and Terry Moore and Deborah Deitz of Abt Associates.

Phase 1 analyses demonstrated that the OSCAR system is not accurate. Although the OSCAR nurse staffing measures appear reasonably accurate when aggregated across facilities (e.g., for state averages), at the level of the individual facility their accuracy is unacceptable. Medicaid Cost reports, although determined in the Phase I analysis to be more accurate than OSCAR, do not contain consistent staffing definitions or report consistent staffing measures across states. In addition, there is a considerable time lag from the reporting period to data availability.

The data collection effort conducted for the Phase I report generally revealed that payroll records and contract staffing agency invoices were an accessible and likely accurate source for nurse staffing data. All of the variables identified in the study were available and easily identified at each of the facilities in the Ohio sample. Data collected included paid nursing hours for all permanent nursing employees as well as hours paid to contract nursing staff. Average daily census was also collected for the time periods corresponding to the payroll data collection. Employees and contract staff were identified by department and staff type (director of nursing, administrative nurses, RNs, LPN/LVNs and Certified Nursing Assistants). The records were found to be available for the previous six to twelve months and generally took no more than 30-40 minutes to extract per facility.

This chapter describes the iterative process employed in the development of a nurse staffing data collection tool that would use as its source documents payroll records and contract agency invoices. Section 9.2 describes the purpose of this task. Section 9.3 describes the processes involved during the development phase. It begins with a description of all the staffing variables of interest and the processes involved in evaluating the availability of this information. It includes the information obtained from interviews with facility staff, payroll processing companies and contract agency personnel during the development phase. This section also includes the rationale for decisions that were made regarding the feasibility of collecting information on certain of the staffing variables. Section 9.4 describes the field-testing that took place using the draft tool and Section 9.5 concludes with recommendations for further revisions and testing.

1.0 Development and Testing of the Nurse Staffing Data Collection Tool

1.0.0 Goal

Staffing information gathered during Phase I involved only one state (Ohio) and collected a limited number of payroll variables. Total staffing hours for RNs, LPN/LVNs and Certified Nursing Assistants were collected for two two-week periods for both facility employees and any contract agency staff engaged during those periods. Results of this study showed that payroll records in Ohio were available and relatively straightforward for the data collector to understand and collect. Thus, the decision was made to expand this investigation to examine payroll records and contract agency staffing invoices in multiple states. The goal in the

expanded study was to test the feasibility of collecting an expanded number of staffing variables from payroll records and contract agency staffing invoices through the use of a specially-developed data collection instrument. This tool would capture staffing hours differentiated by the following characteristics:

- nurse staff type (RN, LPN/LVN, Certified Nursing Assistant (CNA));
- shift worked (eight-hour day, evening or night shift or twelve-hour day or night shift);
- unit worked;
- care provided for Medicare or non-Medicare beneficiaries;
- day of the week worked (Monday through Friday or weekend); and
- type of care (direct care or administrative).

A further goal for this project was to examine and describe facility payroll processes including the types of records available and procedures involved in maintaining and modifying those records. The project team was interested in obtaining the same types of information for the agency invoice processes, as the invoices represent the documentation of the hours and types of contract staff used by facilities. An additional goal for testing this tool was to develop and describe a procedure to audit the staffing data collection instrument.

Payroll period was defined as a two-week period, regardless of the facility's current payroll period. The selection of the above-mentioned variables was made in response to comments from stakeholders and the professional judgement of members of the research team. The following is a brief discussion summarizing the decision-making process for including each of the variables in the study.

Nurse Staffing Hours by Licensure Type

It was important to differentiate between hours worked and hours paid. The number of hours worked captures the time spent working at the nursing facility. This is distinct from the hours that are paid to an employee as components in a benefits package, often referred to as Paid Time Off (PTO). There is great variability between facilities in terms of hours offered as PTO, but as illustration, these hours generally include sick hours, vacation hours, bereavement hours, and/or personal time. Making this differentiation between hours worked and hours paid was thought to present a more accurate picture of hours of care provided for nursing facility residents.¹⁷⁶

OSCAR data on staffing hours is defined as hours worked. Medicaid Cost reports vary by state with at least some states making a distinction between hours worked from hours paid. Nurse staff type (RN, LPN/LVN, CNA) was collected during the Ohio payroll data collection and was known to be readily available.

¹⁷⁶ The number of hours paid presents a more accurate representation of the staffing costs incurred by a facility and will be examined in other aspects of this report.

Shift Worked

The shift worked, e.g., 7:00 AM to 3:00 PM, was selected for inclusion as there has been much public and regulatory interest in understanding the level of nursing facility staffing over the twenty-four hour day. Staffing during the day time (typically the 7:00 AM to 3:00 PM shift) is generally high, as nurse administrators, supervisors and nurse managers are available to supplement the number of direct care workers should the need arise. Staffing on the evening and night shifts (typically 3:00 PM to 11:00 PM and 11:00 PM to 7:00 AM) is generally much lighter as administrative staff are usually not in the facility after 4:00 or 5:00 PM. It was recognized by the research team that staffing for these evening and night hours is an on-going concern for residents, consumers and regulators and should therefore be captured by the data collection tool.

Unit Worked

The interest in unit worked stemmed, in part, from a concern on the part of the research team for the staffing levels provided on specialty units. These are units identified as providing care for targeted populations of residents, particularly Alzheimer or dementia residents and rehabilitation or sub-acute patients. Because of the more specialized nature of the care required for these resident groups and/or the increased acuity of their medical conditions, enhanced staffing on these units is believed to be necessary. If a minimum staffing regulation was to be implemented and if this regulation identified minimum staffing levels by acuity or casemix, some mechanism for identifying staffing in particular areas of the facility would be necessary. In addition, staffing hours reported at the unit level would be most applicable to consumers' interests.

Care provided for Medicare versus non-Medicare beneficiaries

Those residents recently hospitalized and receiving Medicare benefits during their nursing home stay are generally believed to be more acutely ill and therefore in need of increased nursing attention. Their need for daily skilled nursing or rehab care should be evident in staffing levels that reflect a higher level of oversight. In the event that minimum staffing levels are mandated, a mechanism to verify that these residents are receiving an appropriate level of care and supervision would be necessary.

Day of the week worked (Monday through Friday or Weekend)

Similar to the argument for examining staffing by shift, the staffing reported for weekdays versus weekends is of interest to consumers and regulators, as resident needs must be met each day of the week. Directors of nursing, nurse administrators, supervisors and managers are typically available Monday through Friday to supplement any staff shortages. Supervisory staff on weekends make up some portion of the total nurse administrative staff and varies greatly by facility. Generally, nursing home staff workers (nursing assistants and staff nurses) are required to work some proportion of weekend hours, the usual requirement being that they work every other weekend. In terms of the facility staff as a whole, it follows then that half the staff will be on duty for the weekend and half of the staff will have the weekend off. To maintain adequate numbers of staff on weekends, facilities must recruit employees willing to work just weekends or per diem staff. Per diem staff, although

classified as employees of the facility, work only on an as-needed basis. These individuals generally are compensated at a higher rate of pay, but do not receive benefits. Facilities may or may not require a certain minimum of hours per designated time period in order to maintain their per diem status, thus some individuals may work quite often while others work very infrequently.

Type of care (Direct care or Administrative)

The research team believed that a distinction was necessary between hours of care provided to residents and hours allotted for administrative duties. Hours worked by directors of nursing, assistant directors of nursing and MDS Coordinators were thought to belong in a separate category from those of nursing assistants, staff nurses, managers and supervisors who were directly involved in either providing or supervising care. The administrative nurses are typically paid a salary and do not record hours worked. Researchers were interested in the number of positions or full-time equivalents designated for nursing administration as well as an estimate of the hours actually worked. The number of actual hours worked was recognized as potentially not verifiable in any source document but were of interest in terms of the level of effort these individuals expended.

Auditing the staffing information

If a minimum staffing regulation were implemented it would most likely include a reporting requirement that facilities submit staffing hours on some regular basis. Some method of verifying the accuracy of staffing information submitted would be necessary. On-site visits to examine payroll records and contract agency invoices would be one possible method, although not the only one and probably not the most efficient. This type of audit could be accomplished by state surveyors during the annual licensure and certification inspection or by an independent contractor engaged by the state agency for this task. Another possible method for verification of submitted staffing data would be electronic data submission with targeting measures to identify facilities with aberrant staffing numbers. Only those facilities with staffing numbers outside an acceptable range for their bed size would be visited to obtain verification and additional information. For this project, an on-site verification process was developed and partially tested so that both the accuracy of the staffing information could be checked as well as the feasibility of obtaining the information from payroll records and contract agency invoices.

2.0.0 Process

The nurse staffing data collection tool was developed through a subcontract between Abt Associates, Survey Solutions (SSI) and Cowles Research Group (CRG). SSI, a long term care management consulting and accreditation company, developed and revised the data collection tool based on input from the research team. CRG, specializing in health services research and long term care databases, was a key reviewer of the various versions of the tool as it was developed. The project team, composed of Abt, CMS, SSI and CRG staff reviewed the tool at regular intervals over a 12- month period, providing both written and oral comments as well as participating in the field testing of various versions of the early tool. In

total, there were some 15 versions of the instrument developed through a survey of team comments and pre-testing in eight nursing facilities.

In August 2000, the project team began by identifying the staffing variables of interest, a desirable format to facilitate the accurate collection of those variables, and the need to describe a process for auditing the tool. The project team identified problems with the collection and input of staffing data on CMS' OSCAR (or Form 671) and sought to develop a tool that would minimize both facility completion errors and state agency data entry errors. During the fall of 2000, SSI presented a draft version to five nursing facilities in Ohio. Some of the facilities were asked to complete the instrument with minimal assistance from SSI staff while others were interviewed to obtain the same information. Interviews with owners, administrators, directors of nursing and business office managers were conducted to understand the sources of information available to complete the instrument and to evaluate the ease with which the required information could be obtained from existing data systems. Based on the initial field interviews, the tool was put through further revisions. In March 2001, the tool was tested by an Abt staff member at two Boston-area nursing facilities and in May 2001 at another Ohio facility by SSI staff. Based on these additional tests, along with feedback from the facilities' staff, the tool was further revised in content and format.

During the development and pre-testing phase, several major staffing agencies known to provide temporary nurse staffing to nursing homes were interviewed to determine the general format and content of information included on agency invoices. The frequency and availability of invoices was important to guide the development of audit protocols. Audits of nursing facility staffing hours using source documents of payroll records and agency invoices could not take place until all source documents were available. Facilities are generally invoiced for temporary staffing hours on a monthly basis, thus the timing of these audits would be dependent on receipt of the agency invoices.

Several major payroll processing companies were also contacted as part of the tool development process. Interviews were conducted with four major companies in an effort to understand the processes involved for facilities when initially requesting or altering summary reports that included the staffing information of interest.

The remainder of this section will describe the process of instrument development, revision and pre-testing that resulted in a tool accepted as ready for field-testing. The tool was designed to (1) inform the research team regarding facility payroll processes and systems, (2) determine the feasibility of collecting select staffing variables from payroll records and temporary agency invoices and (3) develop and test a mechanism to audit the data. The tool was organized into the following sections:

- Facility identification and information;
- Census and acuity information;
- Facility payroll systems;

- Facility staff turnover and stability;
- Staff hourly wage rates;
- Facility nurse staffing hours;
- Contract nursing services invoices; and
- Contract nursing services nurse staffing hours.

Facility Identification and Information

This section contains facility and data collector identifiers as well as certification types(s) and numbers of beds. As much as possible, where text and numeric information was requested, the form was designed such that each individual number or letter is written in an individual box to minimize data entry errors due to illegible data. The following identifying information was collected:

- Facility name;
- Federal provider number that identifies the nursing facility beds. In cases where facilities contain multiple levels of care, only the provider number that refers to the nursing facility beds is required;
- County;
- Street address;
- Telephone and fax numbers;
- Facility email address, if available; and
- Certification type and number of beds -
 - Skilled nursing facility (SNF) Medicare-only beds;
 - SNF/Nursing facility (SNF/NF) Dually-certified beds;
 - NF Medicaid only beds;
 - Total number of beds in facility.

Census and acuity information

To calculate ratios of nurse staff to residents, census information on the number of current residents is needed for the payroll period. Several of the stakeholder groups for this project strongly recommended that any information collected on staffing and/or recommendations made take into account the acuity of the resident population. In response to this concern, the staffing tool includes information on resident Resource Utilization Groups Version III (RUG-III) as one measure of resident acuity. The research team anticipated, however, that not all facilities would be able to supply this information for all residents. Facilities caring for residents receiving Medicare benefits should be able to report a RUG for each Medicare resident, but for non-Medicare residents a RUG may not be assigned. The decision was made to attempt to collect RUGs for all residents so as to determine the degree to which this information is available for all residents.

Pre-testing at facilities during the development phase showed that only in Ohio, which utilizes a RUG-based Medicaid reimbursement system, could RUGs be identified for all residents. In Massachusetts where Medicaid services are reimbursed to facilities based on

the Management Minutes System (MMS), resident MMS groups could be determined from facility billing software, and Medicare resident RUGs could be obtained using their MDS software. Staff were unable, however, to generate a single report that would list each facility resident with their corresponding RUG. The project team decided that it would further test this issue in multiple states before making a determination as to its utility.

Facility Payroll Systems

This section contains informational questions regarding the types of payroll processing systems that nursing facilities employ. The tool asks the facility to describe how employee hours are recorded, how payroll is generated and what types of staffing information are available in payroll reports. Assessment of payroll processes currently in use is a first step in determining the impact on facilities of any requirement to supply additional or different staffing information from this source. The small sample of facilities visited during the development phase demonstrated a variety of payroll systems and processes.

Pre-testing of the form at eight facilities during the development phase revealed that facilities utilized a variety of systems and processes to record employee hours and generate employee paychecks. Some type of time clock mechanism for recording employee work start and end times was utilized at all facilities. In some facilities these systems for recording hours were fully integrated to the system that generated the payroll, i.e., the hours recorded by the time clock system were electronically linked to the system that produced the paychecks. In other facilities, the system of transferring employee hours from the time clock system to the payroll system was a completely separate and manual process. No sampled facilities were able to fully integrate employee hours worked with payroll and clinical or RUGs information, although such fully integrated systems are known to exist. The frequency with which the payroll was generated also varied considerably. Facilities varied from weekly to biweekly on designated days of the week and/or dates in the month, e.g., one facility paid its employees on the 5th and 20th day of each month.

Facility staff were interviewed regarding the types of information that was contained in their payroll journals or reports. All eight facilities indicated they were able to report total hours by staff nurse type (RN, LPN, CNA). Each facility was also able to distinguish nurse administrator positions that were salaried from those positions that were paid by the hour. One facility, however, could not distinguish RN administrative positions from LPN administrative positions. Salaried nurses did not punch time cards, but generally reported their hours on a time sheet using an honor system. The remainder of the staffing information (shift, unit, day of the week, and Medicare/non-Medicare) varied by facility. In some cases facilities reported that they were able to determine hours for certain variables, when in fact, upon examination of the payroll journal, this information was not available. In all cases, except for Medicare vs. non-Medicare hours, facility staff indicated that all of the other staffing variables were available but would require an examination of other facility records. These other facility records included work schedules and/or daily assignment sheets that were completed and kept by the facility for a designated period of time. However, these records were recognized to be only partially accurate as they were not always revised or

updated to reflect the final distribution of staff per shift and day. Upon examination of these two types of records, it was found that they were at least partially hand-written, contained numerous revisions and did not always indicate the nursing staff's licensure. Only one facility reported being able to distinguish between hours worked on a Medicare skilled nursing unit from its payroll records; the other seven facilities indicated that they either no longer maintained separate skilled-only units or that the information would have to be obtained from supplementary documents.

Interviews with Payroll Processing Companies

Payroll processing companies were contacted during the development phase to facilitate a better understanding of the variability observed in facility payroll reports. Although each of the eight facilities visited during the development phase was noted to use a major payroll processing company, there was considerable variability in the number and types of staffing information documented in payroll summary reports. For example, both of the Massachusetts facilities visited used the same major payroll processing company for the payroll period examined. One payroll summary report listed nurse staffing by licensure, staff type (administrative vs. direct care staff), unit worked and employment status (regular staff or per diem staff). The other facility listed nursing hours by licensure, staff type, shift and weekend/weekday hours.

The research team sought out two major payroll processing companies and one company that collected time and labor data to interface with payroll systems for discussions regarding the various components of payroll reports and the processes involved in selecting and changing those reports. These companies provide payroll/labor data management services for over 6,000 facilities in 45 states. Although their approach varied slightly, generally each system offered facilities a standard report and options for specialized or custom reports. Standard reports generally included summaries by department with varying degrees of additional information available. Components of the reports are selected by the facility at the time the service is initiated. Customized reports or modification of standard reports were also available. One payroll processing company reported that a facility may select up to 100 different earning/department codes for different types of information (e.g., shift, weekend, vacation, sick, unit). Additional codes may be accessed through the company's mainframe system. Through one company, facilities may opt to purchase an additional feature which allows them to query/sort fields so as to generate reports from their own computer system; however, they may sort only on the variables that were initially identified during the set-up of the system. To change the information contained in the reports, the facility must make a request to the payroll processing company. Revisions in reports reportedly take from one to six weeks depending on how the initial system was set up. Facilities are not able to change the format of their payroll reports themselves.

Facility Staff Turnover and Stability Measures

Stakeholder groups had commented on the lack of standardized measures of nursing facility staff turnover in most states. They also suggested that such measures should be available in some publicly-accessible location. In response to this concern, two measures of staff

retention were included in the staffing data collection tool. A measure of staff turnover by nurse staff type (RNs, LPN/LVNs, Medication Aides/Technicians, CNAs, Other nursing staff) was defined as the number of employees in each category whose employment ended during the designated time period as a proportion of the total number of nursing employees on the last day of the time period or the average number of nursing employees employed during the designated time period. The nursing staff stability calculation was also differentiated by nurse staff type and was based on the number of nursing employees with one or more years of service on the last day of the time period as a proportion of the total number of nursing employees. Tenure in key positions (facility administrator, director of nursing and MDS Coordinator) was also included as a separate measure within this section. The designated time period was identified as the 90 days prior to the facility's last state survey or the most recent full quarter for which data were available.

A measure of volunteer hours was also included within this section, as it was recognized that there are a number of facilities that utilize volunteers to augment staff. Volunteer hours were recorded for the same time period as the turnover and stability information in this section of the data collection tool and for the same period as the payroll hours in the Nursing Services Staffing section of the tool.

Initial site visits revealed that turnover information had to be manually computed from several source documents and was not readily available, at least for a 90-day period, from payroll journals. When facilities were able to provide turnover information, data collectors often found errors in calculations.

Staff Hourly Wage Rates

Obtaining hourly wage rates by nurse staff type required the differentiation between hours worked and hours paid. The computation of average wages was calculated using gross wages divided by hours worked. Gross wages paid by staff type was readily available at the eight study facilities. To identify the hours worked required that the researcher locate the total hours by staff type and manually remove the various additional non-worked hours (e.g., vacation, sick, personal, bonus, differential). Using payroll ledger codes, these categories of hours were identified and then subtracted from the total number of hours. Average hourly rates were calculated on staff involved only in direct care and excluded those in administrative positions.

Facility Nurse Staffing Hours

This section examined the feasibility of using payroll records to determine the nurse staffing hours by staff type and variable(s) of interest for employees of the facility for the designated payroll period. Census information for the same period was also recorded here. This section was formatted such that each digit and/or decimal point is recorded in a separate box. Census by day is recorded for the 14 days of the pay period. Average census was computed by the data collector.

The feasibility of determining total nurse hours by department and licensure type as well as by the other variables of interest (i.e., shift, unit, weekday/weekend, Medicare, non-Medicare, direct care/administrative care) from the payroll records was tested during the development phase. The following table summarizes the availability of the staffing variables found during pre-testing:

Table 9.1
Staffing Variable Availability in Payroll Records and Contract Agency Invoices

Staffing Variable	Availability in Payroll Record	Availability in Contract Agency Invoices
Department	Yes	Yes
Licensure	Yes	Yes
Shift	Varied - Available if shift differentials used	Yes
Unit	Varied	No
Day of the week	Varied - Available if weekend differentials used	Yes
Direct care/Administrative	No - Salaried positions identified, but exact hours not available	No
Medicare/Non-Medicare	No	No

Source: Facility record reviews in Massachusetts and Ohio.

Staffing totals by department and staff type was available at each of the eight facilities visited. Staffing by shift was identifiable in some facilities, generally by the use of shift differentials. Facilities that provide extra money for 'off' shifts (i.e., evening and night shifts) as an incentive to secure staff to work the less desirable shifts will have postings in their payroll journals recording this information. In facilities that pay extra for off shifts, but incorporate this into their hourly rates, this information will not be apparent.

The identification of staffing hours by unit and hours worked caring for Medicare beneficiaries vs. non-Medicare beneficiaries was believed to be closely related. Facilities may designate distinct Medicare units, declaring all the beds in that unit as Medicare certified, and restrict Medicare beneficiaries to those beds only. Alternatively, facilities may choose to certify all the beds as dually Medicare and Medicaid certified. If facilities choose to identify a distinct Medicare unit, it seemed reasonable that they would track staffing by unit in order to identify the costs associated with that unit. Preliminary site visits revealed that only one facility could identify staffing by unit. One other facility tracked the staffing hours provided for Medicare residents. Facility staff explained that the tracking of Medicare distinct part unit time and hours had been suspended upon the introduction of Medicare prospective payment.

Information on staffing on weekdays and weekends also varied in availability. Preliminary visits showed a mixture of reporting schemes for this item. Some facilities provide a weekend bonus, similar to shift differentials. If so, this information would be recorded in the payroll journal. Other facilities recorded this information for only a segment of their employees, e.g., only for hourly, non-exempt employees.

The distinction between direct care and administrative hours proved to be not a clear one. None of the facilities visited during the instrument development phase could identify staff hours as either administrative or direct care hours. They could, however, identify a number of nursing administration positions and could also identify those positions or individuals who were paid a salary as opposed to an hourly rate. In the majority of cases, those nurses who were considered administrative were paid a salary. During the pre-testing phase, interviews with facility staff indicated that there were a number of positions that were considered administrative and paid on a salary basis fairly consistently and there were a number of other positions that varied as to their status as administrative and/or salaried positions. In the facilities visited during the pre-testing phase, the director of nursing, the assistant director of nursing, and the MDS coordinator were generally seen as administrative and were paid a salary. Shift supervisors and unit managers who were providing supervision to the direct care staff varied by facility as to the status and payment of these positions. Positions that indicated responsibility for staff education, infection control or quality assurance also varied by facility as to status and payment type. Based on interviews with facility staff and examination of payroll records, the decision was made to record the number of nursing employees in salaried positions and to estimate the number of hours worked by these individuals during the payroll period. Salaried positions were believed to be a reasonable proxy for administrative positions and were readily available from payroll records.

For each of the staffing variables noted to be inconsistently reported among facilities in payroll records, alternative information sources were explored. Interviews with facility staff revealed that the information sought on staffing hours by unit, shift and day of the week could be obtained by examining other staffing records, (e.g., work schedules, daily staffing sheets and/or individual employee time cards or records). Research team staff, in an effort to fully explore the possibility of obtaining these variables from any available source, examined these other documents. Unfortunately, in the case of schedules and daily staffing sheets, the records were often found to be hand written and not updated or revised to reflect the final staff complement on any of the days/shifts of interest. Manually sorting through employee time cards to identify shift and day of the week worked would be burdensome for facility staff and an unrealistic task for an auditor.

Staffing schedules are written and posted to communicate to staff when to report for work. They do not 1) reflect the hours actually worked, particularly when a staff member stayed late or left early; 2) reflect updated information that shows which staff members did not report for particular shifts and which staff members took their place; and 3) always list RNs separately from LPNs. If a staff member from one unit is 'floated' to a short-staffed unit, that information is not regularly recorded. If it is recorded, it is done by hand and often not

legible. If an administrative nurse supplemented regular staffing by performing direct care work, that information is also not consistently recorded. Facilities explained that staffing the facility was such an arduous task that the priority had to be to secure enough staff to provide care, while revising and updating the schedule took a lesser priority. Daily assignment or daily staffing sheets are completed to display all the staff working in the building in a 24-hour period, by unit and shift. These worksheets, used by supervisors to monitor staff attendance, are frequently modified during the course of a day to show how staff assigned to one area may be moved at some point in the shift to respond to a need in another area of the building. Research team staff examined daily assignment sheets and/or schedules and determined that to attempt to extract information from these documents would be a time-consuming and error-prone task.

When facility schedules and daily staffing sheets were examined and compared to payroll records at the department, licensure type and individual employee level, it was found that there was a high degree of discrepancy between the two sources. For the nursing department as a whole, hours recorded in the payroll journal were six percent higher than hours recorded on schedules for a seven-day period. At the licensure type level, hours paid according to payroll records were 11 percent higher for RNs, seven percent higher for LPNs and five percent higher for nursing assistants. On the individual employee level, 16 employee records (four RNs, four LPNs, four CNAs) were examined, with only one employee having worked exactly what was recorded on the schedule. Hours for the individual employees as recorded in the payroll journal varied from hours recorded on schedules by 0.5 hours to 3.25 hours over a seven-day period. Hence, interviews with facility staff and examination of the various alternative staffing documents further reinforced the decision of the project team to accept only payroll records and contract staffing agency invoices as accurate representations of facility staffing hours.

Contract Nursing Services Invoices

This section surveyed facilities as to the types of information available regarding their use of contract agency staff. Facilities were asked to indicate which of the staffing variables of interest (date and shift worked, licensure category, unit, day of the week and hours providing care for Medicare vs. non-Medicare recipients) were present on the agency invoices and — if not on the invoice — if this information was available from other facility source documents. Facilities interviewed and visited during the development phase who used contract agency staff indicated that invoices were received at variable intervals — weekly, biweekly and monthly, and contained varying types of information. Some agency invoices contained all the staffing information sought, while others contained only a total cost amount. This prompted research team members to contact several major contract staffing agencies to determine the range of types of information currently available and an estimate as to the level of effort required to obtain any additional staffing variables.

Two major contract staffing agencies, serving nursing facilities in six states, indicated that they were capable of providing information on contracted hours by shift, unit, and day of the

week. They were not able to differentiate between hours worked caring for Medicare residents from hours caring for non-Medicare residents. These agencies were also questioned regarding their ability to generate summary reports for facilities and both indicated that they could summarize contracted employee invoice data by the following variables:

- Pay period, month, quarter and year;
- Time increments shorter than pay period; and
- Department and unit.

The two agencies differed in their estimation of the level of effort required to modify or create new reports, with one agency indicating that was a relatively easy process and the other stating that this would be possible but difficult and would take approximately 30 - 60 days of lead time.

Contract Nursing Services Nurse Staffing Hours

The recording of contract agency hours by staffing variable was complicated by the fact that often facilities used multiple agencies and were therefore gathering the necessary information from several invoices which did not always cover the same time period or provide the same types of information. A worksheet was formatted to aid in this effort. It provided a place to record the staffing hours by variable for each agency so that they could then be totaled for the facility. During visits to facilities during the development phase, it was found that for those facilities using agency staff, most of the variables of interest were available, yet time-consuming to extract. The more agencies involved, the more lengthy the process. Licensure type, shift and total hours worked were readily available. The date of the service was recorded, but often required the use of a calendar to determine if this was a weekend or weekday. Unit worked and hours caring for Medicare vs. non-Medicare residents was not found on contract invoices.

2.0 Field Testing of the Nurse Staffing Data Collection Tool

Field testing of the draft staffing data collection tool (see Appendix F-1) had two goals: 1) to test the feasibility of collecting the staffing variables from the payroll records and contract agency invoices; and 2) to test an audit protocol. It was envisioned that the tool would be completed by facility staff and audited for accuracy by nurse research consultants who would compare the information recorded on the tool with the source documents utilized. The research team was aware from prior experience that it was highly likely that at least some of the variables of interest would not be available from the designated source documents due to the variability in payroll records and contract agency invoices. The research team was interested in the extent of variability in the source documents, and also in the availability of the desired staffing information from supplementary facility documents and records. It would be important to have an understanding of how these supplementary records were kept, their level of accuracy and/or any auditing process, and the level of effort required to change

current systems to include the desired staffing data. Preliminary information had been obtained during pre-testing, but the research team needed to expand this inquiry to multiple states with different types of facilities.

1.0.0 Facility Sample

States vary as to the types of staffing information they require nursing facilities to collect and report in Medicaid Cost Reports. States were identified for testing the data collection tool based on a geographic diversity and variety in the types of staffing data that facilities are required to maintain to satisfy state requirements. Four states were identified to meet these criteria — California, Maryland, Minnesota and Texas. California requires that only hours worked are reported. Minnesota requires that facilities report both productive staff hours and compensated hours. Texas requires that only hours paid are reported. Primary criteria for facility selection were geographic diversity and size. Facilities had to have at least 50 beds, be located in one of five cities or counties in each state (to minimize travel expenditures), and freestanding (as opposed to hospital-based). There are more than 1000 facilities each in California and Texas, 203 in Maryland and 313 in Minnesota that met the sample requirements for bed size and were freestanding.

The following table listed the cities and counties selected for each state:

State	County
California	San Francisco, San Mateo, Alameda, Contra Costa
Maryland	Baltimore City, Baltimore, Howard, Hartford, Anne Arundel
Minnesota	Hennepin, Olmstead, Dakota, Goodhue, Dodge
Texas	Bexar, Travis, Comal, Guadalupe, Caldwell, Blanco

Larger facilities and facilities that are affiliated with a chain were believed to be more likely to have data available in their payroll records than small and/or independent facilities. In the four selected states, the median number of beds is 99, and 65 percent of freestanding facilities are affiliated with a chain. The original sample was to include 25 facilities in each of the four states, for a total of 100 facilities. The facility sample was stratified based on the number of beds in the facility and chain affiliation as follows:

- 15 facilities with 100 or more beds in each state, 10 of these facilities chain-affiliated and 5 independent. (Overall, 71 percent of facilities with 100 or more beds are part of a chain.)

- 10 facilities with less than 100 beds, five of these independent and five affiliated with a chain. [Note that there is slight oversampling of small, independent facilities that comprise only 40 percent of facilities with less than 100 beds.]

Using these sampling rules, 15 chain-affiliated and 10 independent facilities were selected for study in each state.

2.0.0 Facility Recruitment

Prior to contacting facilities to enlist their voluntary participation in the testing of the nurse staffing data collection tool, national and state provider associations and state survey agencies in each of the selected states were contacted to 1) inform them of the project’s activities and proposed data collection effort and 2) enlist their support and willingness to promote facility participation. Survey Solutions led the effort by personally contacting key responsible individuals and providing background information on the project. Letters were drafted from CMS, Abt Associates and Survey Solutions which explained the development of the nurse staffing data collection tool, the expected level of effort required of those facilities willing to participate in the study and assurances of confidentiality in all aspects of the data collection effort. The letters along with copies of the nurse staffing data collection tool and instructions for tool completion were faxed to those association and agency representatives.

Facilities from each state that qualified in terms of size, type, affiliation, and location were listed by category (independent non-profit, independent for-profit, chain non-profit, chain for-profit). Survey Solutions staff were responsible for contacting facilities to schedule visits. Staff were instructed to contact facilities using the following suggested distribution by state:

**Table 9.3
Facility Sample by State and Type**

State	Independent, Non-profit	Independent, For-profit	Chain, Non-profit	Chain, For-profit	Total
California	3	7	2	15	25
Maryland	5	5	2	13	25
Minnesota	7	3	10	5	25
Texas	3	7	2	15	25

If the facility contacted refused to participate, the recruiter was to move to the next facility within the same category on the list. The number of beds for each facility was also listed and recruiters were instructed to select a mix of large and small facilities. Facilities in each state sample list were initially contacted for administrators' names and fax numbers and then provided with copies of the CMS, Abt and Survey Solutions letters, copies of the tool and instructions for completion. Each facility was then contacted by phone to enlist their participation and to schedule a convenient time for the nurse consultant to visit.

3.0.0 Consultant Recruitment

Qualifications

The research team understood that it was possible that the nurse staffing data collection tool could become a component of the state survey with the task of auditing of the tool performed by state surveyors. Thus the consultants recruited to complete the audit were selected from candidates who had at least some knowledge of and experience with the state survey process. Additionally, they were expected to have the following qualifications: experience in long term care facility management; ability to work independently; attention to detail; initiative and ability to elicit facility staff cooperation. Survey Solutions selected candidates from their roster of nurse consultants who met these qualifications and were either living in or willing to travel to the sample states of California, Maryland, Minnesota, and Texas.

Training

Training was conducted by Survey Solutions' Beth Klitch and Kay Webb via a teleconference with four nurse consultants in a two-hour session on July 11, 2001. Abt, CMS and Cowles Research Group staff also participated, as members of the project team had agreed to accompany nurse consultants on initial facility visits to oversee the audit process. (See Appendix F-2 for agenda and training materials). Training materials consisted of the nurse staffing data collection tool, instructions for completion of the tool, instructions for collecting and submitting the audited tool and a provider questionnaire that was to be completed during the exit interview with facility staff. Goals and objectives of the project were explained, followed by a thorough review of each section of the form.

4.0.0 Field Testing

Between July 31 and August 10, 2001 the nurse staffing data collection tool was tested in 38 facilities in four states — California, Maryland, Minnesota and Texas. Although the research team had planned and expected to test the tool at 80 to 100 facilities, the decision was made to suspend testing after the first 38 facilities were completed for several reasons. The primary reason was that initial field testing demonstrated consistency in results that did not justify further testing of the tool without revisions to the tool's content, format and instructions. It was believed that little or no additional information would be gained relative to the cost in time and travel expenses. What follows is a description of the process employed during the field testing.

Sampled facilities were contacted by phone for facsimile numbers and administrators' names. When this information was obtained, a packet of information containing the tool, instructions and letters of support from Abt, CMS and Survey Solutions was sent to the sampled facilities. Survey Solutions then contacted the facilities to engage their participation in the study and arrange for a convenient time for the nurse consultant to visit. Facilities were asked to complete all sections of the tool prior to the consultant's visit, but were advised that if unable to complete certain sections because of missing information or unclear directions,

they were to mark those areas for discussion with the nurse consultant when she arrived at the facility.

Table 9.4
Facility Sample by State, Size and Type

State	Independent For-Profit		Independent Not-for-Profit		Chain For-Profit		Chain Not-for-Profit		Total	
	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small
California (7)	1	1	0	0	0	3	0	2	1	6
Maryland (8)	0	1	0	1	4	0	1	1	5	3
Minnesota (9)	2	0	1	1	0	0	3	2	6	3
Texas (14)	1	2	1	2	5	2	1	0	8	6
Total	8		6		14		10		20	18

Size: Large facilities had ≥100 beds; Small facilities <100 beds.

Facility visits were structured to include an entrance conference with the administrator and/or the business office manager. The project's general goals were explained as well as the data collection process that the nurse consultant expected to use for the facility visit. The remainder of the visit generally took place with the facility's business office manager or with the person in charge of the payroll process. The nurse consultant reviewed each question within each section of the tool for missing information with the appropriate staff person. If the information was missing due to misinterpretation of the directions, further explanation was offered in order to obtain the information from facility staff. If the information was not available the item was left blank. The nurse consultant then requested the source documents and proceeded to attempt to verify the accuracy of each item by comparing the facility's response on the tool to the respective source document entry.

Facility visits varied in length with the shortest visit taking one hour and 30 minutes and the longest six hours. The average for all facilities, regardless of size or type, was three hours. Data on time to complete audits was not recorded for three facilities (one in Minnesota and two in Maryland). The length of time recorded for facility visits included time for the tool audit as well as entrance conferences and exit interviews. Audit times do not appear to vary significantly by type or size of facility. The average time to audit the Maryland facilities was slightly over two hours; for Minnesota it was two hours and 26 minutes and for Texas two hours and 45 minutes. California audits took longer, with the average slightly over five hours. Because the hours recorded do not distinguish between time spent in audit versus time spent in entrance and exit conferences, it is not possible to make any generalizations as to the level of effort involved in the various states' audits.

Table 9.5
Average Times to Complete Audit

State	Independent For-Profit		Independent Not-for-Profit		Chain For-Profit		Chain Not-for-Profit	
	Large	Small	Large	Small	Large	Small	Large	Small
California (7)	5 hrs.	6 hrs.	N/A	N/A	N/A	4.5 hrs.	N/A	5.6 hrs.
Maryland (8)	N/A	3	N/A	N/A	2 hrs.	N/A	N/A	2 hrs.
Minnesota (9)	1.5 hrs.	N/A	1.75 hrs.	N/A	N/A	N/A	2.8 hrs.	2.6 hrs.
Texas (14)	2.5 hrs.	3 hrs.	3 hrs.	2.8 hrs.	3 hrs.	2.6 hrs.	2 hrs.	N/A

Size: Large facilities had ≥100 beds; small facilities <100 beds.

5.0.0 Findings

The project goal was to describe facility payroll processes, determine if the staffing information of interest could be obtained from payroll records and contract agency invoices and test a mechanism for auditing the staffing data. The outcome of the field testing of the staffing data collection instrument is organized by data collection instrument section.

Facility Identification and Information

All 38 facilities were able to provide identifying information, census, certification type and numbers of beds. Facilities that provide multiple levels of care (e.g., assisted living and skilled nursing) and have federal provider numbers for each type of care occasionally requested guidance regarding the appropriate identification number to report on the form.

Census and Acuity Information

The ability of facilities to complete this section, which requested information on current census and resident RUGs, was varied. All facilities could provide their current daily census; however, the availability of the RUG census was very limited. Only four (two facilities in Maryland and two facilities in Minnesota) of the 38 sampled facilities could generate a RUG for each resident. Interestingly, Minnesota and Maryland are not RUG casemix states and would therefore not be expected to have this information readily available. It may be that the facilities that could generate this casemix information may be more knowledgeable and may have the ability to utilize their software systems in a way that others do not.

Facility Payroll Systems

Facilities were generally evenly split between those reporting that they processed their own payroll and those that use an outside service. Of the 34 facilities that were able to answer this question, 15 stated that they process their own payroll, while 19 use a payroll processing service. The 15 facilities that process their payroll were evenly spread across the four states with four in California, Minnesota and Texas and three in Maryland. They were also fairly evenly split between large (8) and small (7), chain (9) and independent (6), and for profit (6) and not-for-profit (9). It was generally believed that facilities that used an outside service would be more automated and have easier access to reports containing the staffing variables of interest. Facilities that process their own payroll indicated, however, that the majority of

them use automated systems and are able to generate the same staffing variables as those who use an outside service.

Interviews with payroll processing companies conducted during the development phase of the staffing tool led the research team to believe that there were a limited number of vendors in this area providing most of the needed services. Field visits to the 38 sampled facilities, indicated however, that there were 19 different payroll and labor and data processing companies being utilized by the sampled facilities. Only two of the vendors were providing services for three or more nursing facilities. The remaining 17 payroll processing companies had agreements with only one or two nursing facilities.

Hourly employee time is recorded via a timecard system and salaried employees use a sign-in sheet or honor system. Most facilities (24) pay employees every other week while a smaller number (7) pay on two determined dates, e.g., the 15th and 30th or 31st of the month. This presents an interesting situation as the facilities paying on two distinct dates of the month are apparently paying for 15 (or 16) days of work per pay period. For these facilities, the request to report nursing hours or expenditures for 14 days requires additional calculations. Facilities reported that the majority of systems could not hold more than two weeks or one pay period's worth of data. Only ten of the 30 facilities providing information could generate reports for the current pay period, previous quarter and year.

In this section facilities were asked to identify which of the variables of interest their payroll systems could supply. See Table 9.6 for a summary of their responses by state.

Table 9.6
Staffing Information Recorded by Payroll Processing Systems as Reported by Facilities by State

Staffing Information	California (n=7)		Maryland (n=8)		Minnesota (n=9)		Texas (n=14)	
	No. of facilities	%	No. of facilities	%	No. of facilities	%	No. of facilities	%
Staff Type	7	100	8	100	7	78	11	79
Shift	4	57	8	100	4	44	6	43
Weekday/Weekend	3	43	6	75	4	44	5	36
Medicare vs. Non-Medicare Hours	3	43	1	13	0	n/a	1	7
Direct Care vs. Administrative	5	71	4	50	2	22	7	50
Unit	2	29	3	38	0	n/a	2	14

n = the number of facilities visited. n/a = not applicable.

The majority (33 of 38) of sampled facilities could report nurse staffing by staff type (i.e., RN, LPN and CNA). According to the nurse consultants who visited facilities in Minnesota and Texas, where fewer facilities were able to report staffing by type, those facilities that couldn't report staffing by licensure were able to report a total for the nursing department.

The five facilities that could not report staffing by licensure were small (under 100 beds); two were non-profit facilities; and three were part of a chain.

Slightly more than half of the facilities indicated that their payroll systems reported staffing by shift, while the others stated that their systems could provide information on staffing by day of the week and direct care hours vs. administrative hours. Information on staffing hours providing care for Medicare vs. non-Medicare residents and staffing by unit were reported as available in only 13 and 18 percent of facilities respectively.

Facility Staff Turnover and Stability Measures

Facilities were asked to report dates of hire for administrators, directors of nursing and MDS coordinators. The majority of facilities (33) were able to provide information on all three positions; four facilities could provide information on only two of the positions and one facility could provide information on only one position. Two Maryland facilities were unable to report any information on turnover or staff stability. It is not clear, however, from the data whether the position for which data was unavailable was currently vacant or if the information was not obtained by the data collector. Facilities were often unsure if the total number of employees used for the turnover and stability calculations were total facility staff or total nursing staff. The verification of this information by the nurse consultants was frequently not accomplished through the payroll reports, but rather through a separate internal report maintained by the facilities.

Staff Hourly Wage Rates

This item required that gross wages paid and hours worked be recorded for RNs, LPNs, CNAs, Nursing Assistants in training and Medication Aides/Technicians so that average hourly rates could be derived. This item caused considerable confusion for facility staff for several reasons. First, facility staff questioned that the process of using gross wages and hours worked in the same calculation was correct. Secondly, they were uncertain if hours and wages paid for salaried positions were to be included in this area. The instructions did state *not* to include hours for the director of nursing, assistant director of nursing or MDS coordinator; however, in facilities where those positions are not salaried, or where there are additional nursing staff who provide direct care or supervision who are salaried, the confusion is justified.

Another factor leading to confusion and additional calculations related to the facility practice of modifying payroll reports to reflect desired staffing levels by discipline. In the process, however, staff hours were often reported in unexpected categories, which became apparent as the nurse consultant conducted the audit of the instrument. One facility that utilized nursing assistants as medication aides reported the hours spent as medication aides in the LPN payroll category so as not to overstate the nursing assistant hours. These aides often divided their time between working as nursing assistants and as medication aides. The system of removing their medication aide hours from the nursing assistant category was a manual one, which the nurse consultant discovered was not always done in a consistent manner. The employee was paid for the correct number of hours and because their hourly rate stayed the

same regardless of the work they were doing; perhaps this is the reason that these hours were not noted or corrected in the report.

Verification of staff hours by project nurse consultants proved to be quite tedious, as the total number of hours in payroll records by discipline is a grand total of hours worked — plus all other hours paid for vacation, sick time, personal time, etc. To identify only hours worked required that the nurse consultant identify the ledger codes pertaining to unworked hours and manually subtract those hours from the grand total.

Facility Nurse Staffing Hours

This section of the data collection tool requires that the user record the total number of hours worked during the pay period for RNs, LPNs and CNAs. If information on the breakdown of hours by shift, day of the week and hours caring for Medicare residents was available, this was to be recorded also. This section proved to be problematic for several reasons. The previous section, which also required the recording of total hours, included categories for medication aides and nursing assistants in training, while this section did not. Furthermore, the directions did not specify how hours for these two employee groups were to be accounted for. Half of the facilities reporting information on the total number of hours by nursing discipline did not report the same (or even close) totals in this section as they did in the previous section. Discrepancies appeared to be related to 1) the breakdown of nursing assistants into those certified, those in training and those functioning as medication aides, and 2) the problem of calculating hours paid for staff in salaried and non-salaried positions.

Facilities that provide multiple levels of care, have employees function in multiple roles, share staff with sister facilities, and those facilities that utilize wage pass through systems all posed situations not anticipated in the instrument development process. It became clear as the data collection phase progressed that these situations would necessitate modifications to the form and revisions to the instructions.

Contract Nursing Services Invoices

Slightly less than half of the sampled facilities reported using contract nursing services. Of the 18 facilities that reportedly used contract staffing, 15 provided information on contract invoices. All 15 reported that contract invoices could provide information on the staff type (RN, LPN or CNA), date and shift worked. Day of the week worked was reported as available on invoices at 14 facilities, while unit worked was available at only 5 facilities. Hours caring for Medicare residents was reportedly not recorded on any contract invoices.

Contract Nursing Services Nurse Staffing Hours

This section required that facilities record, for each contract agency used in the designated pay period, the total number of hours for each nursing discipline. As information on the breakdown of hours was available, this was to be recorded as well. Facilities and consultants reported this as the most time-consuming task. Worksheets were included in the staffing data tool to assist in the process of identifying the hours within the pay period and then recording the discipline, day of the week, shift, and unit as available. Facilities noted that the

fields to record the information on the worksheet were too small and didn't allow enough space to record partial hours.

Exit Interviews and Consultant Nurse Debriefing

Facility staff were asked to evaluate the staffing data collection tool in terms of the availability of required documents, the length of time needed and the level of difficulty presented for its completion. Exit interviews were conducted in 25 facilities with the facility staff that had worked on completing the form (see Appendix F-3 for sample exit interview form). Each section of the tool is ranked using a scale of one to five with one representing the least level of effort or time and five indicating the highest level. Length of time is designated in 15-minute intervals, as follows:

- 1 = less than 15 minutes to complete;
- 2 = 16 - 30 minutes;
- 3 = 31 - 45 minutes;
- 4 = 46 - 60 minutes; and
- 5 = greater than 60 minutes.

The exit interview also includes sections to record items that the interviewee would recommend adding or deleting and general comments.

Rankings for the Staff Hourly Wage Rates, Facility Nurse Staffing Hours and Contract Nursing Services nurse staffing hours sections were reviewed for the 25 facilities that participated in exit interviews. Although there were some facilities that indicated that sections of the form were difficult and time-consuming to complete, the majority of facilities ranked the above sections as very easy or easy and taking less than 30 minutes to complete. The Facility Nurse Staffing Hours section was evenly split between facilities that ranked it as taking less than 30 minutes and those ranking it as taking 45 minutes or more. More than two-thirds of the facilities, however, ranked the level of difficulty associated with this section as easy or very easy. This illustrates and supports facility comments that the form "wasn't hard but it was time-consuming."

Other facility comments related to requests for improvement in form directions in order to clarify those situations involving multi-level facilities, borrowed staff, wage pass through systems, staff performing in multiple roles, salaried vs. non-salaried staff hours, 15-day pay periods, direct care hours vs. non-direct care hours and productive vs. non-productive hours.

Nurse consultants were contacted following the completion of the data collection effort for general comments on facility visits. In general, the nurses noted that facilities often did not appear to be familiar with the capabilities of their software systems, particularly in terms of knowing which types of staffing information were available. Facilities seemed to overestimate the capabilities of their systems as often as they underestimated them. The nurses also attributed some of the difficulties to the unique staffing situations that facility staff reported in their exit interviews.

Consultant nurses pointed out that a significant number (20 percent) of the facilities had not been able to begin completing the form prior to their visit. Approximately 40 percent were able to complete the form entirely without the consultant's assistance and the remaining 40 percent were able to start it, but left sections incomplete either because of confusion around the directions or simply running out of time. In those facilities where the nurse consultants needed to assist in completing the form, the nurses recorded the information, at least for one or more sections of the tool, directly from source documents and thus were not able to perform the audit portion of the task. Even when facilities had completed all sections, it was clear that although some staffing variables were present in the payroll records, a significant amount of information had been derived from a variety of other facility records. These other internal records were not designated source documents and their accuracy could not be verified.

6.0.0 Conclusions and Recommendations

The research team was able to meet the project goal of examining and discussing with facility staff payroll processing systems, payroll records and contract nursing services invoices. Through the examination of these records and interviews with facility staff, certain conclusions as to the feasibility of extracting staffing information from payroll records and contract invoices were drawn. The third goal, that of testing an audit protocol for the staffing data collection tool, was unfortunately not met in this effort. The remainder of this section highlights the conclusions and recommendations of the project team regarding future collection of detailed nursing facility staffing information. The limitations of this effort are also noted.

Based on on-site review, it appears that there is a great deal of variability in payroll records. Despite this variability, there was some commonality to reporting practices detected which can provide information on the level of detail and accuracy of staffing information available in nursing facilities records. In summary, this data collection effort found that:

- Total nurse staffing hours by licensure type per pay period is currently available at most facilities in payroll and contract agency invoice records. In addition, this information is verifiable with mixed levels of effort;
- Other staffing variables (shift, unit, day of the week, and direct care vs. administrative care) are available in facility internal records but not feasible to verify;
- Technology for creating and modifying payroll and contract agency invoices is available and could be used to make information on shift and weekday vs. weekend hours available;
- The data elements containing information on shift and day of the week reside in most current payroll and invoice processing systems but currently are not easily extracted.

Within a reasonably short timeframe (one to six weeks) modifications to the systems to facilitate these report changes could be accomplished;

- Information on hours by unit is available, but is dependent on staff to manually update; hence, the accuracy is questionable; and
- Hours caring for Medicare vs. non-Medicare residents does not appear to be tracked by payroll systems or facility internal records for the majority of facilities studied.

Most of the project team's recommendations center on modifying the staffing data collection tool to limit the data collected to those variables that currently appear to be readily available and feasible to verify. Other modifications involve eliminating duplicative or unnecessary data fields and improving tool instructions. A revised staffing data collection tool is included (Appendix F-4) and reflects the following modifications:

- The *Resident RUGs* section is eliminated, as this information was not available for every resident on the census in the great majority of the sample facilities;
- The *Facility Payroll System* and *Process for Recording Temporary Agency Staff Hours* sections have been removed, as these sections were utilized during the project's investigative process and were for research purposes only.
- Staffing information on unit, shift, day of the week, direct care vs. administrative hours and hours caring for Medicare vs. non-Medicare residents was not consistently available nor verifiable and has therefore been removed;
- The *Nursing Service Staffing* section is eliminated. The breakdown of hours into the above-mentioned variables was not available and hours worked is recorded in the *Average Wage* section. Removal of the Nursing Service Staffing section eliminates duplicative reporting and condenses the data collection form;
- The types of nurse staffing (i.e., RNs, LPNs, CNAs, Medication Aides/Techs and CNAs in Training) utilized is revised to be consistent across all sections of the form;
- An item to allow facilities to record any nursing staff borrowed from other facilities was added;
- Calculation fields have been eliminated as unnecessary. Any calculations can be done at the data reception point; and
- Each data field in the form has been labeled and the directions made specific to each item. Definitions have been improved to provide better guidance for the user.

These revisions to the staffing data collection tool reflect the information currently available in nursing facilities. Should more detailed staffing information be desired and/or mandated by CMS, on-site facility reviews and interviews with payroll processing companies and contract agencies demonstrate that it could be made available through modification to existing systems. Future work should focus on selecting an optimum level of staffing detail, and identifying and providing guidance for any necessary system changes. The form should also be improved so that it accommodates those unique staffing situations identified during the field testing (e.g., wage pass-through systems, multi-level facilities, employees performing in multiple roles, and 15-day pay periods), while preserving an acceptable level of user-friendliness and accuracy.

The research team acknowledges that, for the facilities that so graciously agreed to participate in the testing of the nurse staffing data collection tool, the task of completing the tool as it was presented to them was formidable. The tool was lengthy and requested information on a maximum idealistic number of variables. Despite the pre-testing that was done, researchers were not prepared for the degree of variability seen in both payroll and invoice processing systems and facility staffing situations. Even for the variables noted to be most readily available — that of total staffing hours by licensure type — the process of removing unproductive hours to determine the hours worked was a tedious process. The verification process was far from what had been envisioned (i.e., simply comparing a number in the payroll record or invoice to a number reported by the facility on the tool). The research team's original thoughts that verification could be incorporated into the survey process appear unrealistic based on the current state of facility records. Electronic submission of a limited set of staffing variables would perhaps be a more feasible way to track and monitor facility staffing information.

1.0 Current Medicare Payment for Nursing Care¹⁷⁷

10.1 Background

In understanding the potential cost implications of a minimum nurse staffing ratio for nursing homes, it is important to understand the amount of nursing care that is currently paid for by the Medicare and Medicaid programs. One method of estimating the costs of a staffing requirement is to measure the costs of paying facilities to staff at the higher required level relative to what is currently being paid.

Depending on how a minimum requirement is implemented and funded, however, the costs to the government might not be the same as the costs to facilities. We found that the Medicare PPS payment related to nursing care was considerably higher than the costs to facilities of staffing at the minimum levels identified in the Phase I study. As a result, the costs to Medicare associated with the requirement might be less than the cost to facilities, since payment levels appear adequate to allow facilities to staff at or above the minimum level. Facilities are not required to staff at the levels embedded in the PPS rates, but it is important that any increased funding related to a staffing requirement be tied to facility staffing levels. This analysis did not evaluate the adequacy of Medicaid payments for staffing at the minimum levels from Phase I.

The primary purpose of this analysis was to estimate current Medicare payments related to nursing care under the Prospective Payment System (PPS) for Medicare skilled nursing facilities that began in 1998. The PPS rate is composed of several components, allowing one to determine how much of the payment for each case mix group is related to nurse compensation. The nursing component of the rate is intended to cover the costs of both nursing services and non-therapy ancillary costs (i.e., prescription drugs, respiratory therapy, equipment and supplies). About 57 percent of the nursing component is related to nursing and social services salary costs. The remaining 43 percent of the nursing component is related to non-therapy ancillary costs (i.e., prescription drugs, respiratory therapy, equipment and supplies).

The prospective payment is case mix adjusted based on the Resource Utilization Group version III (RUG-III) resident classification system, which was designed to measure the intensity of care and services required for different types of SNF residents. We measured the total number of Medicare covered days by RUG-III group and combined this with information on the part of the PPS rate related to nursing care to measure total and per resident day expenditures for nursing care under PPS. In addition, we compared nursing costs under the PPS rate to determine an estimate of expenditures under a simplified rate setting methodology for which the nursing rate was based on minutes of nursing care recorded in the CMS Staff Time Measurement Study (STM) data and the appropriate compensation level. While the STM data was used in the design of the RUG-III system, actual PPS rates were designed using a national data source (Medicare Provider Analysis and Review (MEDPAR)). MEDPAR does not contain the data elements necessary to classify residents exactly as they are in RUG-III and also does not measure directly the amount of nursing time associated with

¹⁷⁷ The author of this chapter is Alan White of Abt Associates. Other individuals who made valuable comments and suggestions on the analyses include Marvin Feuerberg, CMS Project Officer, Barbara Manard of the Manard Group, and Donna Hurd of Abt Associates. Barbara Bell prepared the analytic files used for this analysis.

different types of residents. It was used because it was a national file that could be used to develop standardized payment rates.

1.0 Data Sources

Data from several sources were used in the study:

Medicare claims data: We analyzed all Medicare SNF claims for 1999. The number of covered days by RUG-III group can be identified based on the Revenue Common Procedure Coding System Code (HCPCS), which identifies resident RUG-III group, and the Revenue Center Unit Count, which reflects the number of covered days under each RUG-III group. A facility-level file was created that reported the number of Medicare covered days for each RUG-III group. A facility-level file was created that reported the number of Medicare covered days for each RUG-III group. It was necessary to create a facility level file because the RUG-III payment rates depend in part on a wage adjustment factor that varies based on a facility's location.

CMS Staff Time Measurement data (1995 and 1997). These data measure the amount of time required to care for nursing home residents. Over a period of 48 hours, all unit nursing staff recorded direct resident care time. Staff time measurement data are separated into resident-specific and non-resident specific time. We used information on the number of resident and non-resident specific minutes by RUG-III group for RNs, LPNs, and nurse aides. Data on the number of resident and non-resident specific minutes by RUG-III group were acquired from CMS (<http://www.hcfa.gov/stats/stmds.htm>).

Information on wage rates for nurses. Wage rates for nursing home staff were estimated using data either from several sources, including the Bureau of Labor Statistics, the American Health Care Association's Nursing Facility Handbook, and 1999 Medicaid Cost Report data from California, Massachusetts, Ohio, Texas, and Washington. Fringe benefit costs were estimated based on figures from the Bureau of Labor Statistics.

2.0 Methods

Calculation of CMS expenditures for Medicare covered nursing home stays under the RUG-III classification system involved several steps. The case mix adjusted payment rate is composed of several components, and it is possible to determine how much of the payment for each RUG-III group is related to nurse compensation. This was combined with information on facility location and the number of resident days by RUG-III group, allowing calculation of CMS expenditures for nursing care, using the steps described below.

STEP 1: Determine portion of PPS payment rate related to nursing care. The nursing component of the PPS rate is intended to cover the costs of both nursing and social services and non-therapy ancillary costs (i.e., prescription drugs, respiratory therapy, equipment and supplies). For facilities in urban areas, 56.6 percent of the Federal rate in urban areas is related to nursing and social services salary costs. For facilities in rural counties, 57.3 percent of the nursing component is related to nursing and social services salary costs. (See the May 12, 1998 Federal Register for case mix

adjusted payment rates by RUG-III group.) For purposes of this analysis, we did not consider the transitional facility-specific portion of the PPS rate, focusing only on the Federal rate.

The RUG-III payment rate is divided into four components (Table 10.1):

- *Nursing component.* The nursing component of the rate is intended to cover the costs of both nursing and social services and non-therapy ancillary costs (i.e., prescription drugs, respiratory therapy, equipment and supplies). Each RUG-III group is assigned a nursing index score that is based on the amount of staff time (weighted by salary levels). The nursing weight includes both resident specific time spent daily on behalf of each patient by RNs, LPNs, and nurse aides and other non-resident specific time spent on other necessary functions such as staff education, administrative duties, and other tasks.
- *Therapy case mix component.* The therapy case mix component is related to the amount of rehabilitation therapy time associated with caring for residents in each case mix group. Occupational, physical, and speech therapy costs are grouped in the component related to the therapy index.
- *Therapy non-case mix component.* The therapy non-case mix component is to cover the low level of therapy services associated with residents who did not qualify for one of the RUG-III rehabilitation groups. These therapy services include evaluations for rehabilitation in one or more of the therapy disciplines.
- *Non-case mix component.* All other costs are grouped into the non-case mix related component. Included in this component are costs related to room and board, including capital costs, maintenance, food, and laundry.

The nursing component of the rate is intended to cover the costs of both nursing and social services and non-therapy ancillary costs (i.e., prescription drugs, respiratory therapy, equipment and supplies). For facilities in urban areas, 56.6 percent of the Federal rate associated with urban areas is related to nursing and social services salary costs. The remaining 43.4 percent is related to non-therapy ancillary costs (including Part B non-therapy ancillary services). For facilities in rural counties, 57.3 percent of the nursing component is related to nursing and social services salary costs, and 42.7 percent is related to non-therapy ancillary costs (Federal Register, November 27, 1998 pp. 65561-65562).

The Federal Register does not specify what proportion of the nursing index is related to salary costs for social services workers as opposed to nurses. According to the 1995 and 1997 Staff Time Measurement (STM) data, which were used in the design of the RUG-III system, there were an average of only two social worker minutes per resident day. This was small compared to the average 138 nurse aides, 69 RN, and 42 LPN minutes per resident day (including both resident and non-resident specific time) observed in the STM data.

There is concern that the STM may not include all types of social services workers, since it includes no categories other than social workers and does not include non-resident specific

time for social workers. As a result, we used staffing figures from CMS's Online Survey Certification and Reporting System (OSCAR). OSCAR includes a measure of social workers and "other social services workers" (both measures include full time, part time, and contract staff). In 1998, according to OSCAR, there was an average of about 0.12 social services hours (0.08 social worker hours and 0.04 other social service hours). Staff time related costs for each RUG-III costs were calculated as 56.6 percent of the total nursing component for urban facilities and 57.3 percent for rural facilities. Nursing costs were estimated as 95.764 percent of the component related to staff time costs. The remaining 4.236 percent was related to costs for social services staff.¹⁷⁸

The figures in the nursing cost column of Table 10.2 represent CMS's per diem expenditures for nursing care (i.e., wage and benefit costs for RNs, LPNs, and nurse aides) for each RUG-III group. Facilities are not required to staff in accordance with these rates, as the PPS payment is intended to cover virtually all costs associated with a stay. The figures in Table 10.2 do, however, represent CMS's payment rate for nursing care under the RUG-III system. The primary source of payment rate information for this analysis was the May 12, 1998 Federal Register. Under the 1999 Balanced Budget Refinement Act (BBRA), however, payment for 15 RUG-III groups (all of the extensive services, special care, and clinically complex groups and 3 rehabilitation groups) were increased by 20 percent effective April 1, 2000. The increase was intended to be temporary, but it was extended through October 2001 as CMS finalizes a refined RUG system. For some analyses, we used the higher payment rates mandated by the BBRA.

Under the three-year phase-in transition period for the PPS, payment for most facilities is based on a weighted average of the facility specific per diem and the Federal percentage of the adjusted Federal *per diem* rate.¹⁷⁹ The facility specific portion is based on allowable costs from the cost reporting period beginning in fiscal year 1995 (adjusted for inflation), using the following payment blend:

In the first cost reporting period after July 1, 1998, the facility-specific percentage is 75 percent and the Federal percentage is 25 percent.

- In the second cost reporting period after July 1, 1998, the facility-specific percentage is 50 percent and the Federal percentage is 50 percent.
- In the third cost reporting period after July 1, 1998, the facility-specific percentage is 25 percent and the Federal percentage is 75 percent.

¹⁷⁸ This percentage was calculated using staffing figures from OSCAR and wage figures from the Bureau of Labor Statistics. Based on OSCAR, average hours per resident day were 0.52 for RNs, 0.72 for LPNs, 2.00 for nurse aides, and 0.11 for Directors of Nursing. The associated cost per hour for these staff, including estimated fringe benefit costs, were \$21.63 for RNs, \$14.54 for LPNs, \$9.10 for nurse aides, and \$16.26 for social workers. Given these figures, \$1.87 of estimated per diem staff time costs were related to social services, and \$42.32 were related to nurses.

¹⁷⁹ This provision allows for SNFs to elect to bypass the transition to the PPS and instead to be paid at the full federal rate beginning with their next cost reporting period.

For this analysis, we focused only on payment rates under the RUG-III system and ignored the facility-specific portion of the rate. There were several reasons for this decision. The primary purpose of this analysis was to understand the potential cost implications to Medicare of a minimum staffing requirement for nursing homes. Such a requirement will likely not be implemented until some time after 2001, at which time the transition to the PPS will be complete and the facility specific portion of payment rates will be irrelevant. In addition, the Balanced Budget Refinement Act gave facilities the option to have their payment based entirely on the Federal rate, bypassing the transition to PPS.

Table 10.1

Casemix Adjusted Payment Rates Under the RUG-III Classification System by Component: Urban and Rural Nursing Facilities

RUG-III code	Index values		URBAN					RURAL				
	Nursing Index	Therapy Index	Nursing Component	Therapy Component	Therapy-Non-case mix	Non-case mix	Tot Fed Rate	Nursing Component	Therapy Component	Therapy-Non-case mix	Non-case mix	Tot Fed Rate
RUC	1.30	2.25	\$142.32	\$186.01		\$55.88	\$384.21	\$136.34	214.90		\$56.95	\$408.19
RUB	0.95	2.25	\$104.00	\$186.01		\$55.88	\$345.90	\$99.64	214.90		\$56.95	\$371.49
RUA	0.78	2.25	\$85.39	\$186.01		\$55.88	\$327.28	\$81.81	214.90		\$56.95	\$353.66
RVC	1.13	1.41	\$123.71	\$116.56		\$55.88	\$296.15	\$118.51	134.67		\$56.95	\$310.13
RVB	1.04	1.41	\$113.86	\$116.56		\$55.88	\$286.30	\$109.07	134.67		\$56.95	\$300.70
RVA	0.81	1.41	\$88.68	\$116.56		\$55.88	\$261.12	\$84.95	134.67		\$56.95	\$276.57
RHC	1.26	0.94	\$137.94	\$77.71		\$55.88	\$271.53	\$132.15	89.78		\$56.95	\$278.88
RHB	1.06	0.94	\$116.05	\$77.71		\$55.88	\$249.64	\$111.17	89.78		\$56.95	\$257.90
RHA	0.87	0.94	\$95.25	\$77.71		\$55.88	\$228.84	\$91.24	89.78		\$56.95	\$237.98
RMC	1.35	0.77	\$147.80	\$63.66		\$55.88	\$267.34	\$141.59	73.54		\$56.95	\$272.08
RMB	1.09	0.77	\$119.33	\$63.66		\$55.88	\$238.87	\$114.32	73.54		\$56.95	\$244.81
RMA	0.96	0.77	\$105.10	\$63.66		\$55.88	\$224.64	\$100.68	73.54		\$56.95	\$231.17
RLB	1.11	0.43	\$121.52	\$35.55		\$55.88	\$212.95	\$116.42	41.07		\$56.95	\$214.44
RLA	0.80	0.43	\$87.58	\$35.55		\$55.88	\$179.01	\$83.90	41.07		\$56.95	\$181.92
SE3	1.70		\$186.11		\$10.91	\$55.88	\$252.91	\$178.29		\$11.66	\$56.95	\$246.91
SE2	1.39		\$152.17		\$10.91	\$55.88	\$218.97	\$145.78		\$11.66	\$56.95	\$214.39
SE1	1.17		\$128.09		\$10.91	\$55.88	\$194.88	\$122.71		\$11.66	\$56.95	\$191.32
SSC	1.13		\$123.71		\$10.91	\$55.88	\$190.50	\$118.51		\$11.66	\$56.95	\$187.12
SSB	1.05		\$114.95		\$10.91	\$55.88	\$181.74	\$110.12		\$11.66	\$56.95	\$178.73
SSA	1.01		\$110.57		\$10.91	\$55.88	\$177.36	\$105.93		\$11.66	\$56.95	\$174.54
CC2	1.12		\$122.62		\$10.91	\$55.88	\$189.41	\$117.46		\$11.66	\$56.95	\$186.08
CC1	0.99		\$108.38		\$10.91	\$55.88	\$175.18	\$103.83		\$11.66	\$56.95	\$172.44
CB2	0.91		\$99.62		\$10.91	\$55.88	\$166.42	\$95.44		\$11.66	\$56.95	\$164.05
CB1	0.84		\$91.96		\$10.91	\$55.88	\$158.75	\$88.10		\$11.66	\$56.95	\$156.71
CA2	0.83		\$90.87		\$10.91	\$55.88	\$157.66	\$87.05		\$11.66	\$56.95	\$155.66
CA1	0.75		\$82.11		\$10.91	\$55.88	\$148.90	\$78.66		\$11.66	\$56.95	\$147.27
IB2	0.69		\$75.54		\$10.91	\$55.88	\$142.33	\$72.37		\$11.66	\$56.95	\$140.98
IB1	0.67		\$73.35		\$10.91	\$55.88	\$140.14	\$70.27		\$11.66	\$56.95	\$138.88
IA2	0.57		\$62.40		\$10.91	\$55.88	\$129.19	\$59.78		\$11.66	\$56.95	\$128.39
IA1	0.53		\$58.02		\$10.91	\$55.88	\$124.81	\$55.59		\$11.66	\$56.95	\$124.20
BB2	0.68		\$74.45		\$10.91	\$55.88	\$141.24	\$71.32		\$11.66	\$56.95	\$139.93
BB1	0.65		\$71.16		\$10.91	\$55.88	\$137.95	\$68.17		\$11.66	\$56.95	\$136.78
BA2	0.56		\$61.31		\$10.91	\$55.88	\$128.10	\$58.73		\$11.66	\$56.95	\$127.34
BA1	0.48		\$52.55		\$10.91	\$55.88	\$119.34	\$50.34		\$11.66	\$56.95	\$118.95

Table 10.1

Casemix Adjusted Payment Rates Under the RUG-III Classification System by Component: Urban and Rural Nursing Facilities

RUG-III code	Index values		URBAN				RURAL					
	Nursing Index	Therapy Index	Nursing Component	Therapy Component	Therapy-Non-case mix	Non-case mix	Tot Fed Rate	Nursing Component	Therapy Component	Therapy-Non-case mix	Non-case mix	Tot Fed Rate
PE2	0.79		\$86.49		\$10.91	\$55.88	\$153.28	\$82.85		\$11.66	\$56.95	\$151.47
PE1	0.77		\$84.30		\$10.91	\$55.88	\$151.09	\$80.76		\$11.66	\$56.95	\$149.37
PD2	0.72		\$78.82		\$10.91	\$55.88	\$145.62	\$75.51		\$11.66	\$56.95	\$144.12
PD1	0.70		\$76.63		\$10.91	\$55.88	\$143.43	\$73.42		\$11.66	\$56.95	\$142.03
PC2	0.65		\$71.16		\$10.91	\$55.88	\$137.95	\$68.17		\$11.66	\$56.95	\$136.78
PC1	0.64		\$70.07		\$10.91	\$55.88	\$136.86	\$67.12		\$11.66	\$56.95	\$135.73
PB2	0.51		\$55.83		\$10.91	\$55.88	\$122.62	\$53.49		\$11.66	\$56.95	\$122.10
PB1	0.50		\$54.74		\$10.91	\$55.88	\$121.53	\$52.44		\$11.66	\$56.95	\$121.05
PA2	0.49		\$53.65		\$10.91	\$55.88	\$120.44	\$51.39		\$11.66	\$56.95	\$120.00
PA1	0.46		\$50.36		\$10.91	\$55.88	\$117.15	\$48.24		\$11.66	\$56.95	\$116.85

Source: Federal Register, May 12, 1998

Table 10.2
CMS Payments for Nursing Care Under the RUG-III Classification System

RUG-III code	Index values		Urban		Rural	
	Nursing Index	Therapy Index	Nursing Cost	Tot Fed Rate	Nursing Cost	Tot Fed Rate
RUC	1.30	2.25	\$59.11	\$384.21	\$55.71	\$408.19
RUB	0.95	2.25	\$43.20	\$345.90	\$40.72	\$371.49
RUA	0.78	2.25	\$35.47	\$327.28	\$33.43	\$353.66
RVC	1.13	1.41	\$51.38	\$296.15	\$48.43	\$310.13
RVB	1.04	1.41	\$47.29	\$286.30	\$44.57	\$300.70
RVA	0.81	1.41	\$36.83	\$261.12	\$34.71	\$276.57
RHC	1.26	0.94	\$57.29	\$271.53	\$54.00	\$278.88
RHB	1.06	0.94	\$48.20	\$249.64	\$45.43	\$257.90
RHA	0.87	0.94	\$39.56	\$228.84	\$37.28	\$237.98
RMC	1.35	0.77	\$61.39	\$267.34	\$57.86	\$272.08
RMB	1.09	0.77	\$49.56	\$238.87	\$46.72	\$244.81
RMA	0.96	0.77	\$43.65	\$224.64	\$41.14	\$231.17
RLB	1.11	0.43	\$50.47	\$212.95	\$47.57	\$214.44
RLA	0.80	0.43	\$36.38	\$179.01	\$34.28	\$181.92
SE3	1.70		\$77.30	\$252.91	\$72.86	\$246.91
SE2	1.39		\$63.20	\$218.97	\$59.57	\$214.39
SE1	1.17		\$53.20	\$194.88	\$50.14	\$191.32
SSC	1.13		\$51.38	\$190.50	\$48.43	\$187.12
SSB	1.05		\$47.74	\$181.74	\$45.00	\$178.73
SSA	1.01		\$45.92	\$177.36	\$43.29	\$174.54
CC2	1.12		\$50.93	\$189.41	\$48.00	\$186.08
CC1	0.99		\$45.01	\$175.18	\$42.43	\$172.44
CB2	0.91		\$41.38	\$166.42	\$39.00	\$164.05
CB1	0.84		\$38.19	\$158.75	\$36.00	\$156.71
CA2	0.83		\$37.74	\$157.66	\$35.57	\$155.66
CA1	0.75		\$34.10	\$148.90	\$32.14	\$147.27
IB2	0.69		\$31.37	\$142.33	\$29.57	\$140.98
IB1	0.67		\$30.47	\$140.14	\$28.72	\$138.88
IA2	0.57		\$25.92	\$129.19	\$24.43	\$128.39
IA1	0.53		\$24.10	\$124.81	\$22.72	\$124.20
BB2	0.68		\$30.92	\$141.24	\$29.14	\$139.93
BB1	0.65		\$29.56	\$137.95	\$27.86	\$136.78
BA2	0.56		\$25.46	\$128.10	\$24.00	\$127.34
BA1	0.48		\$21.83	\$119.34	\$20.57	\$118.95
PE2	0.79		\$35.92	\$153.28	\$33.86	\$151.47
PE1	0.77		\$35.01	\$151.09	\$33.00	\$149.37
PD2	0.72		\$32.74	\$145.62	\$30.86	\$144.12
PD1	0.70		\$31.83	\$143.43	\$30.00	\$142.03
PC2	0.65		\$29.56	\$137.95	\$27.86	\$136.78
PC1	0.64		\$29.10	\$136.86	\$27.43	\$135.73
PB2	0.51		\$23.19	\$122.62	\$21.86	\$122.10
PB1	0.50		\$22.74	\$121.53	\$21.43	\$121.05
PA2	0.49		\$22.28	\$120.44	\$21.00	\$120.00
PA1	0.46		\$20.92	\$117.15	\$19.71	\$116.85

Sources: Calculated based on the May 12, 1998 and November 27, 1998 Federal Register, and staffing figures from 1998 OSCAR data.

STEP 2: Determine the number of Medicare covered days by RUG-III group. Medicare Part A SNF claims report the number of Medicare covered days by RUG-III group, even accounting for residents who were in two or more groups during the period covered by the claim. As a result, the claims data were used to measure the number of Medicare covered days by RUG-III group using Medicare Part A SNF claims with a 1999 date of service. It was not necessary to use the Minimum Data Set for this purpose.

We measured the number of Medicare covered days by RUG-III group using the universe of Medicare Part A SNF claims with a 1999 date of service (Table 10.3). The number of covered days in each RUG-III group can be identified based on the HCPCS code and the revenue unit fields in the claims. The HCPCS code indicates the resident's RUG-III group, and the revenue unit field indicates the number of days for which payment was made. Claims with a zero reimbursement amount were excluded, as it was difficult to justify including these claims in an analysis with the objective of calculating how much was paid for nursing care.¹⁸⁰ There was also one provider with four claims in an unknown RUG-III group (RM5) that were excluded from the analysis.

Payment rates and percentage of costs related to nursing care vary based on whether a facility is urban or rural. The claims data included 41,190,009 total resident days, but 54,898 of these days could not be classified as either urban or rural because the provider number on the SNF claim could not be linked to the Provider of Service (POS) file. Urban/rural status for these resident days was imputed based on the proportion of urban and rural days within the RUG-III group. For example, the RHC group had a total of 5,267,560 resident days, but we could not identify urban/rural status for 5,441 of these days. The urban and rural counts were inflated by an adjustment factor of 1.001034 to assign these days as either urban or rural, so that the sum of urban and rural days would equal total days. These adjusted counts were used for all of the analyses included in this report.

Of the 41.1 million Medicare covered resident days in 1999, nearly 75 percent of resident days (30.8 million) were for residents in one of the RUG-III rehabilitation groups, and 98 percent of resident days were for residents in the "upper RUG-III hierarchy" (i.e., the groups above clinically complex) (Table 10.3). The ultra-high rehabilitation group had the largest number of resident days (12.4 million).

¹⁸⁰ Most of the claims with a zero reimbursement amount were for the 'AAA' RUG-III group, a default code that is assigned to claims without an MDS assessment.

Table 10.3
Total Medicare Covered Days by RUG-III group, 1999

RUG-III code	Total Medicare covered resident days		
	Urban	Rural	Total
Total	32,046,912	9,143,097	41,190,009
RUC	385,793	145,146	530,939
RUB	1,803,175	376,710	2,179,885
RUA	512,794	123,288	636,082
RVC	722,808	272,557	995,365
RVB	3,984,510	881,565	4,866,075
RVA	1,474,269	379,333	1,853,602
RHC	4,069,202	1,198,358	5,267,560
RHB	4,174,689	1,110,738	5,285,427
RHA	1,451,180	416,262	1,867,442
RMC	1,580,754	571,026	2,151,780
RMB	2,781,818	863,089	3,644,907
RMA	919,738	304,919	1,224,657
RLB	84,727	39,953	124,680
RLA	129,543	45,744	175,287
SE3	1,103,300	336,633	1,439,933
SE2	1,373,934	472,481	1,846,415
SE1	70,553	29,864	100,417
SSC	517,548	195,522	713,070
SSB	864,784	178,128	1,042,912
SSA	1,158,067	325,161	1,483,228
CC2	55,781	29,732	85,513
CC1	210,032	89,118	299,150
CB2	199,203	59,869	259,072
CB1	776,334	185,757	962,091
CA2	221,579	70,174	291,753
CA1	818,816	245,502	1,064,318
IB2	21,562	5,981	27,543
IB1	72,209	20,914	93,123
IA2	5,647	2,145	7,792
IA1	44,089	13,534	57,623
BB2	1,360	358	1,718
BB1	5,373	1,754	7,127
BA2	716	263	979
BA1	8,838	2,535	11,373
PE2	14,916	5,468	20,384
PE1	56,261	23,722	79,983
PD2	47,560	12,539	60,099
PD1	152,096	45,425	197,521
PC2	5,961	2,184	8,145
PC1	24,253	7,969	32,222
PB2	7,682	2,893	10,575
PB1	39,074	14,431	53,505
PA2	7,682	2,241	9,923
PA1	86,702	32,112	118,814

Sources: Medicare SNF claims data, 1999

STEP 3: Apply appropriate wage adjustment factor. The labor-related portion of the payment rate is adjusted to account for differences in area wage levels using a wage index that was based on hospital wage data from cost reporting periods that began in fiscal year 1994 (Federal Register, May 12, 1998, page 26274). We created a facility-level file that contained the number of covered days in each RUG-III group. Facility location was

identified based on the Metropolitan Statistical Area (MSA) code (for urban facilities) or state (for facilities without an MSA code) contained in the POS file.

A facility-level file was needed so that the appropriate wage adjustment factor could be applied to adjust our measure of nursing costs for the facility. Total expenditures for nursing care for each facility were determined based on the number of Medicare covered days by RUG-III group at the facility times the appropriate nursing cost measure (from Table 10.2) times the wage adjustment factor.

There were a small number of claims for which the provider number on the claim could not be matched to the POS file, preventing us from assigning a wage adjustment factor to the provider's payment. The adjustment factor for these providers was assumed to be equal to one.

STEP 4: Calculate total and per diem expenditures for nursing care based on RUG-III rates. Total Medicare expenditures for nursing care under the RUG-III system are equal to the sum of expenditures for each facility, based on Steps 1-3. In addition to calculating the total amount that CMS is paying for nursing care, we calculated the average amount per patient day, based on the distribution of residents by RUG-III group and facility. This permitted comparison of facility nursing costs under the minimum nurse staffing ratios that were suggested in Phase I of the report.¹⁸¹

STEP 5: Determine Medicare expenditures under a simplified rate setting methodology. We estimated how much Medicare would pay for nursing care under a simplified rate setting methodology under which the rate related to nursing care was determined based on nursing minutes by RUG-III group and the appropriate wage rate. Nursing minutes for each RUG-III group were determined from the 1995 and 1997 STM studies, using data available from CMS.

Step 5A: Determine nursing minutes for each RUG-III group. Resident and non-resident specific minutes per resident day for each case mix group were measured using the 1995 and 1997 STM studies, based on figures taken from the CMS web site (<http://www.hcfa.gov/stats/stmds.htm>) (Table 10.4).

Table 10.4
Average Nursing Minutes by RUG-III Group and Type of Nurse — Figures from CMS Staff Time Measurement Study

RUG-III code	Resident and non-resident specific minutes per patient day		
	RN	LPN	Nurse Aide
RUC	112.7	53.8	180.1
RUB	87.7	37.4	123.8
RUA	64.5	40.4	98.4
RVC	90.9	50.7	164.9
RVB	94.7	41.6	136.3
RVA	75.6	30.0	106.8
RHC	110.6	53.5	167.0
RHB	102.3	39.9	129.9

¹⁸¹ The Phase I report suggested the following minimum staffing levels: Nurse aides: 2 hours per resident day; RNs and LPNs: 0.75 hours per resident day, of which 0.2 hours must be RNs. A higher 'preferred minimum' of 0.55 nurse aide hours was also associated with improved quality of care.

Table 10.4
Average Nursing Minutes by RUG-III Group and Type
of Nurse — Figures from CMS Staff Time
Measurement Study

RUG-III code	Resident and non-resident specific minutes per patient day		
	RN	LPN	Nurse Aide
RHA	89.7	27.6	102.6
RMC	111.2	66.8	180.0
RMB	101.2	42.4	141.8
RMA	95.0	33.9	117.3
RLB	79.0	48.9	191.3
RLA	64.5	32.0	122.8
SE3	140.7	101.5	191.3
SE2	110.4	85.4	163.2
SE1	77.9	60.1	195.3
SSC	72.9	64.3	184.1
SSB	70.9	55.0	172.4
SSA	91.7	41.7	130.4
CC2	85.2	42.5	191.1
CC1	55.7	57.7	176.9
CB2	61.5	41.8	159.0
CB1	59.0	36.2	147.3
CA2	58.8	43.3	130.3
CA1	59.7	37.6	103.3
IB2	40.0	32.0	137.2
IB1	39.0	32.0	130.0
IA2	38.0	27.0	100.0
IA1	33.0	26.0	96.0
BB2	40.0	30.0	136.0
BB1	38.0	28.0	130.0
BA2	38.0	30.0	90.0
BA1	34.0	25.0	73.5
PE2	37.0	32.0	184.8
PE1	37.0	29.4	181.6
PD2	36.0	25.0	170.0
PD1	36.0	27.6	160.0
PC2	25.6	32.8	154.4
PC1	45.1	20.6	124.2
PB2	28.0	36.8	80.6
PB1	27.5	27.7	93.9
PA2	31.9	30.6	72.9
PA1	28.2	29.8	72.8

Source: CMS, <http://www.CMS.gov/stats/stmds.htm> (Based on 1995 and 1997 Staff Time Measurement studies).

Step 5B: Use wage rate data to convert nursing minutes into expenditures. The two best sources of data on average wages for nurses were the Bureau of Labor Statistics (BLS) and wage rate data from Medicaid Cost Report data. According to the BLS, average wage rates in 1998 for those employed in nursing and personal care facilities were \$19.94 for RNs, \$14.40 for LPNs, and \$8.57 for nurse aides (assuming 35 hours worked per week). Based on the Medicaid Cost Report data, after adjusting for the above-average wages in the five states for which we had nurse wage data, average wages in 1999 were \$20.01 for RNs, \$15.63 for LPNs, and \$8.66 for nurse aides.

In addition to wage costs, it is important to consider the costs associated with fringe benefits. We considered two measurements of fringe benefit costs. According to the BLS, 24.3 percent of total compensation for nursing home employees consists of benefits (including paid leave, supplemental

pay, insurance, retirement and savings, and legally required benefits). Based on the Medicare Cost Report data used by CMS in setting PPS, fringe benefits represented about 15 percent of the total compensation for nursing home employees.

3.0 Results

There were more than 41 million Medicare covered resident days in 1999, nearly 75 percent of which (30.8 million) were for residents in a RUG-III rehabilitation group. The high rehabilitation group had the largest number of resident days (12.4 million). Under the PPS Federal rate, Medicare payments to nursing facilities were more than \$10 billion (Table 10.5). The total nursing component (which includes both nursing care and ancillary costs) was nearly \$4.8 billion (\$116 per resident day). Total payment related to therapy services was just over \$3 billion (\$74 per resident day) and the total non-case mix component was nearly \$2.3 billion (\$55 per resident day).

We used the methods described above to measure the portion of the Federal rate related to the costs of nursing (i.e., RN, LPN, and nurse aide) care. In 1999, this was \$2.56 billion or \$62 per resident day (Table 10.6). Under the Federal rate, \$115 million was related to social services (\$2.80 per resident day) and \$2.09 billion to ancillary costs (\$51 per resident day).

Table 10.5
Reimbursement Under RUG-III Federal Payment Rates

	Reimbursement under RUG-III	
	Total	Average per resident day
Total Federal Rate	\$10,093,781,828	\$245.05
Nursing component	\$4,771,950,333	\$115.85
Therapy component	\$3,044,092,390	\$73.90
Non-case mix component	\$2,277,739,105	\$55.30

Based on 1999 resident days by RUG-III group and PPS payment rates published in the May 12, 1998 Federal Register. Figures adjusted by the wage adjustment factor for each facility.

Source: Abt Associates, 2001.

Table 10.6
Nursing Reimbursement Under RUG-III Federal Payment Rates

	Reimbursement under RUG-III	
	Total	Average per resident day
Total Nursing component	\$4,771,950,333	\$115.85
Related to nursing (RNs, LPNs, aides)	\$2,562,530,575	\$62.21
Related to social services	\$115,139,827	\$2.80
Related to ancillary costs	\$2,094,279,931	\$50.84

Based on 1999 resident days by RUG-III group and PPS payment rates published in the May 12, 1998 Federal Register. Figures adjusted by the wage adjustment factor for each facility.

Source: Abt Associates, 2001.

As part of understanding the potential cost implications of a minimum staffing requirement, we compared the costs of staffing at these minimum levels to payment related to nursing care under the PPS Federal rate. Based on wage and fringe benefit costs for nurses, the PPS Federal rate related to nursing care is close to our estimate of what it would cost facilities to staff at the minimum levels suggested by the short stay and long stay analyses (see chapter 2). In 1998 dollars, the short-stay minimum costs \$54 per resident day, below the \$62 average per resident day related to nursing care (Table 10.7). The higher staffing requirement suggested by the long-stay analyses would cost about \$63 per resident day, slightly above current reimbursement levels, a potential implication of this finding is that the marginal costs to *Medicare* associated with a minimum staffing requirement are much lower than the costs to facilities of staffing at the higher level.

It was beyond the scope of this analysis to evaluate the adequacy of the other components of the PPS rate, but if these are set too low, facilities may be forced to use the nursing portion to cover non-nursing related costs. If this is the case, then additional Medicare funds may be required if a minimum staffing ratio is implemented. For this report, we were also not able to evaluate the adequacy of Medicaid rates for the minimum staffing levels.

43. Table 10.7

Costs of Staffing at Minimum Staffing Levels Identified in Short-Stay and Long-Stay Analyses

44.	45. Average per resident day
Current reimbursement under PPS	\$62.21
Costs under minimum ratio identified in short-stay analyses	\$54.16
Costs under preferred minimum identified in long-stay analyses	\$63.19

Based on 1999 resident days by RUG-III group and PPS payment rates published in the May 12, 1998 Federal Register. Figures adjusted by the wage adjustment factor for each facility. Costs of staffing at minimum staffing ratios are based on average wage rates of \$20.01 for RNs, \$15.63 for LPNs, and \$8.66 for nurse aides, and that fringe benefits costs were 24.3 percent of total compensation.

Source: Abt Associates, 2001.

Our analysis suggested that the nursing component of the RUG-III payment rate was somewhat less than the level of nursing expenditures suggested by the simplified rate setting methodology. Based on this simplified methodology, the costs of providing nursing care to residents with Medicare covered stays was \$3.52 billion in 1999, or about \$85 per resident day, higher than the \$62 average under the PPS Federal rate (Table 10.8).

Table 10.8

Nursing Costs Under Simplified Rate Setting Methodology

	Reimbursement under RUG-III	
	Total	Average per resident day
Total	\$3,517,612,872	\$85.40
Wages and salaries	\$2,662,832,944	\$64.65
Fringe benefit and payroll taxes	\$854,779,928	\$20.75

Based on 1999 resident days by RUG-III group and PPS payment rates published in the May 12, 1998 Federal Register. Figures adjusted by the wage adjustment factor for each facility.

Source: Abt Associates, 2001.

4.0 Conclusions

The costs to the government of a minimum staffing requirement depend on how the requirement is implemented and on how additional funds are linked to higher staffing levels. One way to measure the potential costs is to measure the additional payment to facilities that would be required in order for them to staff at the minimum level. This type of policy would not target additional funds to low-staffed facilities, but would ensure only that current payment levels were sufficient for facilities to staff at the required level.

Medicare expenditures under PPS related to nursing care were \$2.56 billion in 1998, or \$62 per resident day. This figure was somewhat less than what nursing expenditures would be if they were based on minutes from the CMS staff time measurement data. It is, however, close to what costs to facilities would be to staff at the minimum thresholds identified in chapter 2. In 1998 dollars, we estimate that it would cost facilities about \$54 per day to staff at the thresholds identified by the short stay analyses and \$63 per day to staff at the minimum levels identified by the long-stay analyses.

46. Description of the RUG-III Classification System

RUG-III is a 44-group model for classifying nursing home residents into homogenous groups according to common health characteristics and the amount and type of resources they use (see Table A-1 for a description of the 44 groups). Residents are classified based on residents' clinical conditions, extent of services used, and functional status. The groups are in seven general categories (in general order of costs associated with caring for residents): rehabilitation, extensive services, special care, clinically complex, impaired cognition, behavior problems, and reduced physical function.

The RUG-III system was developed as part of the multi-state Nursing Home Case Mix and Quality (NHCMQ) demonstration project. The classification system was designed using resident characteristics from the Minimum Data Set (MDS) and wage-weighted staff time. It was developed based on analysis of the 1990 and 1995 Staff Time Measurement studies conducted by CMS.

The first level of the RUG-III system is a hierarchy of major resident types, representing groups of residents with certain clinical conditions. These include rehabilitation, extensive services, special care, clinically complex, impaired cognition, behavior only, and reduced physical functioning (See Table A-1 for definitions of these categories). The rehabilitation category, which includes those with the most intensive need for services, is divided into five levels of intensity, based on the total minutes of therapy received per week, the days of therapy per week, and the number of different types of therapy received. Residents whose clinical conditions do not require skilled therapy are classified into lower categories, which descend in order of severity, the number of services used, and the amount of time and resources required to care for the resident. The seven major groups are further split based on the ADLs that the residents accomplish or other end splits (e.g., presence of nursing rehabilitation.)

Table A-1
The RUG-III classification system

Category	ADL index^A	End splits	RUG-III group
47. 1) Rehabilitation			
Ultra high rehabilitation (At least 720 minutes of therapy received per week with 5 or more days for one type of therapy and at least 3 days for a second type)	16-18	Not used	RUC
	9-15	Not used	RUB
	4-8	Not used	RUA
Very high rehabilitation (At least 500 minutes of therapy received per week with 5 or more days for one type of therapy)	16-18	Not used	RVC
	9-15	Not used	RVB
	4-8	Not used	RVA
High rehabilitation (At least 325 minutes of therapy received per week with 5 or more days per week for one type of therapy)	13-18	Not used	RHC
	8-12	Not used	RHB
	4-7	Not used	RHA
Medium rehabilitation (At least 150 minutes of therapy received per week with 5 or more days of some type of therapy)	15-18	Not used	RMC
	8-14	Not used	RMB
	4-7	Not used	RMA
Low rehabilitation (At least 45 minutes of therapy received per week with 3 or more days of some type of therapy and 2 or more nursing rehabilitation activities at least 6 days per week each.)	14-18	Not used	RLB
	4-13	Not used	RLA
Extensive services (Resident qualifies for extensive services on the basis of clinical indicators. Qualifications include receipt of parenteral/IV feeding, IV medication, the special care category, the clinically complex category, and the impaired cognition category. ADL index score must be 7 or higher– otherwise classify resident into special care)	7-18	Count of other categories	SE3
	7-18	code into plus IV medications	SE2
	7-18	+ feeding	SE1

Table A-1
The RUG-III classification system

Category	ADL index ^A	End splits	RUG-III group
2.) Special care (Resident qualifies for extensive services on the basis of clinical indicators. Qualifications include an ADL score of 7 or more plus any of the following:	17-18	Not used	SSC
	15-16	Not used	SSB
	7-14	Not used	SSA
<ul style="list-style-type: none"> • Two or more ulcers of any type or a stage 3 or 4 pressure ulcer and two or more selected skin care treatments; • Feeding tube with parenteral/enteral intake and aphasia; • Surgical wounds or open lesions other than ulcers, rashes, or cuts and surgical wound care or application of dressings or ointments; • Respiratory therapy for 7 days; • Cerebral palsy and an ADL score of 10 or more; • Fever and vomiting or weight loss or tube feeding with high; parenteral/enteral intake, pneumonia, or dehydration; • Multiple sclerosis and an ADL score of 10 or more; • Quadriplegia and an ADL score of 10 or more; and • Radiation therapy 			
3.) Clinically complex (Resident qualifies for extensive services on the basis of clinical indicators. Qualifications include any of the following: feeding tube with high parenteral/enteral intake; comatose and not awake and ADL dependent; septicemia; second or third degree burns; dehydration; hemiplegia/hemiparesis and an ADL score of ten or more; internal bleeding; pneumonia; end stage disease; chemotherapy; dialysis; physician order changes on 4 or more days and physicians visits on 1 or more day; physician order changes on 2 or more days and physician visits on 7 days; diabetes and injections on 7 days and physician order changes on 2 or more days; transfusions; oxygen therapy; application of dressing to foot and injection on foot or open lesion on foot)	17-18D	Signs of depression	CC2
	17-18		CC1
	12-16D		CB2
	12-16		CB1
	4-11D		CA2
	4-11		CA1
4.) Impaired cognition (Resident must have an ADL index of ten or less and a Cognitive Performance Scale of 3 or more, indicating moderate, moderately severe, severe, or very severe impairment)	6-10	Receiving nursing	IB2
	6-10	rehabilitation	IB1
	4-5	Not receiving	IA2
	4-5	Receiving nursing	IA1
		rehabilitation	
	Not receiving		

Table A-1
The RUG-III classification system

Category	ADL index ^A	End splits	RUG-III group
5.) Behavior problems only (Resident must have an ADL index of 10 or less and the presence of delusions, hallucinations, or one of more of the following 4 or more days per week: wandering, verbally abusive behavior, physically abusive behavior, socially inappropriate/disruptive behavior, resisting care.)	6-10	Receiving nursing	BB
	6-10	rehabilitation	BB1
	4-5	Not receiving	BA2
	4-5	Receiving nursing rehabilitation	BA1
6.) Physical functioning reduced (Split into physical functioning groups is based on the ADL index and whether the number of nursing rehab activities is 2 or more)	16-18	Not receiving	
	16-18	Receiving nursing rehabilitation	PE2
	16-18	rehabilitation	PE1
	11-15	Not receiving	PD2
	11-15	Receiving nursing rehabilitation	PD1
	9-10	rehabilitation	PC2
	9-10	Not receiving	PC1
	6-8	Receiving nursing rehabilitation	PB2
	6-8	rehabilitation	PB1
	4-5	Not receiving	PA2
	4-5	Receiving nursing rehabilitation	PA1
	4-5	Not receiving	
4-5	Receiving nursing rehabilitation		
4-5	Not receiving		

A: The ADL index is based on the amount of support required for the following ADL activities: bed mobility, transferring, toilet use, and eating. It ranges from 4 (fully independent) to 18 (totally dependent, needs two-person assistance where applicable).

1.0 Medicare and Medicaid Payments for Improved Nurse Staffing: Issues and Options¹⁸²

11.1 Overview and Approach

11.1.1. Overview

The amount of money that nursing homes have to spend on staffing and other necessities is heavily dependent on public payment systems.¹⁸³ This chapter summarizes some key issues and options for policy-makers' consideration in the event that new minimum nurse staffing standards are to be established and policy-makers want to pay for the new mandate appropriately.

The cost for public payers and the effect of new requirements and accompanying payments depends on programmatic design details. This is illustrated well by the different results of different approaches to estimating the potential cost of new minimum staffing requirements, discussed elsewhere in the report. In one approach, the cost of paying for adequate staffing is computed independently and then compared to what Medicare is currently paying for the nursing component of Medicare rates. That analysis suggests that a new minimum could be cost free to Medicare, if adequate payments for meeting minimums were the only issue. Another analysis estimates the cost of bringing all nursing homes up to a new minimum staffing level, regardless of what homes are already getting in Medicare rates — that is, the cost of all the “missing staff” is first computed and then a share of that cost is allocated to Medicare. That approach suggests increased Medicare costs of roughly \$.6 Billion for nursing home payments. A key difference between the two is that the second assumes that Medicare would supplement existing payments with an “add-on” sufficient to pay for “missing staff,” regardless of the adequacy of current rates. The choice between those two payment approaches is one of the most contentious that policy makers face at the state and federal levels.

¹⁸² This chapter was written by Barbara B. Manard, Ph.D., of The Manard Company, Chevy Chase, Maryland, under a consulting agreement with Abt Associates.

¹⁸³ In 1998, Medicaid paid for the care of 68 percent of residents and Medicare paid for 9 percent. Twenty-three percent paid privately (including about 2 percent who have long-term care insurance). For further details about the relationship between public spending, different approaches to setting Medicare and Medicaid rates, and nurse staffing, see Chapter 2 in HCFA, *Report to Congress: Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes*, Summer 2000.

Decisions about that and similar issues require policy-makers to strike an appropriate balance among competing objectives: spending sufficient money (both in rates and administrative costs) to achieve staffing objectives; reasonable cost containment; administrative feasibility; and equity. Equity is a particularly complex issue. It involves federal state relationships in general; equity among states with regard to any new federal funds (e.g., should states that have financed higher staffing levels for years get less of any new money than states that have lower staffing rates?); accountability and commitments to residents, taxpayers, and providers. There is considerable discussion in provider trade publications (and some in scholarly journals) suggesting various approaches that should be tried to improve staffing levels in a tight market and/or make more efficient use of current staff, but relevant systematic program evaluations with national application are not available to help guide policy-makers choices.

11.1.2 Approach

The issues discussed below incorporate information from interviews with knowledgeable people representing a range of perspectives and experience.¹⁸⁴ Two sets of interviews, focused information gathering, and analysis were conducted for this report.

The first round of interviews was conducted in November and December of 2000 (subsequently called “late 2000”). During this first round of interviews and discussions, respondents were assured that their remarks would not be referenced by name; rather, it was explained, the goal was to assemble, understand, and synthesize the full range of issues and options, to the extent possible.

A second (more limited) set of interviews and information collection activities was conducted in July through September 24, 2001. In that case, respondents were asked to provide information that would be attributed to them or the organizations they represent. The primary goal of those activities was to try to understand similarities and differences among a set of organizations’ positions at one particular point in time.¹⁸⁵

¹⁸⁴ Those interviewed included: staff from The American Health Care Association, The American Association of Homes and Services for the Aged, and The National Citizens Coalition for Nursing Home Reform; representatives of The Alliance for Quality Nursing Home Care, which is composed of 12 national long term care companies; additional nursing homes executives; and Medicare and Medicaid officials with experience in relevant operational and policy issues.

¹⁸⁵ Those from whom information was obtained (and included in this chapter) during the second round (July through September 23, 2001) are specified in subsequent sections. Originally, this second round or phase was to include the analysis of some detailed information from five states (California, Florida, Minnesota, Texas, and Vermont) regarding their experience designing, implementing, and operating (for approximately 6-18 months, depending on the state) special programs to enhance staffing in nursing facilities and paid for as a special part of the Medicaid payment system. The timeline for this report’s activities, including the deadline for its completion, precluded completion of the original plan. As the timeline for this report developed during 2001, interviews and other information collection

11.2 Paying Appropriately for Nursing Staff in the Context of Overall Rates

Nursing staff account for less than half of overall nursing home costs. Theoretically, it should be possible to determine a reasonable amount to pay for appropriate nursing staff, assuming that the two sides of that equation (prices and quantity) could be determined. Issues regarding setting appropriate public rates, looking at nursing in isolation, are discussed below. But at the outset it is important to recognize the interplay between spending on nursing staff and other items (food, other staff, capital and so fourth). If rates for appropriate nursing are paid adequately, but rates for other components are not, is it appropriate for providers to skimp on other costs such as food and pharmaceuticals that may be equally important to quality? In the alternative, should providers be expected to raise private pay rates to make up for shortfalls? On the other hand, if Medicare and Medicaid rates for nursing are inadequate, but some other rate components are substantially in excess of “reasonable” costs, should public payers pay the full cost of raising nursing rates to an adequate level, without considering opportunities for conserving aggregate public funds by reducing rates for other components?

If the answer to the question above is that public payers should pay “appropriately” for the “reasonable costs” of nursing home care in total, as most seem to agree in theory, the challenge of figuring out the cost of paying appropriately for nursing (assuming new minimum staffing standards) gets back to fundamental issues of nursing home rate setting that Medicare and Medicaid have been struggling with since the inception of the programs: determining payments that appropriately balance the competing objectives of reasonable cost-containment, quality, and access. If federal policy-makers decide to implement new staffing requirements, then the need to consider appropriate payments for nursing in the context of overall rates raises a set of issues specific to Medicare payments, and others related to federal oversight of Medicaid rates.

activities became scheduled mostly for the first two weeks of September 2001; to follow the August period of generally reduced staff availability in most state and other organizations. The events of September 11 substantially affected this plan. Further, during the preceding week, a set of events unfolded that necessarily occupied the time of many state officials and others concerned with federal/state policies regarding nursing facilities (cf. R. Pear, “U.S. May Ease Regulation of Nursing Home Industry,” *The New York Times On The Web*, 7 September 2001, accessed at 7 a.m. ET; The Associated Press, “White House Won’t Ease Nursing Home Rules,” *The New York Times On The Web*, 7 September 2001, AP report filed at 12:12 p.m. ET, accessed at 12:30 p.m. ET).

1.0.0 Medicare Rates

Key Issues Raised in Late 2000 by a Broad Range of Stakeholders and Public Officials

With regard to setting Medicare rates, the issues raised by those interviewed in late 2000 centered on concerns about trying to implement new staffing requirements (with appropriate payments for the nursing component) when there are substantial outstanding issues regarding Medicare's new all inclusive pricing system in general. If, for example, the nursing component of the rates were set to reflect new concepts regarding appropriate staffing, could that be done equitably in a cost-efficient way without first reexamining the appropriateness of payments for therapies, ancillaries, and other components? If the appropriateness of the nursing component were to be determined--as in the first-cut cost estimates in following chapters, by multiplying the number of "appropriate" nursing staff by wages, should that approach also be used to test Medicare's prices for therapies and drugs?¹⁸⁶

Some argued that a component-by-component detailed analysis is needed. Others preferred that only the adequacy of the nursing component be examined. Still others adamantly contended that Medicare should not reopen the whole concept of the new PPS pricing system; that the underlying premise of that payment system is similar to a negotiated price: Medicare offers to pay a particular price, for a defined set of services; providers are free to participate or not. The adequacy of the proffered prices should be tested against access and quality — optimally eventually measured by outcomes, at least at a future date — but for now determined by compliance with existing regulatory standards. Texas' approach to its new program to increase nursing home staffing offers an interesting compromise position in which providers can *choose* between two different rates: one with less accountability and fewer requirements, the other (higher) rate with greater accountability.

Key Issues and Positions, Selected Stakeholders, September 2001

This is the first of three sections that address attributed concerns, policy positions, and analytic support for those positions of four major national organizations: The National Citizens' Coalition for Nursing Home Reform (NCCNHR),¹⁸⁷ The Alliance for Quality Nursing

¹⁸⁶ An alternative approach to testing the adequacy of rates in general or individual rate components is used in some states. Instead of trying to build a "model nursing rate" by multiplying staffing hours by wages, these states compare their rates to case-mix adjusted nursing expenditures for homes that meet standards.

¹⁸⁷ NCCNHR "was formed because of public concern about substandard care in nursing homes," and seeks "to represent the consumer voice at the national level" (<http://www.nccnhr.org>).

Home Care (The Alliance),¹⁸⁸ The American Association of Homes and Services for the Aging (AAHSA),¹⁸⁹ and The American Health Care Association (AHCA).¹⁹⁰ The views of other important groups such as labor unions and professional organizations for those who work in nursing facilities were not assembled in this phase due to time constraints. Information regarding NCCNHR's positions was obtained from the organization's WEB site.¹⁹¹ Information from the three associations representing nursing facilities was obtained by email.¹⁹² Footnotes after each organization's name in this section list the documents relied upon for this and each subsequent section where these organizations' identified views are presented.

Three facts about the summaries presented below should caution the reader's reliance on those summaries alone for information regarding these organizations' positions:

- ⊖ all four organizations have voluminous materials in the public domain, such as testimony before Congress, advertisements in various media, and numerous speeches presented across the country;

¹⁸⁸ The Alliance is composed of 12 national long-term care companies. These include several of the nation's large multi-state for-profit companies such as Beverly Enterprises, Genesis Health Ventures, Sun Healthcare, Manor Care, and Harborside. The Alliance does not appear to have a WEB site of its own, but works closely with AHCA on several initiatives. Some information (with references to original sources) about The Alliance and its collaboration with AHCA can be found at a WEB site maintained by The Annenberg Public Policy Center of the University of Pennsylvania (<http://www.appcpenn.org>). Additional information, dated July 2001 and apparently based principally on a speech given by Michael Walker (Chairman of Genesis Health Ventures and Chairman of the Alliance), can be found at a WEB site maintained by an organization (MDSI) "with the singular focus of providing valuable and useable information to the distribution and marketing community involved in serving primary, acute, and longterm care markets (<http://www.medicaldistribution.com>).

¹⁸⁹ AAHSA "consists of more than 5,600 not-for-profit nursing homes, continuing care retirement communities, assisted living and senior housing facilities, and community service organizations" (<http://www.aahsa.org>).

¹⁹⁰ AHCA "is a federation of 50 state health organizations, together representing nearly 12,000 non-profit and for-profit assisted living, nursing facility, and subacute care providers...." (<http://www.ahca.org>).

¹⁹¹ <http://www.nccnhr.org>, accessed September 15, 2001.

¹⁹² In late September 2001, the three major organizations representing nursing facilities responded to the author's request for written statements they might have or chose to prepare that would highlight their key concerns, policy positions, and the like regarding nursing facility staffing and public payments. In each case, the requests were sent as follow-ups to the same association staff that had participated in (or organized) earlier discussions (late 2000) with this chapter's author. Respondents were sent copies of documents or written summaries of comments from the previous (late 2000) discussions prior to the September 2001 exchanges.

- ⊘ three of the organizations (The Alliance, AHCA, and AAHSA) supplied requested summaries to highlight key positions in few days, during a national crisis, and the fourth organization (NCCNHR) was not contacted personally in this round to follow-up on previous discussions, due to this project's timeline; and
- ⊘ finally, time did not permit the usual opportunity for those who supplied the source documents to review this author's summary of them.

Thus, it is best to view the summaries to follow as *one initial* comparison, subject to change as positions are clarified and evolve. The strength of the attempt, despite the limitations, lies principally in the outline of the issues (from the late 2000 discussions) exemplified and illuminated by specific points and counter-points.

With respect to Medicare rates:

- ⊘ **NCCNHR**¹⁹³
 - has said “The greatest weakness in [the Nursing Home Reform Law passed in 1987] was, and remains, the lack of a meaningful staffing standard”;
 - has noted that while “reimbursement levels are a significant determinant of providers’ ability to deliver optimal care,” the organization;
 - remains skeptical of “excuses given by the industry for not achieving the staffing needed to provide for residents.” NCCNHR particularly; and
 - dismisses the argument that bankruptcies following introduction of the new Medicare SNF PPS provide evidence that Medicare rates are inadequate, pointing out “Even homes in bankruptcy are staying in the business – just reconfiguring their shifting leadership – taking full advantage of the protections the bankruptcy laws allow.”

- ⊘ **AAHSA**¹⁹⁴

¹⁹³ Various documents found at <http://www.nccnhr.org/govpolicy>.

- has focused recent comments regarding Medicare rates and staffing principally on details such as the inflation factor (arguing for continuation of the full market basket update beyond its scheduled reduction).

☐ **AHCA**¹⁹⁵

- Stressed three key points regarding public payments and staffing minimums in September 2001:
 - First, collaboration among all parties: “Government, consumer advocates and providers must join together” to accomplish various goals, which AHCA refers to as creating ‘a fully-funded aggregate optimal staffing standard for nursing facility patients.’ Similarly, AHCA states it is impossible to “overemphasize the importance of all parties working together to address this critical issue.”
 - Second, maintain the Medicare SNF provisions that increased rates in 1999(BBRA) and 2000 (BIPA). Many call these provisions the “Medicare give-backs.” Certain key provisions and “give-backs” are due to expire soon. AHCA noted “If CMS does not act administratively and/or Congress legislatively on or before October 1, 2002, Medicare PPS rates to skilled nursing facilities will fall [substantially]. Indeed, continued inaction will soon create unease in the financial marketplace to the great detriment of the patients we serve and to providers.”
 - Third, address “the historic and chronic under funding of Medicaid” payments for nursing facilities.

☐ **The Alliance**¹⁹⁶

¹⁹⁴ Email (September 19, 2001) from Ruta Kadnoff on behalf of AAHSA to Barbara Manard, reconfirming positions in a previous (November 9, 2000) document, supplemented with two more recent issue briefs; AAHSA, *Issue Brief: Long Term Care Workforce* (focuses on legislatively-oriented initiatives); AAHSA, *The Long-Term Care Workforce* (one page statement of the problem with proposed administrative and legislative solutions).

¹⁹⁵ Email (September 21, 2001) from Rick Abrams on behalf of AHCA to Barbara Manard urging that the CMS report to Congress contain recommendations on three specific issues; AHCA, *Position of the American Health Care Association on Staffing Standards in Nursing Facilities* (summarizes position supporting “the creation of an aggregate optimal staffing standard” and offers five “guiding principles on the creation and maintenance of nursing facility staffing standards”).

- noted in late 2000 (and reaffirmed the position in September 2001) that it has “gone on record supporting staffing standards,”
- focused principally on issues such as Medicaid and workforce availability issues (discussed in sections to follow), and
- stressed that policy-makers should consider Medicare rates and staffing issues in the context of over-all market conditions: “There is real price sensitivity in the private pay marketplace, and contrary to popular opinion, the margins on private pay patients have been decreasing.”

In late 2000, the issues raised by those interviewed centered on concerns about trying to implement new staffing requirements (with “appropriate” payments for the nursing component) when there was such debate and contentiousness regarding Medicare’s new all-inclusive pricing system in general. The new payment system was the main event; staffing and quality were the supporting cast in many providers’ issue analyses. Today, however, many who once focused foremost on Medicare’s part in nursing facility bankruptcies, now put quality and staffing out front, with potential disruptions to owner’s aspirations as secondary considerations.

AHCA and The Alliance have become particularly visible — via a national ad campaign among other activities — in their collaborative effort to garner support for “aggregate minimum staffing ratios,” by focusing attention on a recent report by the General Accounting Office (GAO) which attempts to estimate the magnitude of a potential workforce shortage in nursing facilities in future years.

Regardless of which organizations or providers are more (or first) concerned about quality relative to dollars, it is important to tease out some of the key issues beneath current positions. These positions may shift; further, perceptions of positions are frequently reshaped deliberately — or unexpectedly, as changing circumstances refocuses the nation’s policy lens.

One such underlying issue is the relationship between the market capitalization (stock prices) of publicly traded nursing facilities and quality care from a patient’s perspective. To what extent is it true that unease in the capital markets would cause harm to patients?

Despite dramatic declines of stock prices (and many bankruptcies) following the implementation of the new SNF PPS, there were not —

¹⁹⁶ Email (September 19, 2001) from Linda Keegan on behalf of The Alliance to Barbara Manard, reaffirming positions in a previous document (December 2000) and summarizing 5 points.

according to GAO, the Inspector General (IG), or the industry itself — concomitantly dramatic, observable, negative consequences for patients.

Similarly, during the remarkable escalation of nursing facility valuations in the years prior to the SNF PPS, there does not appear to have been a concomitantly remarkable escalation of nursing facility quality, however measured.

2.0.0 Medicaid Rates

Key Issues Raised in Late 2000 by a Broad Range of Stakeholders and Public Officials

With respect to Medicaid rates, the repeal of the Boren Amendment in 1997 substantially reduced federal involvement in determining the appropriateness of Medicaid rates both prospectively in terms of federal review and approval of State Plans and as an issue subject to contest in federal courts. But the prospect of mandating new federal staffing standards raises again questions regarding the appropriate role of the federal government in assuring that sufficient, but not excessive, Medicaid money is available to pay for the quality of care that federal rules prescribe. Some providers interviewed were concerned that even if the federal government set new payment standards for the nursing component of state Medicaid rates, Medicaid rates for other components would in many cases still be inadequate.

State policy-makers interviewed for this project were more skeptical regarding the asserted inadequacy of their overall rates given current requirements, but they were universally concerned that new staffing minimums not be implemented as “unfunded mandates,” and urged that federal policy-makers provide both sufficient funds (perhaps through an enhanced federal match for nursing staff) and leave states sufficient flexibility to determine how Medicaid nursing homes rates should be set.¹⁹⁷ Several Medicaid officials noted that declining nursing home occupancies present them with new opportunities to buy more services from less costly providers, while focusing on efforts to enhance the supply of alternative services and compliance with federal rules in the wake of the Olmstead decision. Given the wide range of circumstances across the states with respect to current Medicaid rates, current costs, and local labor market issues, several State

¹⁹⁷ Several Medicaid officials raised concerns about the challenge of coordinating and properly allocating staffing requirements and costs attributable to Medicare versus Medicaid patients. They noted that while it was frequently asserted that Medicare payments subsidize Medicaid underpayments (because Medicare payments have been generally more generous than Medicaid), the introduction of Medicare’s new payment system has altered the dynamics in many states and created pressure for states to assume the cost of what some argue are shortfalls in Medicare payments. In addition, some State policy officials say that the combination of Medicare’s new pricing system and the cost-related Medicaid payment systems used in most states has created new incentives for providers to maximize the portion of costs assigned to Medicaid on cost reports; they are way of additional monitoring costs added to these they already see as the result of changes in Medicare policy.

Medicaid officials suggested that the best — and perhaps only — way to gauge the cost of a new federal staffing requirement for Medicaid would be for states themselves to develop cost estimates with supporting documentation and program implementation proposals, in exchange for supplemental funding. But others were just as wary as providers of new reporting mechanisms and urged that at a minimum there be an adequate testing period under real world conditions.

Key Issues and Positions, Selected Stakeholders, September 2001

The format of this section replicates that regarding specific positions on Medicare rates. As noted, the sources for quotations and information attributed to each organization below are given in the section on Medicare rates above.

☐ **NCCNHR**

- stresses quality issues — as seen by its members and constituency — first, and secondarily emphasizes firm accountability systems for both Medicare and Medicaid rates. Thus, the organization
- **remained largely neutral during the debates preceding repeal of the Boren Amendment — concerned that Medicaid spending on nursing facilities might decline, but unconvinced that law actually protected residents’ quality of care.**

☐ **AAHSA**

- has proposed a new federal requirement, much stronger than the Boren Amendment. The proposal was developed after late 2000 and appears potentially to sharpen some differences between AAHSA and the other provider organizations (AHCA and The Alliance). The proposal calls for:

“Funding to Improve Staffing: Recognize full labor costs under the Medicaid program by establishing a federal requirement that states incorporate 100 percent of labor costs for recruiting, training, retaining and compensating qualified staff as part of their Medicaid payment rates. . . . The provision should also prohibit states from reducing funds to other components of their payment methodology to fund the newly recognized costs.”

- ☐ That provision differs from The Alliance and AHCA in that it would require state Medicaid programs and Medicaid-certified providers to maintain sufficiently detailed cost reports to determine the “full labor costs” that states would be

required to fund. By contrast, The Alliance and AHCA have supported elimination of nursing facility cost reports and propose other ways (discussed later) for states and the federal government to establish “accountability” for nursing facility payments.

☐ **AHCA**

- consistently cites Medicaid payments as a major problem and a key barrier to appropriate staffing in nursing facilities;
- recently released a study it commissioned that reported that in all but one of the 36 states studied, Medicaid rates were lower than actual (allowable) facility spending on Medicaid patients in nursing facilities.

☐ **The Alliance**

- said “The Medicaid program is so severely under funded that simply addressing the incremental costs associated with a new staffing minimum will be sorely inadequate....Our companies simply cannot absorb the costs of the costs of additional federal staffing standards [in light of current losses on Medicaid] and shifting those costs to Medicare or to privately paying patients is not an option.”
- In support of the proposition that Medicaid rates are inadequate for even current costs, The Alliance cited a “recent work Joe Lubarsky has done for AHCA on Medicaid cost coverage [i.e., the document attributed to the accounting firm — BDO Seidman — in which Mr. Lubarsky is a partner, entitled *A Briefing Chartbook on Shortfalls in Medicaid Funding for Nursing Home Care*, August 30, 2001].
- The Alliance noted in late 2000--and underscored in September 2001—the need to pilot-test any new staffing standard; it recommended the development of “a research framework...to ensure that these pilots surface the major policy issues” at both the state and federal level, and “allow us to measure the impact of higher staffing levels on care outcomes and on regulatory compliance.”

AHCA’s support for the development of the database used in the BDO Seidman study provides an opportunity to address numerous critical questions regarding the adequacy of Medicaid rates. Many studies in the past have relied on statewide aggregate “average rates,” to examine issues regarding both trends in the adequacy of Medicaid spending and the relationship between Medicaid rates and various

measures of quality and/or access. Studies frequently have relied on such data, because that data is all that has been available for cross-sectional national studies or national trend analyses. Some important questions that could be addressed with the AHCA-supported database include these:

- ⊘ To what extent is low occupancy a factor in the difference between Medicaid rates and costs in the newly available study? In the Phase I Report for this staffing study, researchers described an analysis of Ohio data in which declining occupancies accounted for virtually all of the a decline in per-diem cost-coverage. But national data have not been available before to determine whether Ohio is a relatively isolated case, or whether in states such as Texas — with one of the lowest occupancy rates in the nation — the per-diem losses might be substantially mitigated and the problem viewed in a different light, were the costs adjusted for an efficient occupancy rate.
- ⊘ Where are the real problems in the difference between payments and spending — are differences worse (or better) in the direct care components or property?

The answers to questions like those, combined with the analyses already made available, could give policy-makers at the federal level information critical to evaluating the need for and alternative designs for proposed federal programs addressing Medicaid rates.

2.0 Workforce Supply, Wage Rates, and Public Payment Costs

Those interviewed in late 2000 and those contacted again in September 2001 agreed that multiple staffing factors contribute to good (or poor) care and that implementing minimum staffing levels would be neither easily accomplished (as an administrative matter) nor likely to produce only the best *intended* results. Thus, this section does not distinguish between issues raised in late 2000 and those raised by specific organizations in September 2001.

Many of those we interviewed were concerned that regardless of the prices public payers might be willing to pay, there is an underlying shortage of RNs. Thus, if more RNs (who take time to train) were not first “produced,” mandating new RN standards for nursing homes would simply drain them from other health care sectors. Others believe that in the short term at least, RNs could be found, but only for a

substantially higher price than current wages.¹⁹⁸ Some urged that econometric analyses be done to estimate the incremental wages and benefits that would be required to draw RNs and potential CNAs into the workforce before trying to estimate the price to build into payments. Others suggested that it would be wise to invest first in labor-force development and/or to begin with a period of demonstrations and pilot projects in selected states before mandating new staffing levels to test hypotheses regarding how much it might cost (both for actual rate enhancements, when warranted, and for program implementation and monitoring efforts). Most suggested that program rules should provide for exceptions where good faith efforts to hire required staff did not succeed due to labor shortages.

By contrast, some argued that understaffing in nursing homes requires immediate attention, and that excessive testing could result in needless delays. Those supporting this position argue that a “best shot” program first be implemented nationally, and subsequently refined as problems are identified. The argument for this approach is that by the time the research is completed, the situation will have so substantially changed that major program adjustments will be needed regardless. Asked to respond to this suggestion, several Medicaid officials and providers said that a “fire first, aim later” approach would likely have to start out with higher public payments than minimum estimates to have any chance of success garnering sufficient support for the program — much like Medicare initially set managed care rates purposely high to develop participation. There was, however, general agreement that any new staffing requirement and concomitant changes to payments be closely monitored and subject to well-designed evaluations.

3.0 What Level of Staffing Should Be Built into “Appropriate” Public Payments?

Three issues dominated discussions on this topic with those interviewed in late 2000. First, respondents stressed the importance of pegging any new minimum staffing requirements to a measure of patient acuity (case-mix) that could be readily constructed from routine data available to providers. That is, if new staffing standards are required and are related to patient acuity (as most argue they should be), then providers need to be able to determine readily whether they are in compliance.¹⁹⁹ As discussed in the Phase I report, this study approaches the issue of appropriate staffing quite differently from that used in developing the RUG-III classification system. If the resulting staffing minimums are tied to a different case-mix measurement system, respondents urged policy-makers to give considerable attention to efforts to harmonize the two.

¹⁹⁸ Those interviewed suggested that 20-30 percent of any new RN hires would likely be contract agency nurses, though there was considerable variation in these rough-cut estimates. The cost of agency RNs was said to be anywhere from 20 percent higher to more than double the usual wages for on-staff nurses.

¹⁹⁹ Policy-makers will also need to decide whether compliance with any newly mandated staffing ratios must be met every single day (like Vermont currently requires), or whether providers would have some leeway to meet standards on an aggregated (weekly or monthly, for example) basis.

Second, assuming that case-mix measurement issues are resolved, issues remain regarding the level of staffing that should be built into appropriate public payments. There was general agreement that if staffing minimums are set at the point related to avoiding bad outcomes, adequate payments should be pegged to a higher level of staffing. In addition, several public officials we interviewed were troubled by the notion of defining adequate payment for mandated staffing simply as the cost of new minimums, even if these were pegged to achieving good outcomes. These concerns arise because even the most refined case-mix measurement system will at best be an approximation of individual patients' needs for nursing.²⁰⁰ To accommodate variations in "true need" for nursing at each facility (i.e., that not captured in the acuity-based minimum staffing requirements), some thus suggested picking a somewhat higher point for estimating adequate payments. That position was favored more by those who favor greater accountability for spending, recognizing the cost trade-offs in targeting public payments appropriately.

The trade-offs that policy-makers have to consider stem from the fact that the higher the public rates for nursing, the higher the public cost, unless higher nursing care rates are balanced by cost savings elsewhere. Thus, considering the nursing cost component of rates alone, some prefer that the balance be achieved by pegging nursing care rates directly to new minimum staffing ratios (assuming these are set at the level for achieving good outcomes) and expecting providers to pay for those patients whose costs exceed predicted averages from savings achieved on patients whose costs are below average. Others prefer that public rates be set higher than the amount estimated for the new minimums, but that public costs for nursing care be constrained by minimizing opportunities for providers to profit on nursing rates. This issue would be moot (for Medicare, considered alone) if Medicare is already paying nursing rates sufficiently above the cost of new staffing minimums to allow for some staffing above the minimums, as the analyses discussed in a subsequent chapter suggest is currently the case (at least in the aggregate).

The third issue involves the use of the nursing times built into the RUG-III rates as an approach to testing the adequacy of Medicare rates for nursing. As discussed in a separate chapter, the research team found that current Medicare payments for nursing are less than costs when the staff times embedded in the RUG-III rates are multiplied by wage factors (though higher than the cost of the minimum staffing ratios discussed in the Phase I report). Respondents in late 2000 were divided regarding the appropriateness of that approach to testing the

²⁰⁰ That is, the actual nursing care needs for patients at a particular facility may vary considerably from the average predicted by even a refined case-mix measurement system. In the Phase I report we noted that it is difficult for surveyors to operationalize current staffing regulations effectively, which is one of the strong arguments in support of minimum staffing ratios. Nevertheless, some policy officials noted, so long as those additional general requirements remain, "adequate" public payments need to be determined in light of those overarching requirements.

adequacy of Medicare's payments for nursing.²⁰¹ Some argued that the nursing minutes from the RUG-III system time studies are an implicit contract with providers to pay sufficiently for *those* minutes; they say that the minutes from the RUG-III time studies should in fact be the minutes built into actual payments. Others said that a key term in the actual implicit contract in the new payment system is providers' flexibility to decide whether or not to accept Medicare's offered price and--if they accept the price--to provide care meeting standards. From that perspective, Medicare need not consider either cost reports or RUG-III minutes in determining the adequacy of nursing payments; the test of adequacy should be tied to access and compliance with standards. The argument here is that it is fully appropriate for Medicare to offer a price that is in effect a discount off that calculated with RUG-III minutes in the equation.

The positions of NCCNHR, AAHSA, AHCA, and The Alliance on the final issue remained divided in September 2001, as discussed below. The debate above over approaches to testing the adequacy of Medicare rates is at heart a debate about "accountability." And in that issue lies the sharpest fissure dividing parties to the debate.

4.0 Accountability

Two issues arise regarding approaches to accountability, should new minimum staffing requirements be required. Both have cost consequences, with the magnitude of those costs dependent on policy details. First, if new minimum staffing ratios are required, should there also be related new reporting requirements regarding staffing? Some advocates (prominently including NCCNHR) have long said that more detailed staffing information should be available to the public, regardless of whether or not new minimums are required.²⁰²

²⁰¹ Respondents were also divided on the matter of considering the adequacy of nursing component rates without also considering the adequacy (or possible excess over costs) of payments for other rate components.

²⁰² If new staffing information were required, regardless of the reason, policy-makers will need to decide not only issues such as those discussed in a separate chapter (i.e., in what form and in how much detail should questions be asked and data reported), but also additional issues such as the frequency with which the new staffing data must be reported. There are a substantial number of operational details that optimally would be addressed *prior* to finalizing any proposed instrument's design. Some states that were being tracked in the original design for this chapter, reported in preliminary interviews that the information needed for accountability with regard to their staffing enhancement programs is generally different from the form and frequency of information that might be most useful to consumers. Therefore, many providers and policy officials interviewed urged that the goals of any new staffing reports be carefully considered to minimize excessive additional reporting. That is, many expressed concerns that a form designed for one purpose (e.g., providing more information to consumers on a national WEB site maintained at the federal level) would be inappropriate for a different purpose (e.g., providing evidence that nursing facilities were actually staffing to the levels to which public payments were pegged, as required in a number of innovative state programs).

Second, to what extent (and how), should providers be held accountable for spending the money paid for nursing staff through public rates? Some argue strongly that if staffing is the issue, then only staffing should be tracked. That is, if new minimum staffing requirements are implemented, then providers need only be held accountable for having the staff required. The Alliance appears to be in this camp from its statement, reaffirmed in September 2001, regarding accountability: “We recognize that a ‘you spend it, we’ll sent it’ approach to payment is neither responsible nor advisable. But we also believe that it’s inadvisable to add more accountability systems to the systems that already exist. The current survey and enforcement system is designed to ensure that providers meet established standards. Use that system to ensure that standards are met, pure and simple.”

Others contend that in return for a new public commitment to pay for appropriate staffing, policy-makers have an enhanced fiduciary responsibility to taxpayers to better assure that public dollars actually are spent on nursing care. In many states, this has been the bargain struck between providers and those who determine rates (legislators and the executive branch). For example, each of the 5 states in the original design for this chapter has procedures for recouping funds from providers who fail to meet conditions specified in the staffing enhancement programs.

Accountability is more contentious with regard to Medicare than to Medicaid payments, because — as many see it — the fundamental contract between payers and providers in the new SNF payment system absolves Medicare from responsibility for detailed cost finding and matching of payments to expenditures on a facility-specific basis while providers are essentially free to keep any rewards from efficiently managing costs, so long as a provider remains in compliance with quality assurance regulations.

5.0 Conclusion

The most important point in this chapter for policy-makers is this: the cost for public-payers and the effect of new requirements and accompanying payments depends on programmatic design details.

If policy-makers at the state and/or federal levels want to estimate the cost of potential new staffing requirements, how should that be done? Costs for public programs will be higher if policy-makers choose to pay for all of the “missing staff,” regardless of whether there is already sufficient money in the rates to pay for the missing staff, were the money applied differently. Policy-makers might choose that more expensive option to further other goals such as minimizing the government’s role in directing provider spending. But policy-makers and others could benefit substantially from simulation models that allow ready evaluation of important trade-offs.

In addition, without an array of creative alternatives from which to choose, policy-makers might conclude that the only choices are the most extreme: a return to the earliest form of Medicare cost-related payments, or adding more money to the Medicare pricing system, in hopes that it will be spent wisely on staffing, if that is the intent. At present, states are experimenting with many different models and approaches to paying appropriately for improved nurse staffing. These initiatives might be studied, using simple techniques such as interviews, to help policy-makers learn rapidly what works in operational terms.