

NURSE AIDE TURNOVER AS RELATED TO QUALITY OF PATIENT  
CARE, LOCATION, PROFIT STATUS, AND SIZE OF  
NURSING HOME

by

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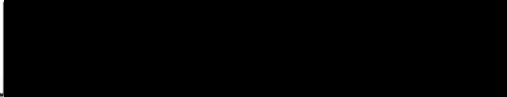
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## CHAPTER I

### INTRODUCTION

The rapid turnover of personnel has long been recognized as a major problem in the health care field. One part of this problem is the rapid turnover of nurse aides in the nursing home industry. The United States Senate Subcommittee on Long-Term Care (1974) reported that 43% of nursing home personnel are nurse aides, with an annual turnover rate of 75%. In the state of Oregon, nurse aides constitute nearly 80% of the nursing care staff in nursing homes, and it is not unusual for a nursing home to have a turnover rate of 100% or greater (Report of ... Nursing Assistants, 1978).

The issue of nurse aide turnover is a problem in terms of monetary cost to the Oregon taxpayer. On the average 55% of all nursing home residents are on public assistance (Report of...Nursing Homes, 1978). Turnover may also be a problem in terms of emotional cost to staff, and in terms of quality to nursing home residents. Employee turnover becomes a problem for taxpayers, nursing home residents, and health care workers. It becomes a problem that we all should be concerned about.

It was the purpose of this study to investigate the relation of turnover to quality of patient care, and the relation of turnover to nursing home location, profit status, and size.

#### Review of the Literature

The review of the literature to follow discusses labor



turnover, its dysfunctional consequences, measurement, and causes; and relates it to the location, size, and profit status of the employing organization. It then covers the issue of quality patient care as it relates to turnover.

#### Dysfunctional Consequences of High Turnover

Labor turnover, broadly defined as the movement in a working force when workers leave and have to be replaced (Samual, 1969), is generally recognized as an important and costly factor with which employers must deal. Although some authors (Pigors & Myers, 1969; Wieland, 1969) do list advantages to a low labor turnover rate, such as bringing new blood into the organization, these same authors are quick to also point out that a high turnover rate is far more detrimental than advantageous.

The dysfunctional consequences of labor turnover are often broken down into financial costs, quality of care costs, personal costs for staff, and organizational efficiency. Schwartz (1974) refers to the "dollar costs" of rehiring and retraining, and to the "hidden costs" which include staff morale, disruption of programs, and loss of continuity of quality care. Kasteler, Ford, White and Carruth (1979) include "dollar costs" and "subtle costs," of a social and psychological nature; and Stryker-Gordon (1979) refer to the "financial cost" of recruitment, selection, repeated training, and an increased need for supervision. She also speaks of the "emotional cost" to staff from poorly integrated, low performing, and constantly changing personnel, and "quality cost" to residents of nursing homes from uneven standards of care, and

repeated breaking of staff-resident relationships. The last breakdown ("Methods", 1955) includes "direct costs" such as insurance costs, and "intangible costs" such as low morale and deterioration in public relations. Other disadvantages include the psychological costs incurred to those left behind when a person leaves a group or an organization. Wieland (1960) believes that a persons leaving can create a great deal of unrecognized disruption for the group, and that this group will not function as smoothly as usual until that position is filled again. He states that "people are not like machine parts and they are not completely interchangeable", particularly for those functions which are not formally spelled out, but rather are informal, natural, or even unconscious.

Pesking (1973) believes that the disadvantages of turnover must also include an increase in accidents and absenteeism, as a result of low morale, reduced management efficiency and effectiveness, missed production schedules, increased overtime, and overhiring in an effort to maintain work schedules.

#### Measurement of Turnover

The actual turnover rate of personnel is easily measured, most commonly by use of termination numbers, according to the following equation:

$$\text{turnover} = \frac{\text{total number of terminations - voluntary or involuntary - over a specific period of time}}{\text{average work force, in numbers, for that period}}$$

("Methods", 1955; Levine, 1957; Peskin, 1973; Pigors & Myers, 1969; Calhoon, 1963).

Although turnover rate can easily be measured, using this

formula, it is rarely done (Kasteler et al., 1979; Samual, 1969; Dane, 1972; Levine, 1957; "Methods", 1955). We often hear of high turnover in nursing home employees, but with the exception of a few isolated studies, few figures are presented to back up the assertions.

Several reasons for this lack of turnover data have been given. Peskin (1973) reasons that by calculating turnover rates, organizations feel that they are attracting attention to the problem of turnover, and that this in turn requires an investigation of its causes, something which they are unwilling to look into. A second reason put forth for not calculating turnover rates is that many managers view labor as an undiminishing resource, always available, willing to work, and easily replaced. Another reason mentioned is management's belief that studies are too time consuming, and results might reflect poor management (Dane, 1972).

For each of the reasons given for not calculating labor turnover rates, reasons are also given in favor of calculating rates. Longest (1974), Dane (1972), "Methods" (1955), and Schwartz (1974), all cite financial reasons. Schwartz (1974) believes that one of the best reasons for calculating turnover rates is to facilitate a decrease of staff turnover, by using the calculated rates to first locate, and then remedy problem areas. Levine and Wright (1957) state that personnel turnover statistics are indicators of job satisfaction, and the volume and quality of care produced within a health care organization.

#### General Causes of Labor Turnover

The causes of labor turnover, other than size, location, and

profit status of the organization, are many and varied. They include the following:

1) A discrepancy between what a person encounters on the job and what was expected by that person (Mobley, Griffeth, Hand, & Meglino, 1979).

2) Poor supervision, poor communication, unreliable hiring practices, and hiring of overqualified persons (Kahl, 1968).

3) Lack of an intellectual environment and lack of day care facilities (McCloskey, 1974).

4) Lack of knowledge or conflicts in information given to a person (Wieland, 1969).

5) Physical size, and location of employing facility, length of new employee orientation, and employee grievance procedures (Longest and Clawson, 1974).

6) Personnel faced with goals they feel they cannot achieve, such as total rehabilitation of a patient, patients they feel they cannot help, or staff problems they feel they cannot solve. Odors, a dirty work environment, long hours, and physically and mentally exhausting work are also given as causes of personnel turnover (Kasteler et al., 1979).

From the above discussion it should be clear that labor turnover is a major problem for an organization; that there are serious disadvantages to a high turnover rate, in terms of money, staff, and product costs; that turnover studies, although warranted, are sadly lacking; and that the causes of labor turnover are many.

Studies indicate that three of the major factors influencing turnover are location, size, and profit status of the employing

facility.

#### The Influence of Location, Size, and Profit Status on Turnover

Longest and Clawson (1974) obtained results in a study of turnover and hospitals in an urban community indicating that location of the hospital did indeed have an effect upon employee turnover. They found that those organizations located farthest from the center of a city demonstrated a higher turnover rate. Kasteler et al., (1979) in a study of turnover rates in nursing homes found that small rural towns had lower turnover rates than did urban homes.

The size of an employing organization has been demonstrated to have a direct effect on turnover within that organization. Wieland (1969) notes that the larger the organization, the higher the turnover rate. He believes that the size of the organization is associated with various forms of dissatisfaction as well as with problems in communication. Longest and Clawson (1974) and Kasteler et al., (1979) both found that there is a direct relationship between several factors, including the size of an organization, and employee turnover rates.

Profit status, consisting of proprietary and non-profit organizations, has been found to effect turnover rates. Pecarchik and Nelson (1973) noted that proprietary nursing homes had higher turnover rates than did the non-profit homes.

It thus becomes apparent that employee turnover is influenced by many variables, including location, size, and profit status of the employing institution.

#### The Effect of Turnover on Quality of Care

The effect that employee turnover has upon quality of patient

care in health care organizations is frequently mentioned in the literature on personnel turnover (Schwartz, 1974; "Methods", 1955; Samuel, 1964; Seybolt, Pavett, & Walker, 1978; Levine & Wright, 1957; Melbin & Taub, 1966; and Stryker-Gordon, 1979). Melbin and Taub (1966) believe that one of the costs of high personnel turnover is the quality of the product, or kind of care and treatment provided for patients. This deterioration in patient care is the result of extra work for on-the-ward training of new staff. If the patient demands are light, then the time can be spared without sacrificing quality of care. If the treatment load is heavy, time spent by other personnel in on-the-ward orientation of a newcomer entails a loss of service to patients.

Schwartz (1974) claims that the effect of a continuous influx of new staff upon the individual nursing home resident is of no small matter. He states that one aspect of quality care is continuity of care provided by a stable staff. The substandard quantity and quality of output during the employee learning period has long been recognized (Samuel, 1969). Seybolt et al. (1978) states that we should aim to reduce the negative impact on the quality of patient care, resulting from loss of competent personnel.

This review of the literature found a relationship between quality of patient care and employee turnover, however, there has been limited research in assessing this relationship. Peskin (1973) sums up by stating that turnover is the most costly, and least understood phenomena working against productivity, efficiency, and ultimately profits.

### Statement of Problem

In the review of the literature it became apparent that employee turnover is a major problem, relating significantly to location, size, profit status, and quality of patient care. It also became apparent that data in the area of employee turnover is lacking.

The intent of this research was to investigate whether there was a relationship between nursing home location, size, and profit status, and nurse aide turnover rates in Oregon nursing homes; and whether there was a relationship between nurse aide turnover rates and the quality of patient care in Oregon nursing homes. Figure 1 illustrates the expected relationships.

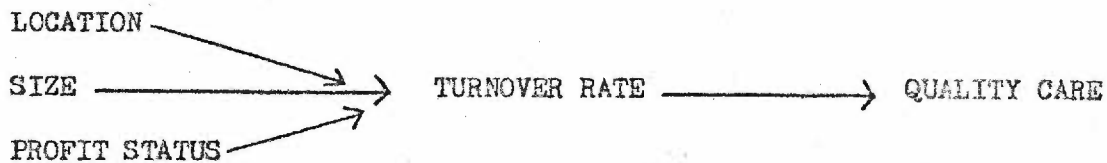


Figure 1: Schematic representation of conceptual relationships between location, size, profit status, turnover, and quality.

### Hypotheses

- (1) The lower a nursing home nurse aide turnover rate, the higher is its quality of patient care.
- (2) The nurse aide turnover rate is lower in nursing homes located in smaller communities than in nursing homes in larger communities.
- (3) The nurse aide turnover rate is lower in nursing homes with fewer beds, than in homes with more beds.
- (4) The nurse aide turnover rate is lower in non-profit homes than in proprietary homes.

## CHAPTER II

### METHOD

#### Design

The design for this study was a non-experimental, descriptive, correlational research design.

#### Subjects and Setting

The subjects of this research were 59 Intermediate Care nursing homes. Nursing homes were selected for study based upon the following criteria:

(1) The institution was classified as an Intermediate Care Facility (ICF) with certified Medicaid (Title XIX) beds, by the Oregon State Health Division Licensing and Certification Section.

(2) The facility was reviewed by the State of Oregon Department of Human Resources, Adult and Family Services review team during the period July 1, 1978 through June 30, 1979.

(3) The facility employs nurse aides.

(4) The facility has no designated skilled nursing care beds.

Criteria one and two were established because the quality of care measure to be used in this study was collected by those review teams during the period July 1, 1978 through June 30, 1979. The third criterion, employment of nurse aides, was included because the turnover data collected was exclusive to nurse aides. Those facilities with skilled nursing care beds were eliminated from this study to control for the additional professional staff requirements necessitated by the presence of patients requiring skilled nursing care. Eighty nine Intermediate Care Facilities within the state of Oregon met the established criteria. Of these, 59 (60%) submitted



the turnover figures requested, thus becoming the subjects and setting for this study.

#### Data Collection

From survey reports of the Oregon Adult and Family Services Division, the names of 89 Intermediate Care Facilities were obtained. The Executive Director of the American Health Care Association was then contacted and asked to write a letter of support to the administrators of the nursing homes (see Appendix A). A copy of the letter was sent to the nursing home administrators. Phone calls were then made to the administrators who were asked for turnover information. Quality of care deficiency information, nursing home size, community in which the home was located, and profit status was also taken from the survey reports. Population of the community was obtained from Portland State University's Population Research and Census Center reports.

#### Measurement of Nurse Aide Turnover

The nursing home administrators were asked for the total number of full-time nurse aide terminations, voluntary or involuntary, during the months of August, 1978, October, 1978, January, 1979, and April, 1979. They were also asked for the total number of part-time nurse aide terminations, voluntary or involuntary, during the same time periods, and for the average number of full and part-time nurse aides employed during that period.

The following equation was used to calculate nurse aide turnover rates:

$$\text{annual turnover percentage} = \frac{\text{total number of full-time terminations} + \frac{1}{2} \text{ of the total number of part-time terminations}}{\text{average work force, full-time} + \frac{1}{2} \text{ of the part-time work force}}$$

That number was divided by four, to obtain a monthly turnover average, multiplied by twelve to obtain a yearly average, and then multiplied by 100 to obtain the annual turnover percentage. The turnover rates were done by a single researcher to assure standardization of procedure.

#### Measurement of Size, Location, and Profit Status

Nursing home location was ascertained by population size of the city in which the facility was located. The name of the facility and the city in which it is located was obtained from the state of Oregon, Department of Human Resources Adult and Family Services Division, Resident Services Review reports (see Appendix B). The current population figures for that city were obtained from the Portland, Oregon, Portland State University, Population Research and Census Center, "Population Estimates: (Oregon) Counties and Incorporated Cities, July 1, 1979". Nursing home size was defined as the average daily census as reported through the American Hospital Association to the State Health Planning and Development Agency. Nursing home profit status was obtained from the Oregon, Department of Human Resources, Adult and Family Services Division, Resident Services Review, 1978.

#### Measurement of Quality of Care

Survey reports of the Oregon Adult and Family Services were the

source of the quality of care data. Every Intermediate Care Facility, certified nursing home, was reviewed by a team composed of two registered nurses and one social worker at least once during the period July 1, 1978 through June 30, 1979. Team reports were reviewed centrally by the unit administrator and medical director to control for consistency. Inter-rater reliability was not established, and may be a limitation of the instrument.

The data collection instrument contained 38 areas against which quality of physical care to each resident in the facility was assessed. Four categories of services were addressed: medical, nursing, social services, and activities (see Appendix B for a copy of the instrument). The assessment was made from both records and by visual examination of the residents at the time of the review. The registered nurse reviewer covered those areas related to medical care, nursing care, and supportive services; the social worker reviewer focused on areas relating to social services and activity plans of care. A deficiency in any item was indicated by placing an 'x' in the column opposite the name of the individual resident to whom it applied. The absence of a mark indicated acceptable quality according to established standards. The section of this review form that deals directly with observed patient care primarily delivered by nurse aides was chosen as the quality of care indicator. The remaining areas of the report were eliminated from this study because they dealt with (1) patient records, an area subject to error and/or falsification, and which may not reflect the true state of the resident; or (2) were areas not directly under the jurisdiction of the nurse aide,

such as wheel chair or eye glass condition or charting. The data used for this study focused on physical care and consisted of observations about care for an individuals: hair, eyes, ears, skin, mouth, teeth, intubated orifices/tubing, body cleanliness, clothing cleanliness, need for shave, fingernails, feet, toenails, odor, edema, nutrition, hydration, contractures, decubiti care, turning/positioning - ROM, comfort/body alignment, maximum mobility, behavioral management, other. The data also included observation about the availability and condition of: linen, bed/mattress, bedside area, fresh water, call bell, side rails or restraints, provisions for privacy, other.

From these reviews the number of deficiencies were totaled for each facility and divided by the number of patients reviewed.

$$\text{deficiency ratio} = \frac{\text{number of deficiencies}}{\text{number of patients reviewed}}$$

The lower the number, the higher was the observed quality of physical care given by the nurse aides.

#### Analysis of Data

Following collection and tabulation, raw data was arranged in tables. The mean and standard deviations were calculated for the turnover rate, quality of care deficiency scores, size of population where nursing homes were located, and bed size. Three homes were not included in the sample. These homes were excluded because they had unusually high turnover rates (555%, 309%, and 150%). The mean turnover rate was 45% when these homes were included in the study, and

31% when excluded. The median was 24 when the 3 cases were included, and 24 when they were excluded. The degree to which turnover rates were related to observed quality of physical care, location, and size of facility were assessed by use of Pearson's r Correlation Coefficient (Polit & Hungler, 1978; Newmark, 1977). The t test was used to determine whether the turnover rates differed significantly between non-profit and proprietary nursing homes.

## CHAPTER III

### RESULTS AND DISCUSSION

#### Description of Subjects

Of the 56 homes in the study, 46 (82%) were proprietary; and 10 (18%) were not-for-profit. The population of the largest city within which a home resided was 370,000; and the population of the smallest town was 920. The nursing homes were of many sizes, the smallest being 18 beds, and the largest 199 beds. The average daily census was 63.

When the sample was compared to the homes not included in the study, no significant difference in size, census, or profit status was found (see Table 1). The average census of both the sample and the homes not in the sample was 63 (SD 31). Homes in the sample range from 18 to 199 and for the non-participating homes 20-120. Of the 30 homes that did not participate, 3 (10%) were not-for-profit compared to 10 (18%) in the sample. The 30 homes that did not qualify for inclusion in the study had higher deficiency scores (29 SD 12). When a t test was applied a significant difference was found ( $t = .91$ ) at  $p < .05$  level of significance. It would appear that homes with a better quality of physical care were more willing to enter the study.

#### Descriptive Findings of Major Variables

##### Quality of Care

Each of the 56 nursing homes in the study was assigned a mean quality of physical care deficiency rating following the computation of specific deficiencies found upon inspection by the Oregon Adult

Table 1: Characteristics of Participating and Non-participating  
Nursing Homes

	Participating (n = 56)	Non-participating (n = 30)
Nursing Home Size (census)		
Mean	63	63
Median	61	60
Standard Deviation	31	31
Range	18-199	20-120
Nursing Home Profit Status		
Proprietary	n = 46 (82%)	n = 27 (90%)
Not-for-profit	n = 10 (18%)	n = 3 (10%)
Deficiency Score		
Mean	8	29
Standard Deviation	6	12

and Family Services Resident Services Review Teams. The deficiencies counted were limited to observed, physical deficiencies of care. Institutional quality of care deficiency scores ranged from 0 to 24, with the lower score indicating a higher quality of care. The mean score for each patient was 8, with a standard deviation of 6. The median score was 6. An average of 40 patients were examined in each home. The average home had 18 citations, with a standard deviation of 7 for the patients examined. Quality of care deficiency scores for individual nursing homes may be found in Appendix C.

#### Nurse Aide Turnover

Nurse aide turnover rates ranged from 3% to 114%. The mean turnover rate was 31%, with a standard deviation of 79%. The median turnover rate was 24%. The majority of the homes, 53 (95%), reported turnover rates of less than 100%; 45 (80%) homes reported rates of less than 50%; 30 (54%) reported rates of less than 25%; and 13 (23%) reported turnover rates of less than 10%. The nursing homes exhibited lower turnover rates than the expected United States average of 75%, as reported by the United States Senate Subcommittee on Long-Term Care (1974). Turnover rates for individual nursing homes may be found in Appendix D.

#### Location

The population of the cities within which the nursing homes were located ranged from 920 to 370,000. The mean population was 255,405, with a standard deviation of 178,627. The median population was 15,150. Further analysis indicated that 12 (21%) of the nursing homes were located in communities with a population of 370,000; 2 (4%) with populations between 80,000 and 100,000; and



5 (8%) with populations between 20,000 and 40,000. Of the remaining 38 homes, 16 (29%) were located in communities with a population between 10,000 and 20,000; and 21 (36%) in communities of less than 10,000 people.

#### Size

Nursing home size, as indicated by the daily census, ranged from 18 to 199. The mean size was 63, with a standard deviation of 31. The median size was 61. Five (9%) of the homes had a daily census of more than 100; 23 (41%) were between 50 and 100; 24 (43%) were between 25 and 50; and 4 (8%) were of less than 25.

#### Profit Status

Non-profit homes constituted 10 (18%) of the homes in the study; while 46 proprietary homes made up the remaining 82%.

#### Test of Hypotheses

##### Nurse Aide Turnover and Quality of Patient Care

The first hypothesis stated that those nursing homes with a lower turnover rate would have a higher quality of physical care given to their patients. Such a relationship would be indicated by a positive correlation between high turnover rates, and high quality of care deficiency scores. The Pearson Product Moment Correlation obtained was .44 between nurse aide turnover and quality of patient care (see Figure 2). The value is above .273, the value needed for significance at  $p < .05$ . The first hypothesis was accepted.

##### Nurse Aide Turnover and Location

The second hypothesis stated that the nurse aide turnover rate would be lower in nursing homes located in smaller communities. Such a relationship would be indicated by a positive correlation

between higher turnover and homes located in larger communities (see Figure 3). The hypothesis was tested using Pearson Product Moment Correlation. Results of the test revealed an  $r$  of .19 between nurse aide turnover and nursing home location. The value was below .273, the value needed for significance at  $p \leq .05$ . The second hypothesis was not accepted.

#### Nurse Aide Turnover and Size

In the third hypothesis it was predicted that the nurse aide turnover rate would be lower in smaller nursing homes than in larger homes (see Figure 4). Such a relationship would be indicated by a positive correlation between higher nurse aide turnover rates and larger nursing homes. The hypothesis was tested using Pearson Product Moment Correlation. Results of the test revealed an  $r$  of .23, a value lower than .273, the value needed for significance at  $p \leq .05$ . This hypothesis was not accepted.

#### Nurse Aide Turnover and Profit Status

In the fourth hypothesis it was predicted that nurse aide turnover rates would be lower in non-profit nursing homes than in proprietary homes. This hypothesis was tested by means of the  $t$  test. Results of this test ( $t = 5.2$ ) indicate that the difference between the 14% turnover rate of the non-profit homes, and the 53% mean turnover rate of the proprietary homes, was statistically significant at the  $p \leq .05$  level (see Table 2). This hypothesis was accepted.

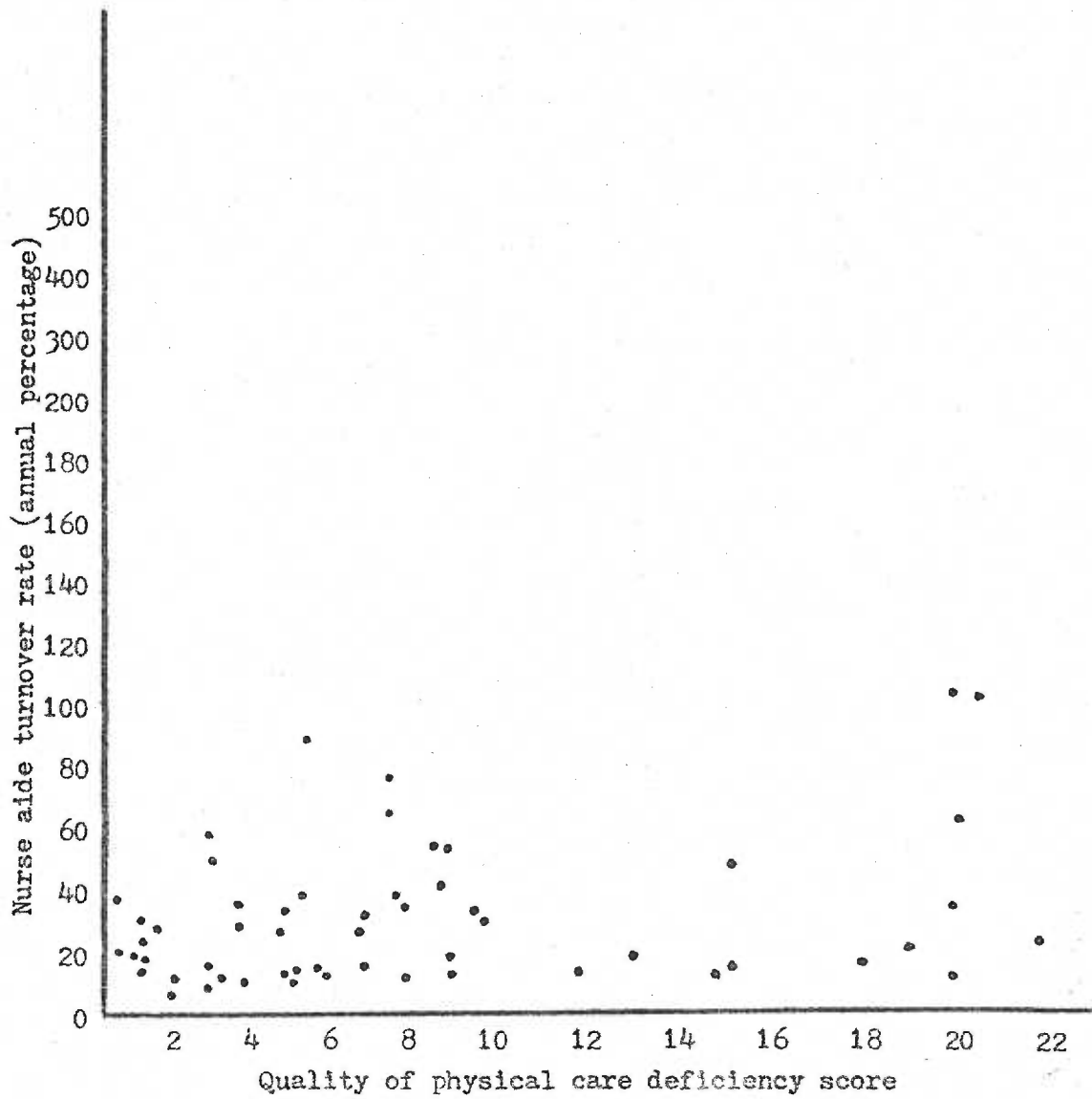


Figure 2: Nurse Aide Turnover and Quality of Physical Care Deficiency Scores

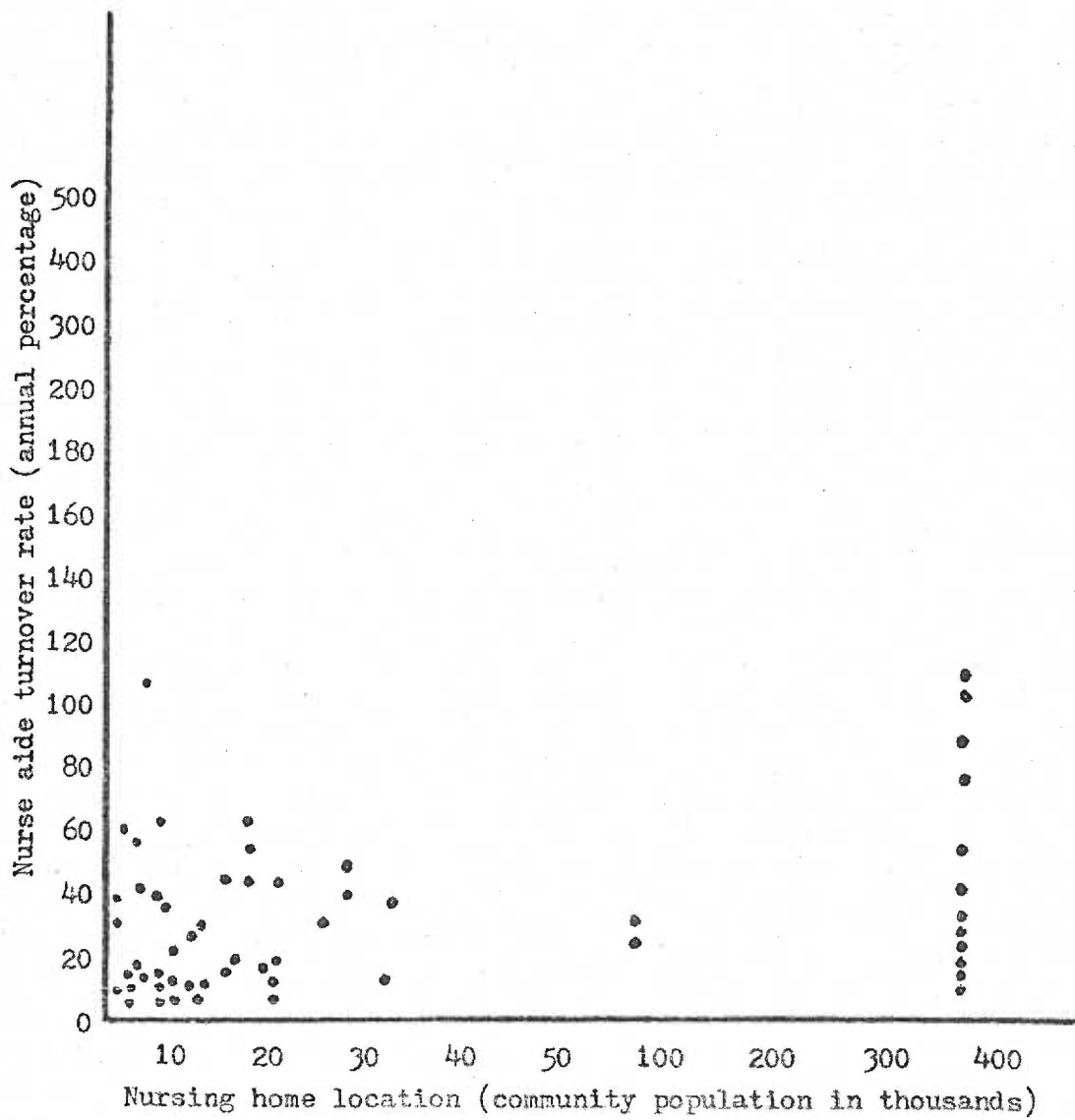


Figure 3: Nurse Aide Turnover and Location

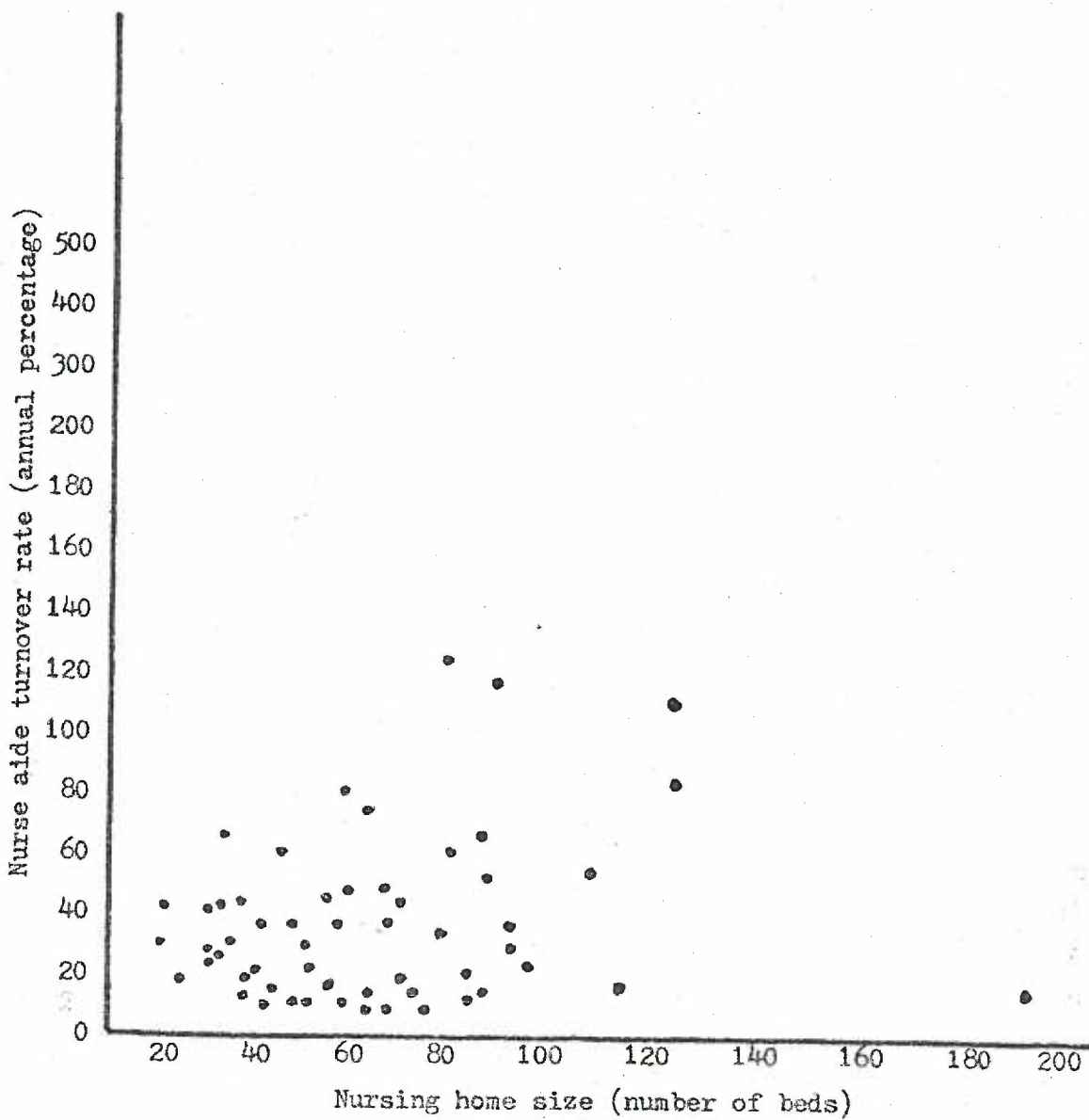


Table 2: T-test for Differences in Turnover between Profit and Not-for-profit Homes

	X	SD	df	t
Profit (n = 56)	53		55	5.2*
Non-profit (n = 30)	14			

\*P  $\leq$  .05

## CHAPTER IV

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

This study investigated the relationship between nurse aide turnover and the observed quality of physical patient care, nursing home location, nursing home size, and owner profit status. Fifty-six Oregon Intermediate Care Facilities, out of a potential of 89 were included in the study. Three homes were excluded due to their unusually high turnover rates. Each of the nursing homes was assigned a mean quality of care deficiency rating following the tabulation of observed physical care deficiencies found upon inspection by the Oregon Adult and Family Services Resident Services Review Team. Individual quality of care deficiency scores were based upon observations of patients receiving nurse aide care. A lower rating indicated that a higher quality of physical care was being given. Additional information concerning location, size, and profit status was also taken from the Resident Review Record.

Data analysis revealed the following:

- (1) Lower nurse aide turnover rates were significantly related to a higher quality of physical patient care.
- (2) Nurse aide turnover rates were not significantly lower in nursing homes located in smaller communities than in nursing homes located in larger communities.
- (3) The nurse aide turnover rate was not significantly lower in nursing homes with lower census, than in homes with higher census.
- (4) The nurse aide turnover rate was significantly lower in non-profit nursing homes than in proprietary homes.

### Limitations of Study

Several weaknesses are inherent in this type of study due to the non-experimental design. The use of the non-experimental design, in which data is collected on existing conditions, without control over extraneous variables, or introduction of a change and observation of the effect, does not enable one to establish a cause/effect relationship. Numerous extraneous and uncontrolled for variables (eg: change in the ownership of a home, personnel policies, or benefits) may have interfered with the results of this study, thereby limiting interpretation of the findings.

Lack of control over the selection of which homes would or would not participate in the study was another weakness. This self selection resulted in an uneven representation of homes with lower citation scores participating in the study (mean 8), than those homes not-participating in the study (mean 29). This uneven participation of homes with lower deficiency scores may have skewed the results. As may be seen in Figure 2, only a few deficiency scores occurred in the middle range (12-16), and this may also have influenced the results.

There were also limitations in the measures. The lack of control over the collection and reporting of nurse aide turnover data, and the unreliable measure for nurse aide turnover may also have resulted in inaccuracies. The quality of the personal care tool used in this survey addressed only a limited number of aspects of patient care; and this instrument may not be an adequate measure of the care affected by the turnover of nurse aides in nursing homes. Other aspects of care, which were not included in the



study (social, psychological, and religious) may be the areas of patient care to suffer the most due to nurse aide turnover. Interrater reliability in the use of the instrument was not established, and may also be viewed as a limitation of the study.

There are numerous potential limitations to this study; the extent to which they are limitations is not known. It is surprising that given these limitations, that such a strong relationship could be found.

The applicability of the results of this study is limited, and may not be assumed to apply to populations other than the one studied.

The major strength of the study is its uniqueness. Nursing home nurse aide turnover is a subject that has been written about frequently, but rarely researched. This study, by investigating the relationship between nurse aide turnover and quality of physical care given to patients, nursing home location, owner profit status, and nursing home size, has contributed to the available information about the subject.

#### Discussion of Nurse Aide Turnover and Quality

A significant relationship between nurse aide turnover and the quality of personal (physical) care given by nurse aides was found in this study. The results ( $r^2 = .19$ ) explained 19% of the variance, and corroborated Melbin and Taubs (1966) belief that one of the costs of high personnel turnover is the quality of the product, or kind of care and treatment provided for patients. This decreased patient care may be a result of the burden of on-the-ward training for new nurse aides by other nurse aides.

If the patient demands are light, then the time may be spared without sacrificing quality of care. If the treatment is heavy, time spent by other personnel in on-the-ward orientation of a newcomer entails a loss of service to patients. This substandard quality and quantity of care provided during the employee orientation period may continue after orientation is completed. Loss of competent personnel may result in inexperienced nurse aides caring for patients. The limitations of the design used in this study make it impossible to identify specific areas of care that may suffer due to staff turnover.

Other factors besides nurse aide turnover are related to the quality of physical care provided by nurse aides in nursing homes (81% of the variance in quality was not "explained"). These factors may include patient mix (type of patients being cared for), nurse aide salaries, institutional hiring practices, length of orientation time, job expectations and attitudes of nurse aides. The reader should refer to the literature review for a more detailed discussion of these factors.

#### The Relationship between Nurse Aide Turnover and Size of Community in which the Home is Located

The absence of a significant relationship between nurse aide turnover and nursing home location did not corroborate the findings of Longest and Clawson (1974) who found that facilities that are located in the larger communities, experience more turnover than those located in smaller communities. This more recent finding may have been due, partially, to the economy and job market. As inflation and unemployment have risen, more women have entered the

the work force, and some have become nurse aides. Many have required that income to survive, and may have remained working in a facility and in a location that they might otherwise have left.

#### The Relationship between Nurse Aide Turnover and Size of Nursing Home

Study results showed that a significant relationship did not exist between nurse aide turnover and the size of the nursing home. This finding did not concur with that of Longest and Clawson (1974) who found that the larger institutions experienced higher employee turnover. This finding may be due to the presence of factors other than size that determine whether a nurse aide will leave a facility. These factors may include wages, benefits and working conditions. If an institution pays high wages, has good benefits, and nurse aides are happy with the conditions (environment, workload, hours) of their employment, they may remain with an institution, despite its large size.

#### The Relationship between Nurse Aide Turnover and Nursing Home Profit

##### Status

The research results in this study showed that significant relationships exist between nurse aide turnover and profit status of nursing homes. The findings revealed that the turnover rate for non-profit homes was 14%, and that the turnover rate for proprietary homes was 53% ( $t = 5.2$ ). One possible explanation for this difference may be that the non-profit homes are smaller. The mean census of the non-profit homes in this study was 46; and the mean census of the proprietary homes was 63. Another explanation may be that non-profit homes have higher expenditures for diets, cleaning, and laundry (Kaeser, 1981). Higher expenditure would

indicate that not-for-profit homes may serve more attractive food, may physically be cleaner, and may provide newer, and nicer linen supplies. These factors may give the nurse aide a feeling of working in a better institution and may keep her from seeking employment elsewhere. A final explanation for the turnover difference between non-profit and proprietary homes may be due to the difference in mean hours on duty per patient day. Kaesers (1981) study found that non-profit homes had 35% to 55% more Registered Nurse time, 23% to 47% more Licensed Practical Nurse time, and 9% to 23% more nurse aide time. This study indicated that there is more staff, hence less of an individual work load in non-profit homes. This would allow more time to be spent with each resident. This increase in licensed nurse time in non-profit homes may also allow for increased nurse supervision of the care given by nurse aides. This may result in the nurse aides giving better care.

#### Implications for Nursing

Few studies have been conducted that investigate the relationship between nurse aide turnover and the quality of patient care provided in nursing homes by nurse aides. The current literature provides evidence to support the idea that there is such a relationship; and the results of this research corroborate that by indicating that nurse aide turnover and the quality of physical care given to nursing home residents is related.

The primary implication for nursing is recognizing that a relationship appears to exist between some aspects of patient care given in nursing homes by nurse aides, and nurse aide turnover. The knowledge that this relationship exists, should then serve to

make nurses more aware of nurse aide turnover with its possible relationships to the physical care given to the patients. Should a problem then develop, in either of these areas, the nurse would recognize that the two may be related in some manner and could then explore the relationship further. A second implication for nursing is recognizing factors other than nurse aide turnover that contribute to the quality of the physical care given to patients. Nurses employed by nursing homes may then be involved in the identification of those factors and in the discovery of their relationship to the quality of patient care.

#### Recommendations for Further Study

Current studies (McCloskey, 1974; Wieland, 1969; Longest & Clawson, 1974; Kasteler et al., 1979) indicate that within organizations, relationships exist between a number of variables and employee turnover. This study found a relationship between nurse aide turnover and the quality of physical care given to patients by nurse aides in nursing homes. It also found a relationship between nurse aide turnover and the profit status of a nursing home. It is recommended that several areas be studied further. Further comparisons of proprietary and not-for-profit nursing homes should be done to determine specific differences that contribute to or inhibit nurse aide turnover. Studies of not-for-profit homes could be conducted to determine whether there is a difference in nurse aide turnover between the various types of not-for-profit homes (eg: on site owners, small chains, large chains). Variables that need further exploration include: ownership patterns, religious affiliation, administrator and Director of Nursing characteristics,

physical layout of the home, characteristics of the nurse aides, characteristics of the patients, community perception of the home, etc. Studies to determine what actually constitutes good quality of patient care in nursing homes need to be done. There is also a need to determine how to accurately measure quality of patient care components. Since the results of this study indicate that nurse aide turnover and the quality of physical care given by nurse aides may be related to a number of other factors, a study to determine these unknown factors should also be undertaken. In conclusion, a study of nurse aide turnover might include a study to determine accurate nurse aide turnover rates; or a study of how to control nurse aide turnover in nursing homes. As the results of this research indicate a significant relationship between nurse aide turnover and the quality of physical care given by nurse aides, information on how to control turnover would also be useful.

#### REFERENCES

Calhoon, R.P. Managing personnel. New York: Harper & Row Publishers, 1963.

Dane, J.H. A model for determining turnover costs. Hospitals, 1972, 46, 65-69.

Kasteler, J.M., Ford, M.H., White, M.A. & Carruth, M.L. Personnel turnover - a major problem for nursing homes. Nursing Homes, 1979, 20-25.

Levine, E. Turnover among nursing personnel in general hospitals. Hospitals, 1957, 31, 50-53.

Levine, E. & Wright, S. New ways to measure personnel turnover in hospitals. Hospitals, 1957, 31, 38-42.

Longest, B.B. & Clawson, D.E. The effect of selected factors on hospital turnover rates. Personnel Journal, 1974, 14, 30-34.

McCloskey, J. Influence of rewards and incentives on staff nurse turnover rate. Nursing Research, 1974, 23, 239-247.

Melbin, M. & Taub, D.L. The high cost of replacing a nurse. Hospitals, 1966, 40, 113-120.

Meyers, R. Methods of determining turnover costs. Hospitals, 1955, 29, 66-68.

Mobley, W.H., Griffeth, R.W., Hand, H.H. & Meglino, B.M. Review and conceptual analysis of the employee turnover process. Psychological Bulletin, 1979, 86, 493-522.

Newmark, J. Statistics and probability in modern life. New York: Holt, Rinehart & Winston, 1977.

• Pecarchik, R. & Nelson, B.H. Employee turnover in nursing homes. American Journal of Nursing, 1973, 73, 289-290.

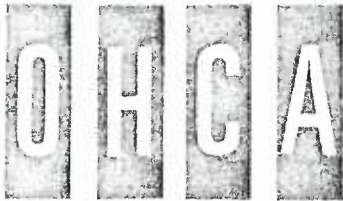
- Peskin, D.B. The doomsday job - the behavioral anatomy of turnover.  
New York: AMACOM, 1973.
- Pigors, P. & Myers, C.A. Personnel Administration. New York:  
McGraw Hill Book Company, 1969.
- Polit, D. & Hungler, B. Nursing research: principles and methods.  
Philadelphia: J.B. Lippincott Company, 1978.
- Report of the joint interim task force on nursing assistants.  
Oregon: State of Oregon, June, 1978.
- Report of the joint interim task force on nursing homes. Oregon:  
State of Oregon, June, 1978.
- Samual, P.J. Labor turnover - towards a solution. London:  
Institute of Personnel Management, 1969.
- Schwartz, A.N. Staff development and morale building in nursing  
homes. The Gerontologist, 1974, 13, 50-53.
- Seybolt, J.W., Pavett, C. & Walker, D.D. Turnover among nurses:  
it can be managed. Journal of Nursing Administration, 1979,  
15, 17-20.
- Wieland, G.F. Studying and measuring nursing turnover. International  
Journal of Nursing Studies, 1969, 6, 61-70.



**APPENDICES**

APPENDIX A

Letter of Introduction



# Oregon Health Care Association

JOHN E. RICHARD  
*President*

801 N. E. 28th AVENUE • PORTLAND, OREGON 97232 • 503/233-5373

October 10, 1980

To: OHCA Nursing Homes

This will introduce Ms. Alice Anderson, R.N., a graduate student of the School of Nursing, University of Oregon. Ms. Anderson is currently undertaking her Masters of Nursing degree thesis.

Generally, the purpose of her study is to secure information relating to client characteristics and nurse aide turnover in Oregon nursing homes.

Ms. Anderson will require the following information to complete her study (see attached).

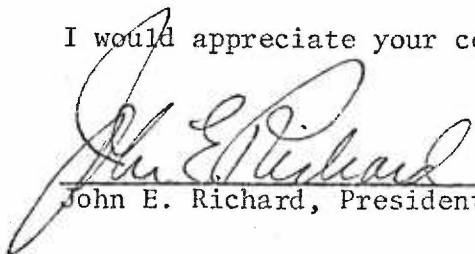
- 1) total number of terminations, voluntary or involuntary, of full time nurse aides during the months of August 1978, October 1978, January 1979, April 1979,
- 2) total number of terminations, voluntary or involuntary, of part-time nurse aides during the months of August 1978, October 1978, January 1979, April 1979,
- 3) percent of clients under 65 years of age, between 65 and 75 years of age, over 75 years of age,
- 4) percent of clients requiring help feeding themselves,
- 5) percent of clients who are male.

Ms. Anderson plans to visit any cooperating home and do the necessary research of terminations and patient characteristics.

Complete anonymity for individual patients and nursing homes is assured. A copy of the final thesis will be available to all homes participating in the study.

I would like to assure you that in my legal opinion this is a legitimate research project. I cannot see any opportunity for liability to the nursing home or to you as administrator in the release of the information under these controlled circumstances.

I would appreciate your cooperation with Ms. Anderson in this study.

  
John E. Richard, President

APPENDIX B

Resident Services Review Instrument

DEPT. OF PERSONNEL  
PLACEMENT AND MANPOWER RESOURCES  
SOCIAL & FAMILY SERVICES DIVISION

SUP-ICF RSR Report

To: Health & Social Services Section

From: Resident Services Review  
Utilization Control Unit, Health & Social Services Section  
Adult & Family Services Division

The attached report represents an assessment of compliance by Skilled Nursing Facilities and Intermediate Care Facilities in accordance with Sections 1902(a)(26) and (31) of the Social Security Act and 45CFR 250.23 and 250.24.

Facility \_\_\_\_\_ Date of Review \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Branch \_\_\_\_\_  
Administrator \_\_\_\_\_  
Owner \_\_\_\_\_  
Director of Nursing Services \_\_\_\_\_  
Certified for: \_\_\_\_\_ Skilled beds; \_\_\_\_\_ ICF beds.  
Title XIX Occupants: \_\_\_\_\_ Skilled; \_\_\_\_\_ ICF; \_\_\_\_\_ ICF-Home for Aged.  
Title XIX Residents reviewed: \_\_\_\_\_ Skilled; \_\_\_\_\_ ICF; \_\_\_\_\_ ICF-Home for Aged.  
Participants in this review:  
Physician: \_\_\_\_\_  
Registered Nurses: \_\_\_\_\_ Reviewed: \_\_\_\_\_ SRP-ICF RSR Supervisor  
\_\_\_\_\_ Medical Review Physician, Utilization Control Unit  
Approved: \_\_\_\_\_  
Social Workers: \_\_\_\_\_ Health & Social Services Section

## P R E F A C E

The purpose of this report is to provide an evaluation of the quality of care - medical nursing, social services and activities - provided to the residents of a facility.

The report is divided into three sections. Section I contains a glossary of terms and interpretations, that is "keyed" to paragraph numbers in the report, and which is designed to outline expectations in the areas concerned. Section II contains items that are applicable to each resident's care and records, and to certain facility policies and programs. Section III contains comments clarifying or providing more detailed information, as needed, on items contained in Section II, and comments or suggestions of a general nature.

Although this review is based upon Federal requirements, certain elements are evaluated against State Health Division regulations and Adult and Family Services Division regulations and guides where they are either more stringent than the Federal requirements or are solely State requirements. Occasionally, comments or suggestions which are seen as good practice and in the resident's best interests will be included and should be considered on that basis. These comments or suggestions will be appropriately noted as such.

"X" marks on this report indicate that a discrepancy exists and that there is a need for corrective action, either by the facility on its own part or by the facility contacting the appropriate attending physician, Adult and Family Services Division branch office or other responsible personnel or agencies. Follow-up action responsibility is indicated on the report as follows: If the number or letter for the item is circled, it will be the responsibility of the Adult and Family Services Division branch office; if it is underscored, it will be the responsibility of the State Health Division. In a few instances an item will be both circled and underscored, which means that both AFS and SHD will follow-up on that portion of the item that is of concern to them.

It is the intent of the Adult and Family Services Division that this report, besides fulfilling a Federal requirement, will serve as a useful management and training tool for the facility management and staff.

RESIDENT ASSESSMENT REPORT

The clarity of terms and interpretations is designed to outline expectations and to provide clarification of certain items in Section II of the report. The items are "keyed" to paragraph numbers in the report.

Abbreviations: Every effort has been made to keep abbreviations to a minimum. The few that are used are as follows:

- |      |                              |      |   |
|------|------------------------------|------|---|
| A    | - Acceptable                 | ROM  | - Range of Motion                                 |
| AFS  | - Adult & Family Services    | RSR  | - Resident Service Review                         |
| AC   | - Alternate Care             | S    | - Skilled LOC                                     |
| D    | - Daily                      | SED  | - Sedatives                                       |
| H    | - Home for the Aged LOC      | SND  | - State Health Division                           |
| I    | - Intermediate LOC           | SNF  | - Skilled Nursing Facility                        |
| ICF  | - Intermediate Care Facility | ST   | - Stabilized                                      |
| L    | - Less than daily            | tran | - Tranquilizer                                    |
| LCC  | - Level of Care              | "x"  | - Corrective Action Required                      |
| Marc | - Narcotic                   | ①    | - Follow-up by AFS Branch office (Circle)         |
|      |                              | 21   | - Follow-up by State Health Division (Underscore) |

Note: Whenever the term "other" is in the report, and whenever there is an "x" on that line, an explanation of the problem will be found in Section II and it will be "keyed" to the appropriate paragraph number.

RESIDENT ASSESSMENT

A. Documentation of Overall Plans of Care. There are four components of a resident's overall plan of care. They are: Health/Nursing Care; Rehabilitation; Social Components; and Activities Program. All must be adequately documented. If any component is thought to be not indicated, then that fact and the reasons therefore must be documented.

1. Health/Nursing Care Plan

- a. assessment - nursing needs of resident based on available data from transfer form, history and physical, physician's orders, nursing assessment, interview of resident/family, etc.
- b. goals (long and short term) - from available data, develop realistic long and short term achievable/measurable goals for the resident.
- c. approaches to goals - individualized methods of achievement of goals.
- d. reflect maximum potential - documentation and assessment should reflect resident's maximum mental and physical potential.
- e. responsible service/services designated - services may include nursing, dietary, physical therapy, occupational therapy, etc., that are required to achieve the goals.
- f. updated - reviewed every 30 days with date of review indicated.

2. Rehabilitation plan. Same as above for the Health/Nursing Care Plan, except that the rehabilitation needs of the resident should be addressed. Areas to be considered could include physical therapy, Activities of Daily Living training, reality orientation, etc.

3. Social Components: Federal and State regulations in this area are relatively vague. While the three components are essential and required, their content is not clearly stated. Accordingly, we have endeavored in the following to outline what is considered to be "good practice", or what a responsible facility or staff member, who is sincerely concerned about the total welfare and care of a resident, would do.

a. social history:

The social history should contain enough information in the following areas to make an assessment of present or potential need for social services; living situation immediately prior to admission; reasons for admission; and alternatives explored; resident's feeling(s) about admission as demonstrated by his/her behavior and attitudes; significant relationships; previous and present vocation(s), interest(s), avocation(s), and skills; available resources, economic and other (see Social Assessment below); significant and relevant life-style factors.

b. social assessment:

The social assessment emerges from the social history. It should summarize the resident's resources and strengths as well as weaknesses and vulnerabilities. From this summary, present social service need(s) and prognosis should be identified. The areas of vulnerability will provide the basis for determining need for service, while the areas of strength will suggest possible approaches for corrective or preventative action in problem areas.

c. social plan:

The plan should be based on the social assessment and should include a statement of goals and prognosis for same. It should make specific recommendations for actions to achieve goals, and should designate who is responsible for what actions. Assets identified should be utilized to the fullest extent in the implementation of the plan. Plan must be signed and dated; goals, objectives, methods should be individualized, with anticipated date of accomplishment.

Social Work reviewers will not accept statements such as, "no social needs observed at this time", because "social needs" are often found to refer only to prosthesis(es), dentures, clothing, finances, etc. Statements such as, "no planned contact by social service designed at this time", would be acceptable, only if there is additional documentation that no current social-emotional problems exist.

(1) Incorporated in overall plan:

Record should clearly document social plan of care and it should be congruent with overall plan of care.



(2) Implemented:

Record should document who is responsible, when each element of the plan is accomplished, and the results noted.

(3) Reviewed periodically:

There should be a clear periodic summary of goals accomplished, problems encountered if any, and changes which would result in modification of original goals. The altered goals should be stated clearly. "No change" or "continue plan" should be documented as to why.

4. Activities Programming:

a. Activities assessment:

The purpose of the activities assessment is to provide a basis for developing an individualized activity plan. At a minimum, it should describe the interests, activities and occupations which have been meaningful and part of the resident's life prior to nursing home admission. In addition it should include an evaluation of present impairment and an estimation of current potential.

b. Activities plan:

The individualized activity plan will be based on the assessment, in that it will reflect the interests and activities identified by the resident and/or family as meaningful. Its purpose is to restore and maintain the resident's mental and emotional functioning at an optimum level. It should reflect resident's participation in planning to the extent feasible.

1. Individualized goals:

The plan should contain short and long range goals that are individualized and measurable.

2. Appropriate approaches:

The plan should suggest specific and appropriate means and programs to be used to carry out the individualized goals, and should name personnel to be involved.

3. Incorporated in overall plan:

Chart should clearly document activities plan congruent with overall plan of care.

4. Implemented:

There should be clear documentation that the resident is appropriately involved in activities in accordance with the plan.

5. Reviewed quarterly:

The periodic (at least quarterly) review should include a summary of progress/regression in relation to goals. It should reflect resident's attitude toward the program and should summarize problems encountered in implementing the planning. When goals are revised, the reasons for change should be indicated.

B. Documentation of Physician's Services.

5. Transfer Data:

- a. content - only necessary if transferred from another facility; name of transferring facility; identifying data; current diagnoses at time of transfer; physician's orders at time of transfer; condition of resident; pertinent data related to ongoing treatment (i.e. x-rays, lab work, etc.)

6. History/Medical Summary:

- a. content - medical evaluation updated to time of admission.

7. Physical Examination:

- a. content - medical evaluation based on physical exam. Admission physical exam must be done within 48 hours of admission, or within 5 days prior to admission.

8. Diagnoses:

- a. content/updated - includes all diagnoses to support current orders and medical findings.

9. Medication Orders:

- a. specific - to include name of medication, dosage, frequency, and route of administration. P.R.N. medications should include basis for administration.

10. Treatment Orders:

- a. specific - to include type, area, duration, and frequency of treatment. P.R.N. treatments should include basis for administration.

11. Diet:

- a. ordered by physician - all diets are to be ordered by the attending physician.

12. Restraint/Safety Measure Orders:

a. specified - basis for use, type of restraint and duration to be used.

13. thru 15. - Self Explanatory.

16. Recertification of Need for Care - can be almost any type of an entry by a physician that indicates that continued care is required, e.g., a drug or treatment order, a change in a drug or treatment order, laboratory or X-ray order, a diet order, or a simple statement, "continue care" or "no change in care", etc.

C. Documentation of Nursing and Supportive Services.

17. Medications:

a. reviewed monthly - the review is by a Registered Nurse.

18. Self Explanatory.

19. Restraints/Safety Measures: includes all types of restraints, including being restrained in a Geri-chair or wheelchair.

20. Nursing Notes:

a. reflect health-rehab, plan of care - pertinent entries reflecting assessment of progress or change in relation to resident's health-rehab, plan of care.

b. summaries, as required - in SNF's reviewer will review for pertinent and current summaries in accordance with the policy of the facility for such summaries, e.g., every shift, once a day, etc.; in ICF's they are required weekly, as a minimum, by licensed nursing personnel. All entries should be dated and signed with identifying title, and reflect the resident's plan of care.

21. New Development/Special Incident: any marked deviation in resident's condition or unusual occurrence or incident, including accidents. A documentation in record should reflect action taken, emergency or otherwise, if applicable. Subsequent entries should reflect appropriate action taken to resolve the problem.

22. Diet:

All documentation of diet, in Nursing Care Plan, or nursing notes should reflect the current physician's order.

23. thru 27. - Self Explanatory.

28. RSR recommendation for Level of Care.
29. thru 30. - These are items for Information only.
31. Social Services - Individual  
Personal Fund Accounting:
- a. AFS Form 713 - separate form for each resident whose funds are being handled by facility. Instructions for Form 713 must be followed and current posting up to at least 30 days prior to RSR review. Review may go back to date of last review. Receipts for expenditures, if appropriate, must be available. Withdrawals by staff/resident/relative and purpose for withdrawal must be signed.
  - b. Appropriate charges - RSR reviewer reviews for compliance with Rule 461-17-140, 150, and 160 AFS Title XIX Long Term Care Facility Services Guide.
  - c. Quarterly accounting - evidence of quarterly accounting to resident or appropriate representative will be noted.
  - d. Delegation/Acceptance forms - required in those instances where someone other than the resident is handling the resident's personal incidental funds. An Adult Service Worker may not be the delegate.
  - e. Interest bearing accounts - required in those instances wherein the resident's personal incidental fund account balance reaches \$75.00, or more.
32. Resident's Needs/Concerns Met - if a need or problem appears evident to reviewer through resident interview or chart review, and if no documentation exists that need/problem has been recognized, reviewer will indicate this by an "X", plus a brief explanation in Section II.
- The following are examples of the kinds of problems that a resident may have which require action or intervention by the facility staff or other appropriate personnel:
- a. feelings about placement/services
  - b. feelings about illness and aging
  - c. feelings about loneliness/isolation
  - d. financial problems
  - e. discharge or transfer
  - f. interpersonal problems with relatives/staff/residents
  - g. need for volunteer
  - h. need for other community resources
33. Residents' Rights Statement - statement should be clearly labeled with resident's name and date. If resident is unable to sign, the next acceptable signature is that of a relative/guardian or Adult Service Worker.

34. Discharge Plan (SKILLED ONLY) - Plan must include goals, person(s) responsible for effecting, alternative living arrangements, and should reflect a team approach. If alternative planning seems impossible, documentation should indicate reason.

35. Humanitarian Concern Displayed - all reviewers will be alert towards observing actions or conduct on the part of the facility staff that give evidence of a lack of compassion for, or consideration of, the residents, their needs, and their rights. This may vary from physical or verbal abuse to inattention or an act of omission.

36. Residents Satisfaction with Facility/Staff - all reviewers will be alert by both observation and interview to any complaints that residents may express to the reviewer.

NOTE: Items 37 and 38 are highly sensitive areas. Reviewers have been instructed to carefully evaluate any data they observe or hear on these items prior to reporting a discrepancy. Also, if a discrepancy is reported, complete details, including the name or names of the resident(s) or staff member(s) involved or registering a complaint, will be explained in Section II of the report. Exception to this policy may be made when a number of residents register the same complaint, e.g., not enough meat in diet, etc. In the latter case only the total number of residents complaining will be included.

37. Management of Personal Funds - Reviewer will ascertain that Personal Incidental Funds handled by the facility conform to the rules and regulations.

38. The item will be explained in the comment section of the report.











SEC. I RESIDENT ASSESSMENT (Cont)

	<p>C. DOCUMENTATION OF NURSING AND SUPPORTIVE SERVICES</p> <p>22. NURSING NOTES:</p> <p>a. reflect health-rehab plan of care</p> <p>b. summaries, as required</p> <p>c. signed</p> <p>d. dated</p> <p>21. NEW DEVELOPMENT/SPECIAL INCIDENT:</p> <p>a. action taken</p> <p>b. follow-up</p> <p>22. DIET:</p> <p>a. provided as ordered</p> <p>23. LABORATORY AND X-RAY:</p> <p>a. physician's order</p> <p>b. reports in chart</p> <p>24. TUBERCULOSIS CONTROL REQUIREMENTS:</p> <p>a. admission test, x-ray, or physician's statement</p> <p>b. follow-up of positive skin test or positive x-ray</p>
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APPENDIX C

Nursing Home Quality of Care Scores

## NURSING HOME QUALITY OF CARE SCORES

<u>Nursing Homes</u>	<u>QOC Score</u>	<u>Nursing Homes</u>	<u>QUO Score</u>
1	5	29	3
2	0	30	1
3	2	31	4
4	22	32	10
5	15	33	21
6	0	34	20
7	4	35	15
8	6	36	1
9	18	37	9
10	3	38	20
11	2	39	8
12	10	40	1
13	1	41	7
14	5	42	3
15	5	43	12
16	19	44	9
17	1	45	7
18	1	46	9
19	8	47	3
20	6	48	8
21	6	49	9
22	4	50	9
23	7	51	8
24	8	52	15
25	5	53	3
26	20	54	24
27	13	55	5
28	5	56	4

A lower score indicates higher quality of care

APPENDIX D

Nurse Aide Turnover Rates



## NURSE AIDE TURNOVER RATES

<u>Nursing Home</u>	<u>TO Rate</u>	<u>Nursing Home</u>	<u>TO Rate</u>
1	6%	29	45%
2	18%	30	18%
3	3%	31	39%
4	24%	32	27%
5	12%	33	105%
6	36%	34	60%
7	9%	35	42%
8	9%	36	30%
9	18%	37	57%
10	6%	38	36%
11	6%	39	39%
12	30%	40	21%
13	36%	41	24%
14	24%	42	9%
15	30%	43	12%
16	15%	44	15%
17	24%	45	15%
18	12%	46	39%
19	12%	47	57%
20	84%	48	60%
21	12%	49	54%
22	30%	50	6%
23	75%	51	39%
24	6%	52	9%
25	6%	53	9%
26	114%	54	102%
27	18%	55	39%
28	9%	56	30%

AN ABSTRACT OF THE THESIS OF

Alice L. Anderson

For the MASTER OF NURSING

Title: NURSE AIDE TURNOVER AS RELATED TO QUALITY OF PATIENT CARE,  
LOCATION, PROFIT STATUS, AND SIZE OF NURSING HOME

Approved: \_\_\_\_\_

Linda Kaeser, R.N., M.S.W., Thesis Advisor

The purpose of this study was to investigate the relationship between nurse aide turnover and the quality of patient care, size, location, and profit status of nursing homes.

Criteria for inclusion in the study was established. Fifty-nine of the 89 eligible nursing homes agreed to participate in the study.

To determine nurse aide turnover rates, nursing home administrators were contacted and asked to provide figures. These were computed via a standard formula and expressed as percentages.

The quality of care score was computed for each facility from information taken from data collected by the Oregon Adult and Family Services Resident Services Review Team during the period July 1, 1978 through July 30, 1979. A lower score indicated a higher quality of care.

Additional data, location (population), size (census), and profit status was collected to explore the relationship between

each variable and nurse aide turnover.

Four hypotheses were formulated as follows: First, those institutions with lower nurse aide turnover rates would have a higher quality of patient care. Second, the nurse aide turnover rate would be lower in nursing homes located in smaller communities than in nursing homes located in larger communities. Third, the nurse aide turnover rate is lower in nursing homes with fewer beds than in homes with a greater number of beds. Fourth, the nurse aide turnover rate is lower in non-profit nursing homes than in proprietary homes. Hypotheses #1 and 4 were accepted; and hypotheses 2 and 3 were rejected.

The conclusions are that this study found a relationship between nurse aide turnover and quality of patient care and nursing home profit status. This study did not find a relationship between nurse aide turnover and nursing home location and size.