

Personnel Time in Nursing Homes of Washington State

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THE PLIGHT of many older citizens has created a phenomenal interest in the role of the nursing home in the care of the sick and the aged. This interest has been fanned by the rising cost of long-term hospitalization, advances in medical care and rehabilitation, and changing cultural patterns and age distribution of the population. Official health and welfare agencies are devoting more time and attention to nursing homes. The embarrassing lack of information about present practices in these homes, however, has been a severe handicap in planning construction and licensing programs.

A national inventory in 1954 reported that Washington had 3.6 beds per 1,000 population in nursing homes providing skilled nursing care, or nearly 40 beds per 1,000 population over 65 years of age (1). These rates are higher than the rates for any other State. Washington was the only State in 1954 having more nursing home beds (8,964) than general hospital beds (8,423).

In 1951 a nursing home licensing law was enacted by the State legislature, and in that same year rules, regulations, and standards were adopted by the Washington State Board of

Health (2). A nursing home is defined in the law as "any home, place or institution which operates or maintains facilities providing convalescent or chronic care, or both, for a period in excess of 24 consecutive hours for three or more patients not related by blood or marriage to the operator, who by reason of illness or infirmity are unable properly to care for themselves."

The nursing home licensing law is administered jointly by the State department of health and 17 of the 37 local health departments. Public health nurses and sanitarians, under the direction of the local health officer, visit homes to assist and consult with the operator and to enforce the law and the rules and regulations. Where the local health department staff is small, personnel from the State department of health work directly with the nursing homes. In other localities, a State team consisting of a nurse and a sanitarian works with local health department staffs and arranges for additional consultant services in architecture, nutrition, or management, as needed. During 1955 there was an average of 4 public health nursing visits and 5 sanitarian visits to each home by State or local personnel.

The present study of personnel in nursing homes in Washington, undertaken in 1956, had three objectives:

1. To collect and analyze data on the number and kinds of personnel employed in the various types of nursing homes.

2. To develop from the analysis staffing guides and other related material for the various sizes and types of homes. Such guides can be used by public health nurses and nursing

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Table 1. Washington State Department of Public Assistance requirements for skilled nursing personnel in nursing homes, by shift, and monthly rate of payment for patient care, 1956 ¹

Type of home	Shift (7 days per week)			Monthly rate paid
	Day	Evening	Night	
Group I-----	One RN-----	One RN-----	One LPN-----	\$180
Group II-----	One RN-----	One LPN-----	One LPN-----	145
Group III-----	One RN or one LPN-----	None-----	None-----	115
Group IV-----	One LPN-----	None-----	None-----	90

¹ In addition to the skilled nursing personnel listed, sufficient additional personnel to care adequately for the type and number of patients in the home are required.

NOTE: RN=registered nurse; LPN=licensed practical nurse.

home operators in interpreting the following section of the Laws, Rules, Regulations, and Standards, which applies to all nursing homes: "The nursing service in the home shall be the responsibility of a person employed full time as a registered nurse or a licensed practical nurse, and who has had at least 2 years' experience. Additional personnel shall be employed when the size of the service requires it, in order to give adequate care to patients."

3. To provide data that can be used to compare nursing home practice in the State of Washington with that in other States.

Collection of Data

Every year, as part of the application for renewal of license, due July 1, each nursing home must complete a weekly employee work schedule. Reported on this form are identifying data on the home, names of all employees and of the operator, hours and time of work, and type of position held by each employee, together with the license number of each registered nurse and licensed practical nurse. Included on the application for renewal are data on bed capacity, number of patients, type of home, and average daily census. From forms submitted in 1956, covering a 1-week period in May of that year, data were obtained for the study. With the assistance of the public health statistics section of the State department of health, the information was coded, punched on tabulating cards, and summarized.

Since the data were required for renewal of the nursing home license, information was obtained on all nursing homes. Similar reports

have been required for the past 6 years, and frequently the data have been verified during regular public health nursing visits to the homes. For this reason, the data collected appeared to be more complete and accurate than would be expected from a questionnaire. The reporting of licensed nursing personnel is believed to be reliable because the license number for each nurse had to be included and could be verified. However, the work classification for other types of personnel, particularly in small homes, was difficult to do and probably not too accurate.

In May 1956 there were 9,680 nursing home beds in the State. The 558 beds located in nursing home units in general hospitals were excluded from the study. Information was collected from 300 licensed nursing homes and homes for the aged, which provided 9,122 beds for patient care.

Types of Homes and Patients

The Washington State Department of Public Assistance has established four groups of nursing homes as a basis of payment for nursing home care of welfare patients. A home is classified as I, II, III, or IV according to the qualifications and number of skilled nursing personnel employed in the home. The requirements for skilled nursing personnel and the rate of payment for patient care for each type of home are shown in table 1.

Medical examiners, employed by the department of public assistance, examine welfare patients, classify them into four groups, and recommend the type of nursing home care

needed. Arrangements are then made for the care of patients in homes that have the appropriate skills available. In general, patients in the four types of homes meet the following criteria:

The group I patient is usually confined to bed unless lifted out, must be fed, or helped in feeding, and cannot assist in bedmaking, bathing, or caring for himself. He may be incontinent, in need of special diet, or in need of skilled nursing service such as intravenous and oxygen therapy or special dressings.

The group II patient is usually confined to bed unless lifted out, can assist with bedmaking by rolling from side to side, and may be capable

of feeding himself. He may, however, be incontinent and require parenteral medication or a special diet.

The group III patient may be on bed rest but have bathroom privileges, feed himself, and have a minor modification of a regular diet, or he may be ambulatory and require only semi-professional nursing service.

The group IV patient is usually ambulatory, sitting up frequently, and may require simple nursing services such as oral medication and routine observation. He may present a mild mental confusion.

Pertinent to analysis of the data on personnel in Washington's nursing homes are background

Table 2. General characteristics of nursing homes in Washington, May 1956

Type and size (in beds)	Number of homes	Number of beds	Number of patients	Average occupancy (percent)	Average size (beds)
Group I	97	4, 180	3, 995	95. 6	43
12-20	13	227	213	93. 8	17
21-30	18	489	433	88. 5	27
31-40	20	709	668	94. 2	35
41-60	31	1, 515	1, 452	95. 8	49
61-129	15	1, 240	1, 229	99. 1	83
Group II	28	926	882	95. 2	33
12-40	21	537	519	96. 6	26
41-77	7	389	363	93. 3	56
Group III	151	3, 552	3, 334	93. 9	24
4-20	72	947	855	90. 3	13
21-30	54	1, 329	1, 222	91. 9	25
31-40	13	464	482	103. 9	36
41-60	6	285	283	99. 3	48
61-117	6	527	492	93. 3	88
Group IV ¹	12	245	209	85. 3	20

¹ Ranged in size from 6 to 45 beds.

Table 3. Number of persons employed in nursing homes, by type of home, Washington, May 1956

Type of personnel	Total	Group I	Group II	Group III	Group IV	Unclassed
Total	4, 074	2, 090	393	1, 323	60	208
Registered nurses ¹	508	365	51	66	4	22
Licensed practical nurses ¹	462	188	54	183	8	29
Nurse aides and orderlies	1, 591	845	149	508	10	79
Operators	158	54	12	72	10	10
Housekeeping personnel	334	151	32	126	11	14
Dietary personnel	669	316	64	246	10	33
Laundry workers	115	63	14	30	2	6
Maintenance and gardening personnel	180	76	13	74	5	12
Other personnel	57	32	4	18	0	3

¹ Includes 58 operators who are registered nurses and 91 operators who are licensed practical nurses. Some homes reported more than 1 operator.

data relating to size of the homes and other general characteristics. Such data for the 288 homes classified into one of the four groups are shown in table 2. Group I and Group III homes far outnumbered the other two types. Homes in group I tended to be larger than those in any other group, and they had more patients than even the more numerous but generally smaller homes in group III. All groups had almost a full complement of patients, the average occupancy ranging from 85.3 percent for group IV homes to 95.6 percent for group I homes.

Most of the patients in the nursing homes were welfare patients: The proportion in group I was about three-fourths and in each of the other three groups about four-fifths. The majority of the welfare patients in each type of home met the criteria for that type. For example, nearly two-thirds of the welfare patients in group I homes had a group I classification, while the other third were classified group II, group III, or group IV.

Twelve of the homes, providing 219 beds, were not classified by the department of public assistance. Although the number of personnel in these homes is reported, data on personnel time are not presented.

Types of Personnel

In May 1956, 4,074 persons were employed full time or part time in the 300 nursing homes in this study (table 3). Nurse aides and orderlies were the largest group, about 40 percent. Dietary personnel (cooks, kitchen helpers, dishwashers, and pantry girls) were the second largest group. There were 508 registered nurses and 462 licensed practical nurses employed during the study week. Two-thirds of these skilled

nursing personnel were employed in group I and group II homes, where the patients generally require 24-hour skilled nursing care and supervision. There were 307 persons reported as operators of nursing homes, of whom 58 were registered nurses and 91 were licensed practical nurses. The average number of hours worked during the study week for all employees, including both part-time and full-time personnel, was 37.7 hours.

The percentage of employees who were registered nurses varied from 17.5 in group I homes to 5.0 in group III homes (table 4). In group I and in group II homes, about one-fourth of the employees were skilled nursing personnel; in group III and in group IV homes, nearly one-fifth were in this category. Approximately two-fifths of the employees are classified as nurse aides and orderlies in all types of homes, except group IV, where only 16.7 percent are so classed. More than 60 percent of the employees in group IV homes were classified as "all other."

Personnel Time Per Home

The data reported on the number of hours of employee time were analyzed separately for each group of homes and are presented in that fashion in this section. Although comparisons can be drawn among the groups, each type is considered here as a distinct entity.

Group I

The average number of hours of employee time per home per week varied from 394 for homes with 12-20 beds to 1,393 for homes with 61-129 beds (table 5). Total employee time increased as the size of the home increased. However, registered nurse time did not increase

Table 4. Percentage distribution of personnel employed in nursing homes according to type of personnel, by type of home, Washington, May 1956

Type of personnel	Total	Group I	Group II	Group III	Group IV	Unclassed
Total.....	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0
Registered nurses.....	12. 5	17. 5	13. 0	5. 0	6. 7	10. 6
Licensed practical nurses.....	11. 3	9. 0	13. 7	13. 8	13. 3	13. 9
Nurse aides and orderlies.....	39. 1	40. 4	37. 9	38. 4	16. 7	38. 0
All other.....	37. 1	33. 1	35. 4	42. 8	63. 3	37. 5

Table 5. Average number of personnel hours per home per 7-day week, according to type and size of home, Washington, May 1956

Type and size (in beds)	Total	RN	LPN	Aide and orderly	Other
Group I.....	795	132	77	333	253
12-20.....	394	115	59	87	133
21-30.....	509	111	69	172	157
31-40.....	672	115	86	269	202
41-60.....	919	141	73	403	302
61-129.....	1,393	177	99	679	438
Group II.....	574	74	83	218	199
12-40.....	453	67	80	153	153
41-70.....	938	92	94	413	339
Group III.....	346	70		134	142
4-20.....	221	64		67	90
21-30.....	376	64		170	142
31-40.....	478	67		219	192
41-60.....	656	88		320	248
61-117.....	973	174		255	544
Group IV.....	223	49		37	137

RN=registered nurse; LPN=licensed practical nurse.

in this manner. The number of registered nurse hours per home per week in the 3 size groups with 40 beds or fewer averaged essentially the same as the requirement of 112 hours (day and evening shifts 7 days a week). Homes in the 2 size groups with 41 beds or more exceeded this requirement. In all sizes of homes, the requirement of 56 hours of licensed practical nurse time (night shift 7 days a week) was exceeded.

In group I homes, the duties of the registered nurse are largely those of supervision and teaching of the other nursing staff and, in some homes, include managerial or administrative tasks. Direct service to patients generally consists of administering medications, performing highly technical nursing procedures, and observing the patients. Since the pattern of registered nurse staffing appeared to be related to the requirement rather than to the size of the home or the functions of the nurses, further analysis of registered nurse hours was made (table 6).

Fifteen of the group I homes did not meet the minimum of 112 hours of registered nurse time; four of these homes had 41 beds or more. Nineteen group I homes, 16 of which were larger than 40 beds, reported more than 155 hours of registered nurse time per week. While the

registered nurse hours per home ranged from 50 to more than 215, 42 homes reported between 110 and 124 hours, approximately the required amount. From the work schedules, it was noted that a number of homes employed 2 full-time registered nurses and 1 or 2 part-time registered nurses for relief on the day and evening shifts. The specific requirement appears to have a great

Table 6. Registered nurse hours reported for the study week by group I homes, by size of home, Washington, May 1956

RN hours	Number of homes		
	Total	40 beds or fewer	41 beds or more
Total.....	97	51	46
50-64.....	3	3	0
65-79.....	2	2	0
80-94.....	1	0	1
95-109.....	9	6	3
110-124.....	42	32	10
125-139.....	12	4	8
140-154.....	9	1	8
155-169.....	8	2	6
170-184.....	2	0	2
185-199.....	2	1	1
200-214.....	4	0	4
215 or more.....	3	0	3

NOTE: Includes registered nurse operators; no deductions were made for managerial duties.

influence on the employment of registered nurses in homes with 40 beds or fewer, but larger homes tend to employ more registered nurses than the minimum.

To remove the effect of the size of the home in analyzing registered nurse time, the hours reported for each home were divided by the number of beds. The average number of hours of registered nurse time per bed per 7-day week is shown in the tabulation below. The range was rather wide, but nearly two-thirds of the homes reported between 2.0 and 3.9 hours of registered nurse time per bed.

<i>Hours of RN time per bed per 7-day week</i>	<i>Number of homes</i>
Less than 2-----	9
2.0-2.9-----	31
3.0-3.9-----	31
4.0-4.9-----	11
5.0-5.9-----	7
6.0-6.9-----	3
7.0-7.9-----	0
8.0 or more-----	5
Total-----	97

NOTE: Includes registered nurse operators. No deductions were made for managerial duties.

Group II

The average number of hours of employee time per home per week was 574. Of this amount, 74 hours was registered nurse time and 83 hours was licensed practical nurse time (table 5). The public assistance requirement is 56 hours of registered nurse time and 112 hours of licensed practical nurse time per week. Thus the study data indicate that registered nurses were being employed rather than licensed practical nurses in some homes.

Most group II homes aspire to a group I classification, but because of physical arrangements within the home and staffing requirements, a group I classification is not always feasible or desirable.

Group III

The public assistance requirement for group III homes allows either a licensed practical nurse or a registered nurse to be in charge of nursing service. Forty-eight of these homes reported registered nurses and 103 reported licensed practical nurses in this position. In 41 of the homes the operator was either a registered nurse or a licensed practical nurse

and supplied the only skilled nursing time reported.

The homes in group III reported an average of 346 hours of employee time per home per week, 70 hours of which was skilled nursing time (table 5). The number of hours ranged from 64 for homes with 4-20 beds to 174 for homes larger than 60 beds. In all size groups the requirement for skilled nursing time was exceeded. As in group I homes, the amount of skilled nursing time did not increase as the size of the home increased for homes with 40 beds or less. However, homes with more than 40 beds did have additional skilled nursing staff.

Group IV

The 12 homes in group IV averaged 223 hours of employee time per home per week, much less than the average for any other of the 3 groups (table 5). There was an average of 49 hours of skilled nursing time and 37 hours of nurse aide and orderly time per home per week.

Some of the group IV homes were formerly boarding homes for the well aged. When some of the residents in such a home became ill, nursing staff was added and the home applied for and received a nursing home license.

Skilled Nursing Hours per Shift

In group I homes a registered nurse is required to be on duty at all times during the day and evening shifts. Nearly three-fourths of the hours reported for registered nurses in these homes were on these shifts (table 7). The distribution of registered nurse hours is similar for group II homes, although the proportion was slightly higher for the day shift. Approximately two-fifths of the licensed practical nurse time was for the night shift in both group I and group II homes.

In group III homes, either a registered or a licensed practical nurse is required to be on duty at all times during the day shift. However, 17 percent of the skilled nursing time was reported on the evening and night shifts. All of the skilled nursing time in group IV homes was reported for the day shift.

Nursing Time per Patient

To compare further the four groups of homes, the average number of hours of nursing

Table 7. Percentage distribution of skilled nursing hours according to shift, by type of home, Washington, May 1956

Shift	Group I		Group II		Group III	Group IV
	RN (12,834 hours)	LPN (7,495 hours)	RN (2,065 hours)	LPN (2,329 hours)	RN or LPN (10,494 hours)	RN or LPN (586 hours)
All shifts.....	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0
Day.....	40. 3	28. 2	47. 9	27. 6	68. 9	84. 8
Evening.....	31. 2	11. 3	31. 1	19. 2	7. 9	0
Night.....	9. 4	40. 2	5. 8	37. 1	9. 2	0
Relief ¹	15. 0	17. 1	11. 5	15. 7	11. 4	0
Not stated.....	4. 1	3. 2	3. 7	. 4	2. 6	15. 2

¹ Breakdown by time of day not given. NOTE: RN=registered nurse; LPN=licensed practical nurse.

time available per patient per 7-day week was computed for each home. Nursing time includes the hours reported for registered nurses, licensed practical nurses, nurse aides, and orderlies. Group I homes averaged slightly more than 13 hours of nursing time per patient per week, with a range of from 2 hours to more than 26 hours (table 8). More than one-third of the group I homes reported 12.0 to 13.9 hours. In group II homes, the average num-

ber of hours per patient per week was nearly 12, and the range was 6.0 to 23.9 hours. In group III homes, the average was slightly more than 9 hours per patient, with a range of from less than 2 hours to more than 26 hours. More than two-fifths of the group III homes reported 8.0 to 9.9 hours. The average for group IV homes was about 6, with a maximum of 9.9.

Some group III homes provided more nursing time per patient per week than some group I homes (fig. 1). The variation among homes in all groups was extensive. These findings may indicate, for example, that some group III patients have the same nursing needs as group I patients. Or they may indicate that group III nursing staff may not work as efficiently as the staff in group I homes where care is directed by skilled nursing personnel and which are generally larger and perhaps better designed for nursing care. Further interpretation, however, must await additional information on patients and their need for nursing care.

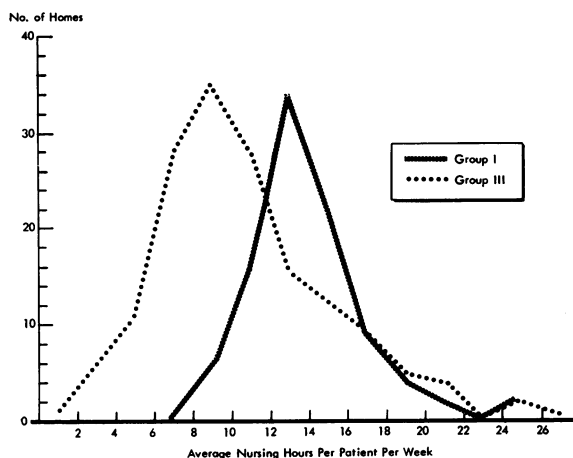
Two recent publications report data on hours of nursing time per patient in nursing homes or other institutions for the chronically ill or disabled. Although these cannot be compared directly with the data for the Washington nursing homes because of differences in study methods, in types of institutions included, and in definitions of terms, it is of interest to review them here. One of the reports, from a

Table 8. Average number of nursing hours¹ per patient during the study week, by type of home, Washington, May 1956

Hours per patient	Number of homes			
	Group I	Group II	Group III	Group IV
Total.....	97	28	151	12
0-1.9.....	0	0	1	1
2.0-3.9.....	1	0	6	3
4.0-5.9.....	0	0	11	2
6.0-7.9.....	0	2	28	2
8.0-9.9.....	6	3	35	4
10.0-11.9.....	16	9	28	0
12.0-13.9.....	34	8	16	0
14.0-15.9.....	22	2	12	0
16.0-17.9.....	9	3	1	0
18.0-19.9.....	4	0	5	0
20.0-21.9.....	2	0	4	0
22.0-23.9.....	0	1	0	0
24.0-25.9.....	2	0	2	0
26 or more.....	1	0	2	0

¹ Includes the time of registered nurse staff and operators, licensed practical nurse staff and operators, and aides and orderlies; no deductions were made for managerial duties.

Figure 1. Average nursing hours per patient per week, group I and group III nursing homes, Washington, May 1956.



study of Florida nursing homes in 1955, gives 16.1 as the average number of hours of nursing service per patient per week. In this study the actual time spent by employees giving nursing service to patients was counted (3). In the other publication, a book by Edna Nicholson (4), this information appears: “. . . the average amounts of bedside service time required to maintain minimum adequate personal attention and nursing care for the residents varied from approximately 1.25 hours per patient per day in the nursing department of an institution where all the patients were ambulant and comparatively self-sufficient to more than 5 hours per patient per day in two institutions filled with seriously disabled people.” Nicholson also states that an average of 22.89 hours of nursing staff time per patient per week was required for minimum adequate institutional care for chronically ill and disabled patients.

In order to evaluate adequately the relationship between skilled nursing time and other nursing time in the four groups of homes, hours reported for the three types of nursing personnel have been changed into minutes per patient per day (table 9). Group I homes provided an average of 44 minutes of skilled nursing time per patient per day, of which 28 minutes was registered nurse time; group II homes provided approximately the same amount of skilled nursing time, 43 minutes, but had less registered nurse time, 20 minutes. Group III

and group IV homes provided considerably less skilled nursing time than the other two groups. Group III homes provided an average of 27 minutes, while group IV homes provided 24 minutes of skilled nursing time per patient per day.

Since group I and group II homes provided an almost equal amount of skilled nursing time per patient per day, and since group III homes provided approximately the same amount of time as group IV homes, it would appear that there are two types of nursing homes in Washington, one type, made up of the group I and group II homes, providing skilled nursing care on a 24-hour basis, and the other type, made up of the group III and group IV homes, providing limited skilled nursing services and supervision. The data also suggest that the group I patient is similar to the group II patient and has almost the same nursing needs, and that the group III patient is similar to the group IV patient.

Staffing Guides

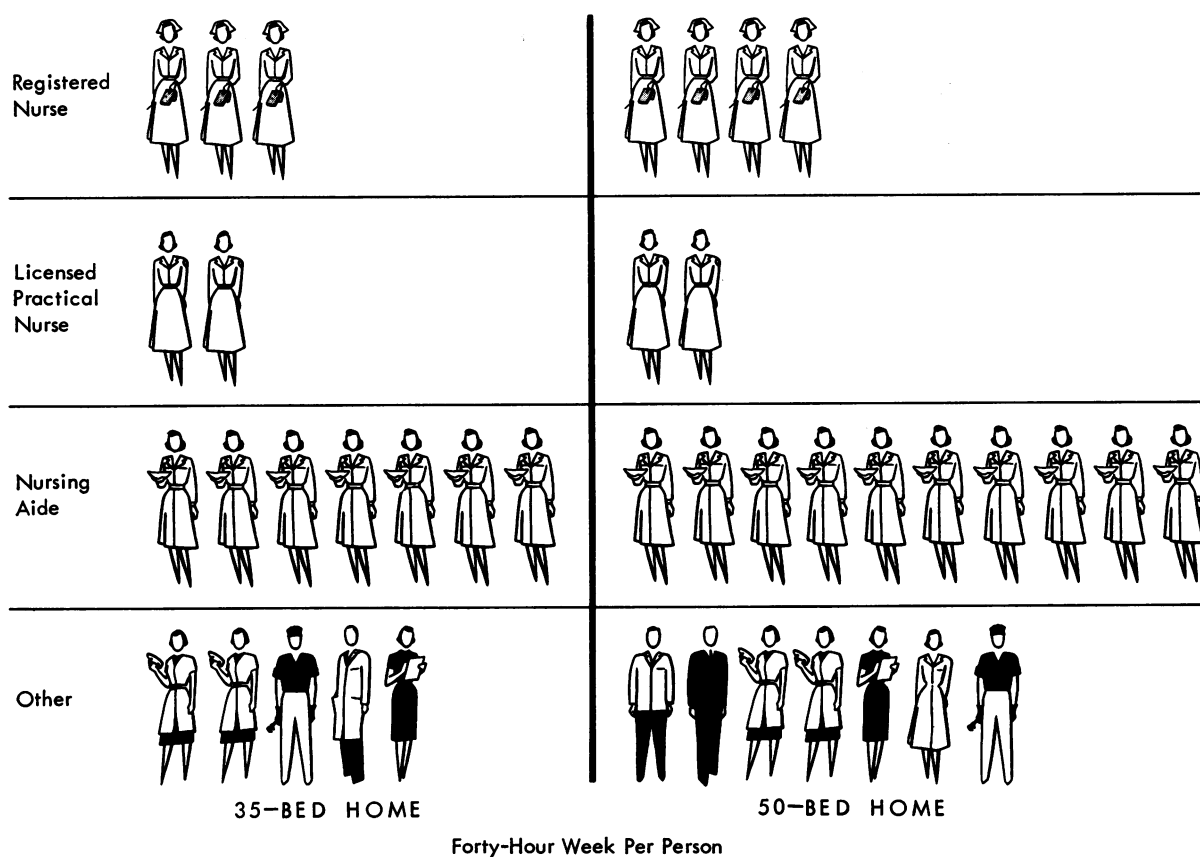
From the data reported in this study, it has been possible to develop staffing guides for “intensive care” homes (groups I and II) and for “limited care” homes (groups III and IV). For example, the study indicated that in group I homes with 31–40 beds there was an average of 115 hours of registered nurse time per week, 86 hours of licensed practical nurse time, 269 hours of nurse aide and orderly time, and 202 hours for other staff (table 5). To determine the number of full-time personnel on duty during a 7-day week, these data were

Table 9. Average number of minutes of nursing time per patient per day, according to type of nursing home, Washington, May 1956

Type of home	Total nursing	RN	LPN	Nurse aides and orderlies
Group I.....	113	28	16	69
Group II.....	102	20	23	59
Group III.....	79	27		52
Group IV.....	42	24		18

RN=registered nurse; LPN=licensed practical nurse.

Figure 2. Staffing guide for "intensive care" nursing homes.



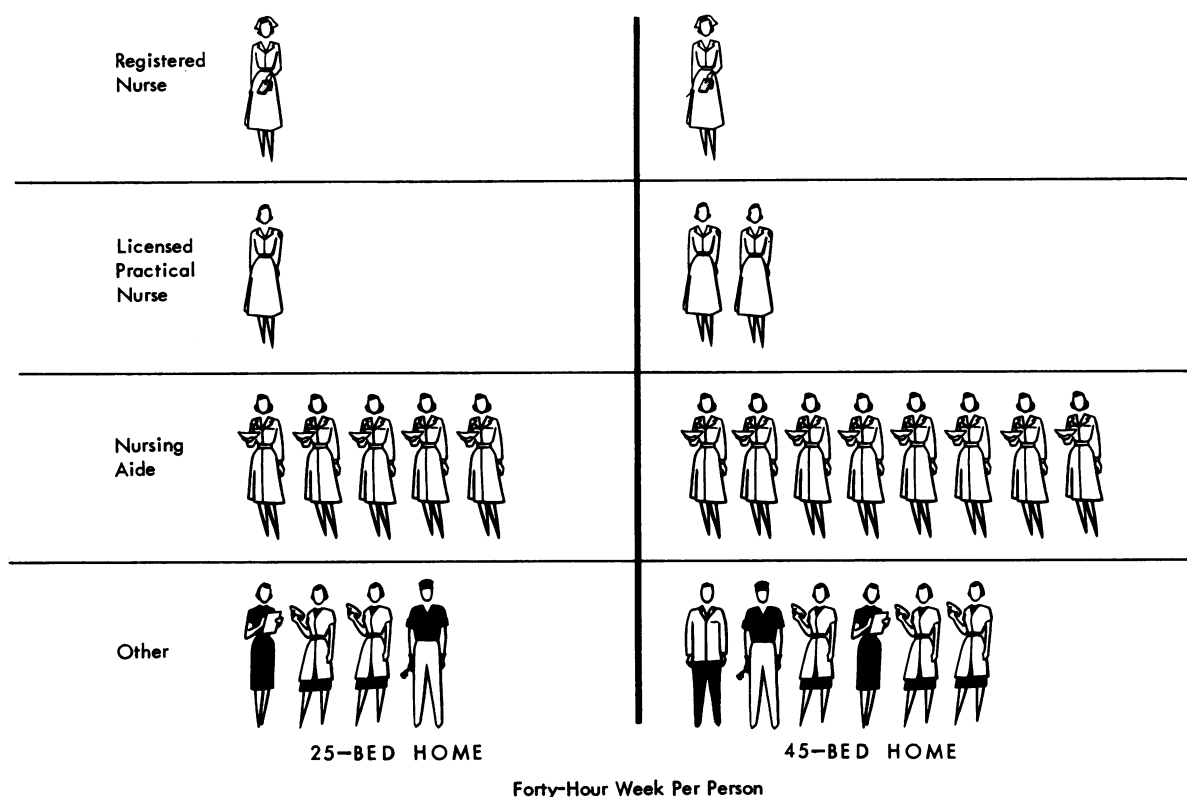
divided by 40 (for a 40-hour work week). The results for this size group I homes indicated averages of 2.8 registered nurses, 2.1 licensed practical nurses, 6.7 nurse aides and orderlies, and 5 other employees. These averages were further analyzed in terms of the work shifts to be covered during the 7-day week and other factors. The numbers were then rounded to full-time equivalents to give the suggested number of employees in the staffing guides.

Guides were developed for a 35-bed and a 50-bed "intensive care" home (fig. 2) and for a 25-bed and a 45-bed "limited care" home (fig. 3). They provide for hours of time slightly above the averages reported in May 1956. This appears to be a realistic minimum since many homes already employ more staff than suggested. It should be recognized that the number and kind of staff needed in any particular home will vary in accordance with many factors. Some of the factors that need to be considered in evaluating the adequacy of

the staff are the type of patients and their need for skilled and other nursing care, the kind of facilities and equipment available, the abilities of each member of the staff, and the philosophy of the operator or management. Also to be considered are the type of medical and other rehabilitative services available, the social and recreational activities provided, and the number of volunteers used. The guides should be useful in working with new or potential nursing home operators, in evaluating staff in existing homes, and in working with other agencies.

For a 35-bed intensive care home the staffing guide provides for a registered nurse on the day and evening shifts and a licensed practical nurse on the night shift for each day of the week. It allows for 2 aides on the day shift, 1 aide on the evening shift, and 1 aide on the night shift. It also recommends an additional aide to cover the time when the workload is greatest. For homes smaller than 35 beds, aide time would be less, with the skilled staff per-

Figure 3. Staffing guide for "limited care" nursing homes.



haps performing nurse aide functions. The amount of skilled nursing time recommended is considered minimum because of the type of patient in intensive care homes.

For a 50-bed intensive care home the guide suggests that a registered nurse be on duty at all times and that, in addition, a licensed practical nurse be employed for the day shift. There would be 4 aides on the day shift, 2 aides on the evening shift, and 1 aide on the night shift. For homes larger than 50 beds additional personnel of all types probably would have to be added, and the staff organized into two or more nursing units.

For a 25-bed limited care home there would be a registered nurse on the day shift 5 days a week and a licensed practical nurse on the day shift 2 days a week and on the afternoon shift 3 days a week. The guide also allows for an aide for each shift. In a 45-bed limited care home an additional licensed practical nurse is suggested to provide for licensed practical nurse supervision on the evening shift and for relief of the registered nurse. There would be 3 aides

on the day shift, 2 aides on the afternoon shift, and 1 aide at night.

Summary and Conclusions

In the State of Washington, nursing homes have been classified into four groups, the classification depending upon the qualifications and number of nursing personnel. In a study in 1956, personnel time was analyzed as to type of service and number of hours and then related to size of the homes and number of patients.

The amount of nursing time available to patients in group I homes averaged about 13 hours but varied from 2 to more than 26 hours per patient per week (7 days). One-third of these homes provided 12.0–13.9 hours of nursing time per patient per week. Nursing time per patient per day in group I homes averaged 113 minutes, 44 minutes of which was skilled nursing time.

Group II homes averaged 12 hours of nursing time per patient per week, with a range of from 6.0 to 23.9 hours. There was an average of 102

minutes of nursing time per patient per day, 43 minutes of which was skilled nursing time.

More than two-fifths of the group III homes reported 8.0 to 9.9 hours per patient per week, with an average of slightly more than 9 hours. The average number of minutes of nursing time per patient per day was 79, 27 minutes of which was skilled nursing time. Group IV homes had a maximum of 9.9 hours per patient per week and an average of 42 minutes per patient per day. Skilled nursing time in these homes averaged 24 minutes per patient per day.

Thus, group I and group II homes are quite similar in total nursing time and in skilled nursing time. There is considerable difference, however, between these two groups and groups III and IV. These two facts suggest the recommendation that there be only two types of nursing homes: intensive care homes, which provide skilled nursing care 24 hours a day, and limited care homes, in which a registered nurse or a licensed practical nurse is in charge of nursing service but not necessarily on duty at all times.

This study has demonstrated that specific requirements for skilled nursing staff influence the staffing patterns, particularly in small homes. In spite of the shortage of nurses, 24-hour skilled nursing supervision in "intensive care" homes has been required in Washington since the licensing program began in 1951. In "limited care" homes, one full-time skilled nurse in charge of the nursing service has been required. Almost all homes meet these standards, and many large ones exceed them. It is recognized, of course, that an official standard or requirement alone does not bring nurses into employment. Pleasant working conditions, intelligent personnel policies, adequate salaries,

and convenient location and hours have all contributed. The present standards for skilled nursing staff appear to be realistic, and it would seem that they could be increased if indicated. Staffing guides based on data presented in the study have been developed for the recommended types of nursing homes.

The data obtained in this study raise a number of questions that will require collection of additional information. Before requirements for skilled nursing staff are changed, it is essential to learn more about the needs of patients cared for in nursing homes. Such data should be related to the information reported here and also to the specific functions of various personnel, the design of the home, and the equipment available.

This study points up one of the values of good working relationships among local health departments, welfare departments, State and local nursing home associations and nursing home operators. A cooperative effort is necessary to obtain data that can be used in planning and operating programs to improve patient care in nursing homes.

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Life Without Dobbins

A group of farmers in Voinjama, northwest Liberia, live without any domestic animals except chickens. Trypanosomiasis, or sleeping sickness, has ravaged the region for centuries, leaving only chickens and a few goats as survivors. There are no jungle ungulates; in fact, it is said that in all of Liberia there are only two horses. Although the people have adjusted, the human economy is chronically handicapped by the lack of domestic animals.

—EUGENE P. CAMPBELL, M.D., *chief, Public Health Division, International Cooperation Administration.*

Doctor's Holiday

On a busman's holiday, Dr. Arno E. Town culminated his visit to Ganta, Liberia, by treating Liberian patients. Despite advance notice of his visit, a frantic chase at the last minute was necessary to collect 10 patients for him to examine. Most were beyond help but he operated on one patient for cataract. Among the local tribes many more people were treated and given instruction. The noted Philadelphia ophthalmologist was in Liberia as a guest speaker of the Northern Liberia Medical Association.

—JOHN S. MOOREHEAD, M.D., *formerly chief public health officer, U. S. Operations Mission, Liberia.*

A Well for Ricaurte

When the rural environmental sanitation program was extended to Ricaurte, Ecuador, 15,000 people attended five health film showings and villagers donated their labor to excavate a well. Interested citizens formed a large subcommittee on health. The zone health department cooperated by supplying the

services of a medical officer, sanitary inspector, and microscopist.

Ricaurte is the site of the first activities of the sanitation program in Azuay-Canar, a village near Cuenca. Health and education services are carrying out a community-school improvement program in the village.

—JAMES D. CALDWELL, *chief, health, welfare and housing field party, U. S. Operations Mission, Ecuador.*

Malariologist's Reward

Children in the malaria-ridden villages near Chiangmai, Thailand, were so used to having malaria all the time they didn't even know they were ill, but their blood was pale and their spirits depressed. I watched school children suffering from enlarged spleens and high temperatures trying to study and play.

In the same area 3 years after the malaria control program began, smiling children, literally blooming with health and energy, lined up for examination. As they marched toward us, my colleagues and I cheered spontaneously, anticipating triumphant findings.

Our cheering was justified! Not one of the children was infected although they lived in the heart of a previously malarious district.

—MELVIN E. GRIFFITH, M.D., *chief malariologist, U. S. Operations Mission, Thailand.*

"Kan Ho Won" Replaces "Kan Ho Bu"

"Kan ho won" will replace "Kan ho bu" if Korean nurses have their way. The term correctly used for "nurse" is "kan ho won" which means "a person who has been trained to give care and protection." At their annual meeting in Seoul the Korean Nurses Association drafted a letter requesting government authorities to use "kan ho won" rather than the old Japanese-imposed term, "kan ho bu," a woman who gives care and protection.

A "kan ho won" for 37 years, Mrs. Hyo Chung Lee, chief nurse at the Masan Tuberculosis Sanitarium, was the first Korean to receive the Florence Nightingale Medal.

—ALBERT P. KNIGHT, M.D., *chief, Health Division, U. S. Operations Mission, Korea.*