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TIME SPENT IN INDIRECT NURSING CARE

by

LTC Terry R. Misener, ANC, USA
(Principal Investigator)

LTC A.J. Frelin, ANC, USA
Patricia A. Twist
(Associate Investigators)

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1. It has been noted that some material was left out of AMEDD Study titled: Time Spent In Indirect Nursing Care, LTC Terry R. Misener. Final report 83-004, Health Care Studies and Clinical Investigation Activity, Government Accession Number DA 301090.

2. The following changes will be made:

a) Page 14, line 16. Change (0.5%). to read (10.5%).

b) Insert page 13-B, APPENDIX 13 Cont.

3. Questions may be referred to Mr. R. J. Plaia, 221-6028/5671.

FOR THE COMMANDER

Terry R. Misener

TERRY R. MISENER
LTC, ANC
Asst. Chief, Health Care Studies
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Part of the FY 83 Army Study Program and intended to augment the FY 81 completed study titled "Nursing Care Hours Standards" by providing valid and reliable percentages for hospital patient nursing care unit requirements (i.e., direct care, indirect care, and non-productive time). These data provide the Army Nurse Corps with the necessary statistics to more objectively determine manpower requirements. Work sampling techniques were used at nine CONUS HSC medical treatment facilities of varying bed capacity by surveying six services (where available, i.e., medical-surgical, intensive care, obstetrics, pediatrics,

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psychiatric, and neonatal). CONCLUSIONS: (1) Across all MTFs, percentages of time spent by inpatient nursing personnel are: direct care (24.5%); indirect care (60.5%); and unavailable for patient care (15.0%); (2) The most variance (in direct care and unavailable for care) appeared to be a function of hospital size and the mix of personnel assigned; (3) Times spent in each activity were as expected, however, differences among the clinical services (obstetrics and Medical-surgical particularly) indicate a different yardstick might be considered for each of the six services; (4) Subjective reports from charge nurses expressed their opinions as to the adequacy of staffing for each shift observed as 24.0% inadequate, most often cause "not enough staff on duty", "above average number of patients needing extensive nursing care, assistance, or surveillance"; and "not an optimal mix of personnel skill levels." Most often cited remedy was "need for an additional RN for the entire shift" selected by 57.0% of respondents. RECOMMENDATION: Findings of this study be combined with those from a patient classification study currently being conducted by the Nursing Research Service at Walter Reed Army Medical Center. Model staffing guides should be developed and tested at selected facilities to determine adequacy of staffing and quality of care.

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TIME SPENT IN INDIRECT NURSING CARE

SUMMARY. Current manpower standards are inadequate to determine inpatient care requirements and staffing needs for Army hospital nursing units. A previous Army study (Sherrod, Rauch, and Twist, 1981) provided reliable and valid data upon which to quantify direct patient care needs. The current study was commissioned by the Army Nurse Corps to answer the question: What percentage of time is spent by inpatient nursing service personnel in each of three temporal categories: direct care, indirect care, and time unavailable for patient care. Nine hospitals were selected throughout Health Services Command (HSC) to perform a work sampling study. Investigators trained data collectors at each site and demonstrated interrater reliability using a modification of a tool used in the "San Joaquin Study" instrument (Murphy, Dunlap, Williams, and McAthie, 1978). For compatibility with the Sherrod study, data collection was carried out on each of six clinical services: medical-surgical, pediatrics, intensive care, psychiatry, neonatal, and obstetrics. A random process was used to select clinical units within each service and days of the week for data collection. On each service, ten eight-hour shifts per medical treatment facility (MTF) were monitored over a two week period (five days, three evenings, and two nights). Nursing service staff were monitored every ten minutes on each selected shift for a total of 107,700 data points. Personnel were classified into the following categories for data collection: a) head nurse; b) wardmaster; c) RN (to include civilians and ANCs); d) 91C; e) 91B; f) aide/nursing assistant; and g) ward clerk. Across all nine installations for all personnel, the following percentage of time spent by nursing care providers was reported: direct care 24.5%; indirect care 60.5%; and unavailable for patient care 15.0%.

These findings were highly comparable to those reported in the civilian literature. To provide nurse managers with a more definitive analysis, the indirect care category was broken into eight substrata: communicative acts; preparation of medications, supplies, and equipment; clerical and charting; conferences; travel and transportation; administration; environmental controls; and wait time.

The indirect care percentages tended to be highly similar across all MTFs with a range of 58.6% to 64.6%. Unavailable for care percentages for all hospitals were more variable (range = 11.9-21.2%). Direct care percentages, by facility, from 17.5% to 29.2% overall, with two installations considered as outliers at the low end.

When examined by clinical service for all sites, the unavailable for care components were extremely close (13% to 16.7%) with critical care and medical-surgical having the highest percentages. Direct care by service ranged from 18.9% for obstetrics to 31.3% for the neonatal service. Obstetrics tends to have erratic demands. A valid reason for the higher percentage in neonatal occurs because in the newborn nursery, when a staff member holds an infant, it is considered direct care. When the indirect care component was examined across services, the range was 54.6% (neonatal service) to 62.9% (medical-surgical).

The results of this study combine with the Sherrod findings to provide objective data upon which to project manpower needs for Army nursing service personnel. A question for further study concerns the non-linear relationship of the three temporal elements. As direct care requirements increase, indirect requirements do not necessarily increase in a linear manner. Furthermore, the reported findings reflect "what is" and not "what should be."

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1. INTRODUCTION.

a. Purpose. The overall purpose of this study was to objectively measure the percentage of time spent by nursing personnel on inpatient clinical services providing direct and indirect care. In addition, the amount of time personnel were unavailable to provide care was documented. The study findings, when combined with the results of the Nursing Care Hours Standards Study (NCHS) (Sherrod et al., 1981), have potential implications for every department of nursing at all medical treatment facilities throughout the Army as an objective report of the time spent by nursing personnel in carrying out their mission. This provides data for a reassessment of manpower yardsticks.

b. Background. The Army Nurse Corps (ANC) has long been convinced that current patient classification system and patient census provide an inadequate basis to determine inpatient nursing care requirements and staffing for nursing units. To document inpatient nursing needs, NCHS was carried out by the Health Care Studies Division (HCSD), Directorate of Combat Developments, US Army Academy of Health Sciences, Fort Sam Houston, Texas. Due to the complexity of the project, LTC S. Sherrod, ANC, the Principal Investigator for the NCHS, limited her data collection to the direct care needs of patients, i. e., "physical or sensory interaction with the patient having direct bearing on his needs such as: physical care of the patient, assisting the doctor with examinations, treatment or procedure, talking with the patient about his condition, health teaching needs, etc."

LTC Sherrod and her co-investigators developed standard time frequencies for an extensive list of direct care nursing tasks in six major inpatient clinical areas: medical-surgical, intensive care, psychiatric, pediatrics, neonatal, and obstetrics. The Sherrod study has been cited as having the most comprehensive and best documented task list to be found anywhere in the nursing literature (Giovanetti, 1982).

In addition to the patient classification system, the Sherrod study developed staffing mix ratios. These ratios were specific for each of the six nursing areas and reflected the levels of personnel actually observed rendering the direct care.

To complete the work begun by the NCHS, the ANC deemed it necessary to provide valid and reliable measurements of the time spent by nursing personnel in other than the direct care activities. These activities were subsumed under two additional rubrics: indirect patient care and unavailable for patient care.

Indirect patient care activities are defined as those tasks performed away from the patient and include such tasks as: communications, planning his care, assessing his needs, preparation of medications and equipment, team conferences, etc. Unavailable for patient care times include those activities of personnel not directed toward patient care or unit management which detract from time available for patient care. The majority of these tasks are performed off the nursing unit.

It was not known whether the percentages of times spent in nursing activities differ across clinical services, across MTFs, or between civilian and military hospitals. In the civilian environment, extensive work has been carried out by Lake (1982) using work sampling to document the percentages of time spent in nursing tasks. In the community hospital setting, he reports the following divisions of labor by nursing personnel: a) direct patient care (28-35%); b) indirect care (50-62%); and c) personal time (10-15%). In comparing the current data with those from Lake, it is necessary to know that he utilized four major activity categories vs three. In his studies, indirect care is compartmentalized into an indirect component (charting, communication about patients, preparing medication, and transcribing orders) and a unit-related component (housekeeping, clerical, communication with others, errands, meetings, and supplies). Very preliminary analysis carried out by the Veteran's Administration (VA) on

medical-surgical units show the following percentages: a) direct care (38-45%); b) indirect care (37-49%); and c) personal time (13-18%) (Kuhn, 1983). It must be noted that, in the VA data, wait time (time waiting to render care) has been subsumed under personal time.

2. OBJECTIVES.

a. Determine the percentage of time spent by inpatient nursing service pesonnel in each of three temporal categories: direct care, indirect care, and unavailable for care.

b. Across the three temporal categories, compare the percentage of time spent among all nine medical treatment facilities surveyed.

c. Compare the time spent in each of the three temporal categories by various nursing service personnel within and among services and facilities.

3. METHODOLOGY.

a. Overview. Using a work sampling method, nine medical treatment facilities (MTFs) were surveyed to quantify the percentage of time spent by nursing service personnel over a representative two week period. Times were subsumed under a rubric of activities consisting of 11 strata. A total of 107,700 ten-minute time segments were monitored during the study; this equates to 17,817 hours of nursing time. At the end of each shift observed (n=461), the charge nurses filled out a survey form to supply basic demographic data pertaining to the nursing unit in addition to their subjective opinions concerning the adequacy of staffing for that shift. Also, the number of admissions, discharges, and transfers (ADTs) per nursing unit were reported.

b. Procedures.

(1) In consultation with COL C. Slewitzke, ANC, Assistant Chief of the Army Nurse Corps, and the Study Director, COL M. Walls, ANC, potential study sites within HSC were identified to provide a representative mix of MFTs by size, nursing unit configuration, and the mission of the population supported.

Several Department of Nursing chiefs and their respective MTF commanders were consulted regarding their willingness to support the study. Nine sites were selected: Brooke Army Medical Center, TX (BAMC); Ft Hood, TX; Ft Leonard Wood, MO; Ft Campbell, KY; Ft Carson, CO; Fitzsimons Army Medical Center, CO (FAMC); Ft Devens, MA; Ft Belvoir, VA; and Ft Lee, VA. A letter from the Commander, HCSCIA, was transmitted to the commander of each selected MTF and requested formal permission to conduct the study (see Appendix 1). All answered in the affirmative.

(2) The Chief, Department of Nursing, at each MTF provided the Principal Investigator (PI) with three items: a) a list of all inpatient nursing units broken down by clinical service (i. e., medical-surgical, pediatrics, neonatal, psychiatry, intensive care, and obstetrics); b) a point of contact at each site; and c) the names of two to seven nursing personnel who would be trained to serve as data collectors at the site.

(3) Using a table of random numbers, the study staff selected nursing units from within each clinical service to collect data. Data collectors were assigned to gather data on randomly selected days over a two-week period. Data were collected on 10 eight-hour shifts within the two-week period, randomly selecting the following shift configurations: a) five days; b) three evenings; and c) two nights (see Appendices 2 to 10).

(4) A data collection form (see Appendix 11) was developed as a modification of a previous study from the US Public Health Service, Division of Nursing, referred to as the "San Joaquin Study" (Murphy et al, 1978). The modifications included changes in operational definitions and expansion of off-the-unit/unavailable for care activities to be more responsive to Army practices and needs. From the same study, a modified tool (see Appendix 12) was developed to be completed by the charge nurse at the end of shift on each of the monitored nursing units. The survey was to determine the basic nursing

unit demographics and allow the charge nurse to subjectively assess the adequacy of the staffing on the shift and to report the number of admissions and dispositions during the tour of duty. Forms were pilot tested at BAMC for validity checks to insure capturing necessary data and to assure that the operational definitions (see Appendix 13) encompassed all of the nursing tasks and time allocations. This also provided an opportunity to carry out checks of interrater reliability measurements, which were essentially 100%. Minor modifications were made in the instruments and instructions to insure ease of use and to clarify operational definitions.

(5) A civilian consultant, with knowledge and experience in training and carrying out a work sampling study, was contracted to review the protocol and train study staff in the method. She jointly trained with the investigators at two facilities and observed the HCSCIA study staff train at one additional site. The study staff subsequently carried out training at the remaining five sites. An outline of the training scenario is found at Appendix 14. As a part of the didactic orientation, data collectors were given two tests (see Appendices 15 and 16) to insure reliability in classification of activities. Further training included two observation periods on typical nursing units allowing data collectors the opportunity to become familiar with the instrument and to further insure interrater reliability. Training and data collection occurred between 28 February 1983 and 31 April 1983.

(6) The basic method for data collection was work sampling, a technique reported by Abdellah and Levine (1954). The method entails collecting data at predetermined intervals; then based upon sampling theory, extrapolating the findings over the entire monitored period of time. Time spent in each of the 11 activity categories was recorded for nursing service personnel at each ten-minute interval during the entire eight-hour shift. The first task observed being performed by the monitored person was the activity documented.

Nursing personnel were assured of not being individually evaluated; data were to be part of aggregate findings. Staff quickly adjusted to the observers and it was not felt that behaviors changed due to observation. During training, data collectors were taught to begin monitoring at random points on the surveyed nursing unit, travel on varied routes, and to begin their observations at random times for each observed segment.

(7) One data collection form was completed per hour on each of the observed nursing units. At the completion of the data collection period, all forms were forwarded to HCSCIA along with a time schedule for the assigned personnel on each nursing unit and the charge nurse survey forms for each shift. Data were key punched by HCSSA at Ft Sam Houston, TX, and analyzed using the Statistical Package for the Social Sciences (SPSS) and Statistical Analysis Systems (SAS).

4. FINDINGS

a. Instruments. The findings are based on two instruments: the "objective form" used to collect the work sampling data and the "subjective form" from a survey completed by the charge nurse at the end of each monitored shift. The work sampling data comprised 107,700 data points or ten minute segments of monitored time, equating to 17,817 hours of nursing service time across all nine study sites. The subjective findings are reported from the 461 forms completed by charge nurses. Because of the large number of data points, the reporting of statistical significance lacks value. Only descriptive statistics will be reported in most instances.

b. Data Collection Period. Table 1 presents the breakout of data collection by month. Table 2 breaks out the data acquisition by day of the week. Table 3 subsumes the hourly data into three shifts.

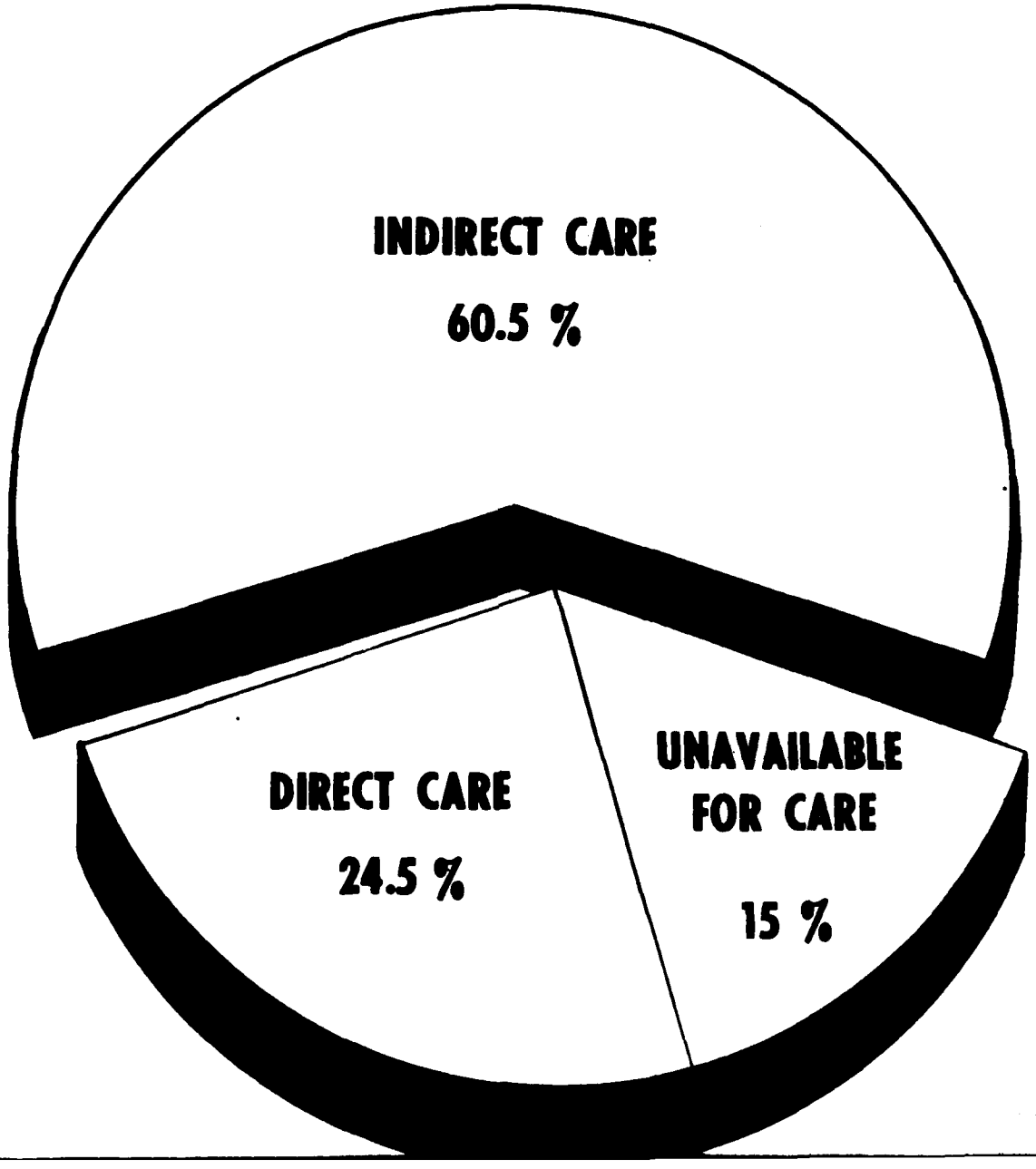
c. Data by Service. Chief nurses submitted lists of their nursing units representing 17 categories. Table 4 presents the data collected by the 17 original clinical settings. To make the data compatible with the Sherrod study, the nursing units were subsumed under the six clinical services of interest: critical care, medical-surgical, psychiatry, OB-labor-delivery, newborn nursery-neonatal intensive care, and pediatrics-pediatric intensive care (see Table 5).

d. Composite MTF Findings for Objective Data. Table 6 delineates the frequency and percentages of total data collected at each of the MTFs in the study. Across all sites and services, 60.5% of nursing time was spent providing indirect care; 24.5% providing direct care; and 15.0% was reported as time unavailable for care (see Figure 1). Table 7 presents the percentages of time spent in each of the three temporal activities across all MTFs. Noteworthy are findings for the indirect care across sites. None of the sites vary more than 4.1% points from the mean (60.5%). To provide a more definitive report for each of the 11 activities monitored, Table 8 and Figure 2 are provided. Table 9 reports the six clinical services and their proportion of the total data by MTF.

The activities of all full-time nursing service personnel were monitored on each ward studied. Table 10, 11, and 12 provide the percentage of data points by all nursing service personnel, nursing personnel by MTF, and nursing personnel by activity performed. A cursory examination of the data revealed a tendency for installations with a higher ratio of RN to non-professional staff to also have a higher proportion of time spent in direct care activities ($r=.61$, $p < .10$).

When all 11 tasks/activities are examined by each category of care provider, several interesting findings are revealed. Head nurses spent 14.5% of their time in direct care. Only 2.0% of time by all providers is spent in environmental tasks. Even the obstetrical service, with its high cleaning requirements, only spends 3.1% of personnel time in environmental efforts.

PERCENTAGE OF MAJOR NURSING ACTIVITY CATEGORIES COMBINED FOR ALL MTFs



PERCENTAGE OF TIME SPENT BY NURSING PERSONNEL IN 11 ACTIVITIES ACROSS ALL MTFs

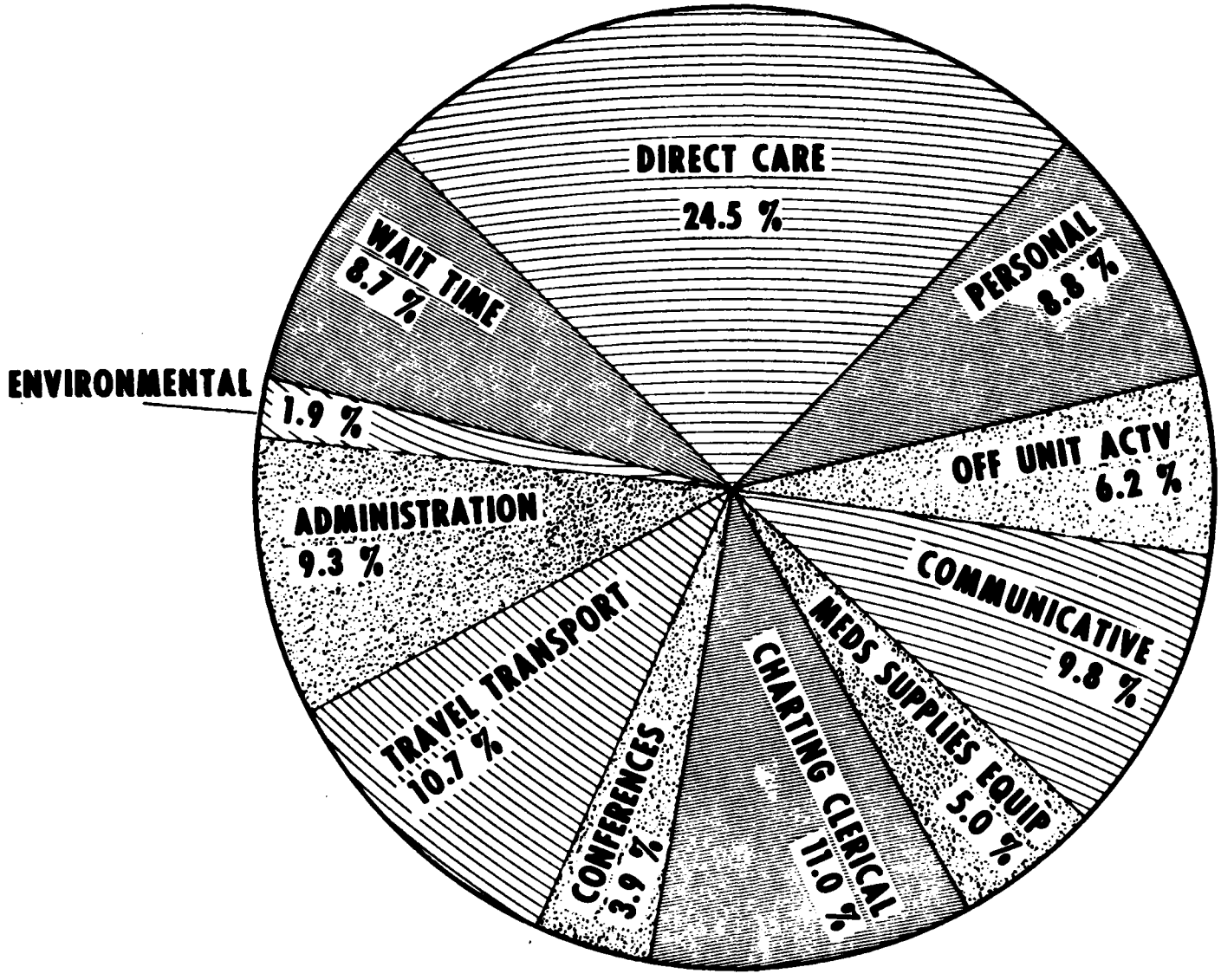


Figure 2

Charting and clerical tasks consume 11.0% of overall time, while travel and transportation activities take 10.7% of nursing personnel time. The percentage of time spent waiting is 8.7%. Head nurses spent only 1.6% of their time waiting, however, LPNs, Aides, and 91B/F/G personnel, respectively, spent 13.0%, 13.2%, and 12.5% of their time waiting.

Table 13 truncates the 11 individual activities into the three temporal activity categories by type of provider. Table 14 provides an overview of the contribution of each type of provider by the six clinical services for the entire data set.

The next two tables present the clinical service findings for the entire data set by the 11 activities (see Table 15), and the three temporal activity categories by service (see Table 16). This latter table substantiates that the percentage of direct care provided is highest for the newborn/neonatal intensive care (31.3%) and critical care units (29.8%), with the least amount of direct care reported for the obstetrical service (18.9%). The indirect care requirements are highest for obstetrics (65.6%) and lowest for the newborn nurseries and neonatal intensive care units (54.6%).

Tables 17, 18, and 19 present the service by activity categories for day, evening, and night shifts, respectively. Direct care time changes from an overall mean of 24.5% to 30.3% on the evening shift and unavailable time drops precipitously from 18.0% on the day shift to 4.1% on the night shift, when fewer personnel are on duty and when fewer extraneous off-the-ward duties are required.

Because the major objective of the study was to examine indirect care, the eight activities subsumed under indirect care were analyzed separately across all MTFs. Tables 20-23 present these findings in a composite fashion, and then by facility, provider, and service respectively. Proportions of total time are

not affected; however, a clearer picture is gained of the individual indirect tasks as compared to all other indirect factors (see Figure 3). Communicative acts, charting/clerical, and administrative functions account for 49.9% of the indirect care with travel and transportation components consuming 17.7% of this subsection. Table 22 illuminates the amount of indirect time that RNs (excluding head nurses) spend in charting and clerical activities (24.9%), whereas ward clerks only spend 33.7% of their time in the same function.

e. Findings by MTF. The data to this point has been based on the aggregate. Appendices (17-25) are provided for each MTF.

f. Composite MTF Findings for Subjective Data. The subjective data were gathered at the end of each monitored shift via a survey questionnaire completed by the charge nurse. Study personnel briefed head nurses on the instrument and then requested that they, in turn, train their charge nurses. Operational definitions were not provided and the form was, by necessity, completed at the end of the shift, at the same time the nurses in charge were confronted with several other tasks that they might have felt to be more relevant. These findings would have been enhanced had the data collectors also subjectively rated the staffing adequacy for the shift observed. Given these possible limitations, four pieces of data were examined: 1) admissions, discharges, and transfers (ADTs) on the shift; 2) the nurses' rating of the adequacy of the staffing for the shifts; 3) the possible causes for the less than adequate staffing; and 4) possible remedies for the staffing situation.

When admissions and discharges were tabulated across all reports, 46.4% of the observed shifts had no admissions and 52.3% of the shifts had no discharges. When ADTs were combined, 33.3% of the shifts reported no ADTs; 51.5% had one or fewer ADTs; 65.4% had two or fewer ADTs; and 72.0% reported three or fewer ADTs. The range of the ADTs for all MTFs combined were 0-21 on days, 0-7 on evenings,

PERCENTAGE OF TIME SPENT BY NURSING PERSONNEL IN INDIRECT CARE ACTIVITIES ACROSS ALL MTFs

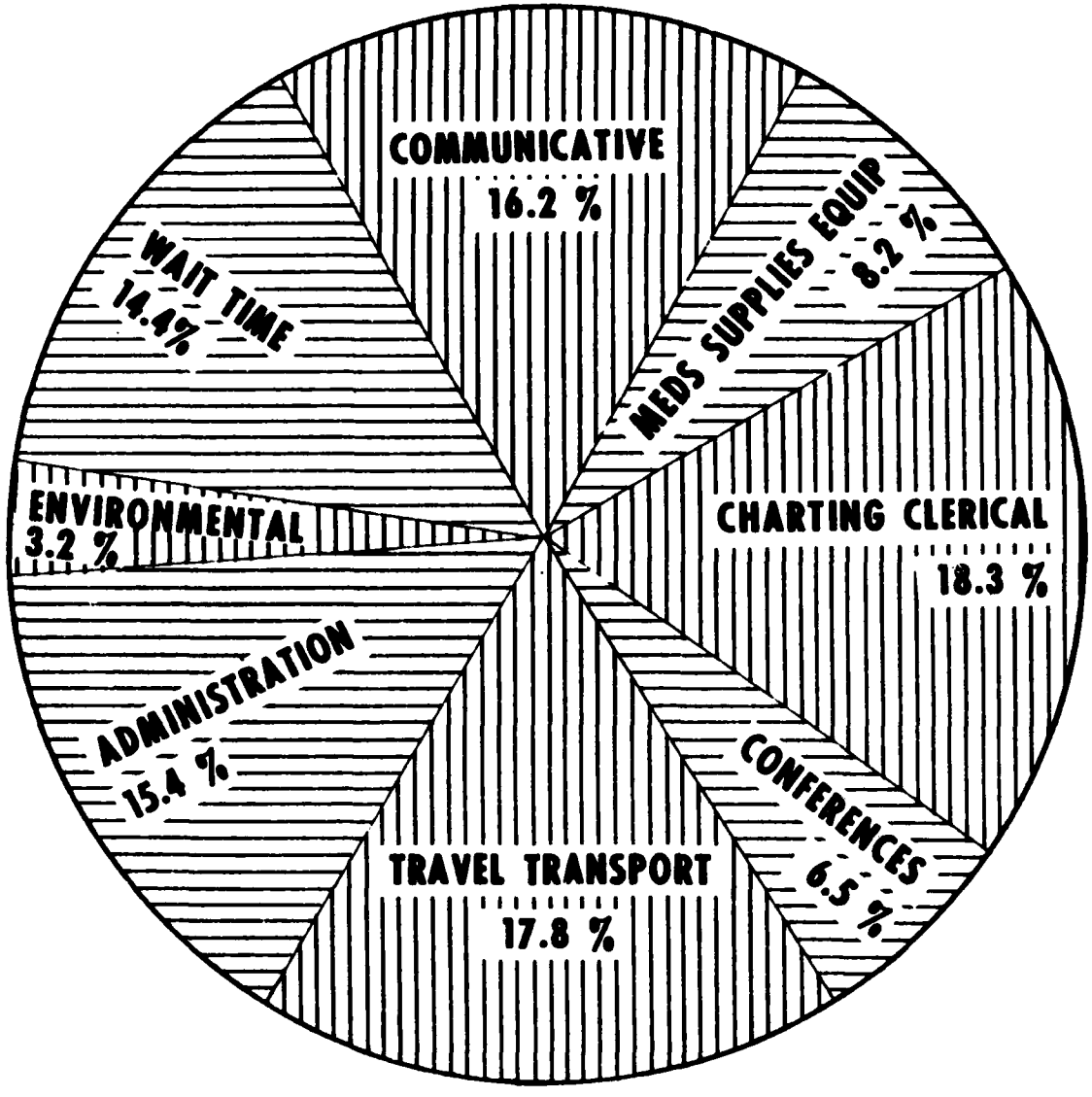


Figure 3

and 0-8 on nights. To compare the number of ADTs by MTF on each of the day, evening, and night shifts, Table 24 is presented. Across all MTFs, 50.9% (n=234) of ADTs occur on the day shift; 29.1% (n=134) of the ADTs were on the evening shift; and 20.0% (n=92) of the ADTs occured on the night shift. Noteworthy is the closeness of the percentages of ADTs by shift across all MTFs regardless of size and configuration.

The gross indicator of the overall staffing adequacy were the charge nurses' subjective reports. Across all sites, from the 461 charge nurse reports, 24.0% of the shifts were rated as staffed inadequately (4.8%, n=22) or barely adequate (19.3%, n=89). When the less than adequate staffing responses were examined, the day shifts were found to be most inadequately staffed with the inadequate response reported on 30.2% (n=70) shifts. Evening and night shifts were reported to be less than adequately staffed on 18.6% (n=25) and 17.4% (n=16) respectively.

The relationships between adequacy of staffing and the percentage of time spent in each of the temporal categories were examined. The correlation between the percentage of time spent providing indirect care and staffing adequacy was not found to be significant. However, a significant correlation ($r=0.22$, $p < .001$) was demonstrated between the percentage of direct care rendered and staffing. As the percentage of time spent in direct care increases, the charge nurses' perceptions about the adequacy of staffing decrease. It is not possible to correlate the staffing adequacy and unavailable for care times because of several possible interactions, i. e., when staffing is perceived to be adequate, the charge nurse may tend to award compensatory time to staff.

If the staffing was "barely adequate" or "inadequate" (n=111), the charge nurse was provided a list of multiple factors which might describe the reasons for this: 55.0% indicated "not enough staff on duty"; 53.0% selected "above average number of patients needing extensive nursing care, assistance, or

surveillance"; 34.0% stated there was "not an optimum mix of personnel skill levels"; 27.0% indicated a "census fluctuation"; and 19.0% responded "above average number of patients needing escort by nursing or other departments." When asked what would have helped the less than adequate staffing situation, 57.0% responded "an additional RN all shift"; 34.0% indicated the need for "an additional aide all shift"; and 27.0% felt that "an additional LPN all shift" would have relieved the situation.

Charge nurses were asked to "please judge the following aspects of care according to your best knowledge of nursing service given to at least 90.0% of the patients during this shift. Consider factors such as safety, accuracy, patient comfort and satisfaction, and agreement with medical and nursing plans of care" (see Appendix 12). Two components of nursing care were found to be judged less than satisfactory at least ten percent of the time:
a) communications with patient and/or family (explanation of procedures, teaching, orientation, "therapeutic socializing" (10.7%); and b) rounds with or assist MD with special procedures (0.5%). The remaining eight categories of care (see Appendix 12) were rated as less than satisfactory from 4.5-8.5% of the time. While these figures may appear low, the referent for judgement was only 90.0% of the patient census. For the same ten items, 53.2-78.3% of the time the charge nurse deemed the care to be "more than satisfactory" or "good."

5. DISCUSSION.

The documentation of how nursing service personnel spend their duty time at nine HSC installations with varying configurations and missions shows that the percentage of times do not differ substantively from those reported in the civilian literature (Lake, 1982), given that operational definitions and categorizations are slightly different. The overall direct care percentages in this study would have been higher if certain components of indirect care; i. e., travel/transportation and equipment set-up and tear-down times, had been subsumed

under direct care. However, conforming to the Sherrod study, direct care activities only encompassed "bedside-to-bedside" tasks. THE CURRENT STUDY MEASURES WHAT IS AND NOT WHAT SHOULD BE. No attempt was made to indicate *quality of care, only quantities of time spent.*

The findings for the direct care category are not as consistent when examined across MTFs and clinical specialties. The single factor which appears to erode most at direct care time is time unavailable for care. When enlisted personnel make up a high percentage of the staff, particularly at small installations, the amount of time off the unit increases. When the number of RNs increases, so does the amount of direct care. These findings may have implications when reconfiguring the yardsticks for manpower allocations.

The data also indicate that wait time spent by LPNs, Aides, and the 91B, F, and G, may be high. This is perhaps a function of their being unable to perform tasks needing to be done, being unable to recognize what needs to be done, or lacking motivation. Likewise, head nurses may spend too much time giving direct care (14.5%). Perhaps more of the head nurse time might be redirected to teaching, supervising, and motivating other staff members.

Although the objective data are reliable, the subjective data must be viewed with caution. It was possible to determine probable causes for a feeling of inadequate staffing reported in 24.0% of the instances and the charge nurse could enumerate the classification of personnel that would possibly remedy the situation.

Several chief nurses have indicated that the number of admissions, dispositions, and transfers on any given shift are a real and significant problem. However, attempts to correlate the numbers of ADTs with several other variables (including adequacy of staffing) failed to demonstrate any relationship. Either the variables which correlate with ADTs were not identified, the relationships are non-linear, there are multi-casual factors, or the variables interactive.

The findings of this study coupled with patient classification studies (i.e., the amount of direct care needed by patients), allows for a close examination of manpower requirements for nursing personnel throughout the Army. A caveat is necessary: as direct care requirements increase, it is not necessarily true that indirect care and unavailable for care requirements will increase in a linear relationship. Further study may be required to develop alternative staffing methodologies.

6. CONCLUSIONS.

a. Across all MTFs surveyed, the percentages of time spent by inpatient nursing service personnel in each of three temporal categories are: direct care (24.5%), indirect care (60.5%); and unavailable for patient care (15.0%). These findings are comparable to previous civilian studies.

b. A comparison of the times spent in each of the three temporal categories among all nine MTFs studied demonstrated that the most variance was in the temporal categories of direct care and unavailable for care. Differences appeared to be a function of hospital size and the mix of personnel assigned.

c. The times spent in each of the activities were not different from that expected. However, the differences among the clinical services, especially obstetrics and medical-surgical, indicate that a different yardstick might be considered for each of the six services.

d. From the reports of charge nurse opinions of the adequacy of staffing for each observed shift, 24.0% of the shifts were felt to be inadequately staffed. The major reasons for the staffing problems were in order of their selection: "not enough staff on duty"; "above average number of patients needing extensive nursing care, assistance, or surveillance"; and "not an optimal mix of personnel skill levels." The most often cited remedy for alleviating the staffing problem was the "need for an additional RN for the entire shift," which was selected by 57.0% of the respondents.

7. RECOMMENDATIONS.

It is recommended that the findings for this study be combined with those from a patient classification study currently being conducted by the Nursing Research Service at Walter Reed Army Medical Center. Model staffing guides should be developed and tested at selected facilities to determine adequacy of staffing and quality of care.

8. LITERATURE CITED.

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TABLES

Table 1

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT
FEBRUARY	2	18	.0
MARCH	3	79110	73.5
APRIL	4	28572	26.5
	TOTAL	107700	100.0

Table 2

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	7206	6.7	6.7	6.7
MONDAY	2	14226	13.2	13.2	19.9
TUESDAY	3	21060	19.6	19.6	39.5
WEDNESDAY	4	20310	18.9	18.9	58.3
THURSDAY	5	21690	20.1	20.1	78.5
FRIDAY	6	15366	14.3	14.3	92.7
SATURDAY	7	7842	7.3	7.3	100.0
	TOTAL	107700	100.0	100.0	

VALID CASES 107700 MISSING CASES 0

Table 3

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT
DAY	1	69630	64.7
EVENING	2	24660	22.9
NIGHT	3	13410	12.5
	TOTAL	107700	100.0

Table 4

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT
	*	144	.1
MED	1	8232	7.6
SURG	2	11346	10.5
MED SURG COMBO	3	2550	2.4
ORTHOPEDIC	4	2748	2.6
OB	5	8016	7.4
LABOR & DELIVERY	6	3390	3.1
OB L&D COMBO	7	4638	4.3
NEWBORN	8	13002	12.1
PEDS	9	16146	15.0
SICU	10	3384	3.1
MICU	11	1950	1.8
CCU	12	1740	1.6
ICU COMBO	13	10584	9.8
NICU	14	2316	2.2
PSYCHIATRY	16	12366	11.5
PED ICU	17	1956	1.8
ICU STEP DOWN M S	18	3192	3.0
	TOTAL	107700	100.0

* Missing

Table 5

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT
	*	144	.1
CRITICAL CARE	1.00	17658	16.4
MED SURG	2.00	28068	26.1
PSYCHIATRY	3.00	12366	11.5
OB LABOR DELIVERY	4.00	16044	14.9
NBN NICU	5.00	15318	14.2
PEDS PICU	6.00	18102	16.8
	TOTAL	107700	100.0

* Missing

Table 6

TIME SPENT IN INDIRECT NURSING CARE STUDY

DATA COLLECTION SITES

VALUE LABEL	VALUE	FREQUENCY	PERCENT
BROOKE AMC	1	17748	16.5
DARNALL COMM HOSP	2	13932	12.9
GEN WOOD COMM HOSP	3	12582	11.7
CAMPBELL COMM HOSP	4	12282	11.4
FITZSIMONS AMC	5	21276	19.8
DEWITT COMM HOSP	6	9282	8.6
FORT CARSON HOSP	7	11214	10.4
FT DEVENS COMM HOSP	8	3276	3.0
FORT LEE COMM HOSP	9	6108	5.7
	TOTAL	107700	100.0

Table 7

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY DATA COLLECTION SITE

PERTOT	MTF COUNT / ROW PCT / COL PCT	BROOKE ARMC 1	DARNALL COMM HOS 11	GEN 4000 COMM HO 21	CAMPBELL COMM HO 31	FITZSIMO NS AMC 41	DENITT COMM HOSP 51	C FORT SON HOSP 61	CAR FT S 71	DEVEN COMM H 81	FORT LEE COMM HO 91	ROW TOTAL
UNAVAILABLE	1	2110	1929	2667	1736	3179	1129	1690	655	1094		16189
		13.0	11.9	16.5	10.7	19.6	7.0	10.4	4.0	6.8		15.0
		11.9	13.8	21.2	14.1	14.9	12.2	15.1	20.0	17.9		
INDIRECT CARE	2	10464	8249	7568	7470	12795	5629	7128	1919	3944		65136
		16.1	12.6	11.6	11.5	19.6	8.6	10.9	2.9	6.1		60.5
		59.0	59.0	60.1	60.8	60.1	63.6	63.6	58.6	64.6		
DIRECT CARE	3	5174	3784	2347	3076	5302	2524	2396	702	1070		26375
		19.6	14.3	8.9	11.7	20.1	9.6	9.1	2.7	4.1		24.5
		29.2	27.2	18.7	25.0	24.9	27.2	21.4	21.4	17.5		
	COLUMN TOTAL	17746	13932	12582	12282	21276	9282	11214	3276	6108		107700
		16.5	12.9	11.7	11.4	19.8	3.6	10.4	3.0	5.7		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 8

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT
DIRECT CARE	-1	26375	24.5
PERSONAL	0	9477	8.8
OFF UNIT ACTV	1	6712	6.2
COMMUNICATIVE	2	10606	9.8
MEDS SUPPLIES EQUIP	3	5435	5.0
CHARTING CLERICAL	4	11853	11.0
CONFERENCES	5	4223	3.9
TRAVEL TRANSPORT	6	11532	10.7
ADMINISTRATION	7	10054	9.3
ENVIRONMENTAL	8	2097	1.9
WAIT TIME	9	9336	8.7
	TOTAL	107700	100.0

Table 9

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY DATA COLLECTION SITE

SERVICE	COUNT / ROW PCT / COL PCT	MTF / BROOKE A IMC 1	CARNALL COMM HOS 2	GEN WOOD COMM HO 3	CAMPBELL COMM HO 4	FITZSIMO NS AMC 5	DEWITT C OMM HOSP 6	FORT CAR SON HOSP 7	FT DEVEN S COMM H 8	FORT LEE COMM HO 9	ROW TOTAL
CRITICAL CARE	1	3864	1264	2394	2544	2910	2508	2154			17658
		21.9	7.3	13.6	14.4	16.5	14.2	12.2			16.4
		21.9	9.2	19.0	20.7	13.7	27.0	19.2			
MED SURG	2	2088	3264	3126	2316	3180	2208	2502	3276	6108	28068
		7.4	11.6	11.1	8.3	11.3	7.9	8.9	11.7	21.8	26.1
		11.9	23.4	24.8	18.9	14.9	23.8	22.3	100.0	100.0	
PSYCHIATRY	3	3084	2376	2196	1356	3354		-			12366
		24.9	19.2	17.8	11.0	27.1					11.5
		17.5	17.1	17.5	11.0	15.8					
OB LABOR DELIVER	4	2394	2262	2136	1776	3319	1440	2718			16044
		14.9	14.1	13.3	11.1	20.7	9.0	16.9			14.9
		13.6	16.2	17.0	14.5	15.6	15.5	24.2			
NON NICU	5	1884	2736	1410	2328	4536	996	1428			15318
		12.3	17.9	9.2	15.2	29.6	6.5	9.3			14.2
		10.7	19.6	11.2	19.0	21.3	10.7	12.7			
PEDS PICU	6	4290	2010	1320	1962	3978	2130	2412			18102
		23.7	11.1	7.3	10.8	22.0	11.8	13.3			16.8
		24.4	14.4	10.5	16.0	18.7	22.9	21.5			
	COLUMN TOTAL	17604	13932	12532	12282	21276	9282	11214	3276	6108	107556
		16.4	13.0	11.7	11.4	19.8	8.6	10.4	3.0	5.7	100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 10

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT
	*	318	.3
HEAD NURSE	1	7926	7.4
WARDMASTER	2	8634	8.0
RN	3	34812	32.3
91C	4	8988	8.3
LPN	5	10308	9.6
91B 91F 91G	6	21120	19.6
AIDE	7	9264	8.6
WARD CLERK	8	6330	5.9
	TOTAL	107700	100.0

* Missing

Table 11

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY DATA COLLECTION SITE

PROV	COUNT / ROW PCT / COL PCT	MTF BROOKE AMC (1)	DARNALL COMM HOS (2)	GEN 4000 COMM HO (3)	CAMPBELL COMM HO (4)	FITZSIMO NS AMC (5)	DEWITT C OMM HOSP (6)	FORT CAR SON HOSP (7)	FT DEVEN S COMM H (8)	FORT LEE COMM HO (9)	ROW TOTAL
HEAD NURSE	1	1452	930	1110	954	1506	774	720	192	288	7926
		18.3	11.7	14.0	12.0	19.0	9.8	9.1	2.4	3.6	7.4
		8.2	6.8	8.8	7.8	7.1	8.4	6.4	5.9	4.7	
WARDMASTER	2	1410	1152	1200	1116	1524	388	768	192	384	8634
		16.3	13.3	13.9	12.9	17.7	10.3	8.9	2.2	4.4	8.0
		7.9	8.4	9.5	9.1	7.2	9.7	6.8	5.9	5.3	
RN	3	6522	4698	3736	3540	7962	2880	3174	570	1630	34812
		18.7	13.5	10.9	10.2	22.9	8.3	9.1	1.6	4.8	32.4
		36.7	34.2	30.1	28.9	37.4	31.3	28.3	17.4	27.5	
91C	4	1728	342	956	630	1218	1568	1542	336	558	8988
		19.2	3.8	10.7	7.0	13.5	18.6	17.2	3.7	5.2	8.4
		9.7	2.5	7.7	5.1	5.7	18.1	13.8	10.3	9.1	
LPN	5	738	324	1134	1866	2622	192	2400	156	816	10308
		7.2	3.1	11.6	18.1	25.4	1.9	23.3	1.5	7.9	9.6
		4.2	2.4	9.5	15.3	12.3	2.1	21.4	4.8	13.4	
91B 91F 91G	6	3324	3360	3132	1842	3978	1452	1194	1338	1530	21120
		15.7	15.9	14.7	8.7	18.8	5.9	5.7	6.3	7.2	19.7
		18.7	24.4	24.7	15.1	18.7	15.8	10.6	40.8	25.0	
AIDE	7	1254	2226	816	1614	1194	762	624	300	474	9264
		13.5	24.0	8.8	17.4	12.9	8.2	6.7	3.2	5.1	8.6
		7.1	16.2	6.5	13.2	5.6	8.3	5.6	9.2	7.8	
WARD CLERK	8	1320	714	408	672	1272	582	792	192	378	6330
		20.9	11.3	6.4	10.6	20.1	9.2	12.5	3.0	5.0	5.9
		7.4	5.2	3.2	5.5	6.0	5.3	7.1	5.9	6.2	
	COLUMN	17746	13746	12532	12234	21276	9198	11214	3276	5108	107382
	TOTAL	16.5	12.8	11.7	11.4	19.8	8.6	10.4	3.1	5.7	100.0

NUMBER OF MISSING OBSERVATIONS = 318

Table 12

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

COUNT ROW PCT COL PCT	INDIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
HEAD NURSE 1	1147 14.5 4.4	532 6.7 5.6	826 10.4 12.3	1409 17.8 13.3	253 3.2 4.7	829 10.5 7.0	562 7.1 13.3	471 5.9 4.1	1725 21.8 17.2	25 .3 1.2	147 1.9 1.6	7926 7.4
WARDMASTER 2	704 8.2 2.7	765 8.9 8.1	1285 14.9 19.2	795 9.2 7.5	464 5.4 8.5	205 2.4 1.7	256 3.0 6.1	1000 11.6 8.7	2734 31.7 27.2	129 1.5 6.2	297 3.4 3.2	8634 8.0
RN 3	9210 26.5 35.1	2451 7.0 25.9	1548 4.4 23.1	4282 12.3 40.4	2282 6.6 42.0	5380 15.5 45.6	1678 4.8 39.8	2796 8.0 24.3	2218 6.4 22.1	273 .8 13.0	2694 7.7 28.9	34812 32.4
91C 4	2742 30.5 10.5	895 10.0 9.5	687 7.6 10.3	600 6.7 5.7	633 7.0 11.7	701 7.8 5.9	240 2.7 5.7	1093 12.2 9.5	399 4.4 4.0	248 2.8 11.8	750 8.3 8.0	8988 8.4
LPN 5	2984 28.9 11.4	1037 10.1 11.0	265 2.6 4.0	857 8.3 8.1	588 5.7 10.8	915 8.9 7.8	272 2.6 6.5	1291 12.5 11.2	370 3.6 3.7	387 3.8 18.5	1342 13.0 14.4	10308 9.6
91B 91F 91G 6	6310 29.9 24.1	2178 10.3 23.0	1251 5.9 18.7	1235 5.8 11.7	792 3.8 14.6	1385 6.6 11.7	848 4.0 20.1	2940 13.9 25.5	918 4.3 9.1	626 3.0 29.9	2637 12.5 28.3	21120 19.7
AIDE 7	2929 31.6 11.2	790 8.5 8.4	252 2.7 3.8	570 6.2 5.4	375 4.0 6.9	781 8.4 6.6	345 3.7 8.2	1327 14.3 11.5	284 3.1 2.8	390 4.2 18.6	1221 13.2 13.1	9264 8.6
WARD CLERK 8	192 3.0 .7	803 12.7 8.5	582 9.2 8.7	838 13.2 7.9	45 .7 .8	1501 25.3 13.6	14 .2 .3	596 9.4 5.2	1404 22.2 14.0	17 .3 .8	238 3.8 2.6	6330 5.9
COLUMN TOTAL	26218 24.4	9451 8.8	6696 6.2	10586 9.9	5432 5.1	11797 11.0	4215 3.9	11514 10.7	10052 9.4	2095 2.0	9326 8.7	107382 100.0

NUMBER OF MISSING OBSERVATIONS = 318

Table 13

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERTOT	COUNT / ROW PCT / COL PCT	PROV: HEAD NURSE (1)	WARDMASTER (11)	RN (21)	91C (31)	LPN (41)	91B 91F 91G (51)	AIDE (61)	WARD CLERK (71)	ROW TOTAL (81)
UNAVAILABLE	1	1358	2050	3999	1562	1302	3429	1042	1385	16147
		8.4	12.7	24.8	9.8	8.1	21.2	6.5	8.6	15.0
		17.1	23.7	11.5	17.6	12.6	16.2	11.2	21.9	
INDIRECT CARE	2	5421	5880	21603	4664	6022	11381	5293	4753	65017
		8.3	9.0	33.2	7.2	9.3	17.5	8.1	7.3	60.5
		68.4	68.1	62.1	51.9	58.4	53.9	57.1	75.1	
DIRECT CARE	3	1147	704	9210	2742	2984	6310	2929	192	26218
		4.4	2.7	35.1	10.5	11.4	24.1	11.2	.7	24.4
		14.5	8.2	26.5	30.5	28.9	29.9	31.6	3.0	
	COLUMN TOTAL	7926	8634	34812	8988	10308	21120	9264	6330	107362
		7.4	8.0	32.4	8.4	9.6	19.7	8.6	5.9	100.0

NUMBER OF MISSING OBSERVATIONS = 318

Table 14

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	PROV COUNT ROW PCT COL PCT	1 HEAD NURSE	2 WARDMASTER	3 RN	4 91C	5 LPN	6 91B 91F 91G	7 AIDE	8 WARD CLERK	ROW TOTAL
CRITICAL CARE	1	1212 6.9 15.4	1080 6.1 12.5	6948 39.3 20.0	3594 20.4 40.0	1980 11.2 19.2	1842 10.4 8.7	336 1.9 3.6	566 3.8 10.6	17658 15.5
MED SURG	2	1806 6.4 22.9	2016 7.2 23.4	7062 25.2 20.3	2586 9.2 28.8	2952 10.5 28.6	6822 24.3 32.3	2730 9.7 29.5	2046 7.3 32.4	28020 26.1
PSYCHIATRY	3	768 6.3 9.7	1224 10.0 14.2	3078 25.1 8.9		102 .8 1.0	4644 37.8 22.0	1974 16.1 21.3	480 3.9 7.6	12270 11.4
OB LABOR DELIVER	4	1446 9.0 16.3	1626 10.1 18.9	5736 35.8 16.5	786 4.9 8.7	2250 14.0 21.8	2340 14.6 11.1	834 5.2 9.0	1026 6.4 16.3	16044 15.0
NON NICU	5	1494 9.9 18.9	1080 7.1 12.5	6264 41.4 18.0	570 3.8 6.3	1248 8.2 12.1	1914 12.6 9.1	1848 12.2 19.9	726 4.8 11.5	15144 14.1
PEDS PICU	6	1164 6.4 14.6	1590 8.8 18.5	5670 31.3 16.3	1452 8.0 16.2	1776 9.8 17.2	3540 19.6 16.8	1542 8.5 16.6	1368 7.6 21.7	18102 15.9
	COLUMN TOTAL	7890 7.4	8616 8.0	34758 32.4	8988 8.4	10308 9.6	21102 19.7	9264 8.6	6312 5.9	107238 100.0

NUMBER OF MISSING OBSERVATIONS = 462

Table 15

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

COUNT ROW PCT COL PCT	DIRECT CARE -1	PERSONAL C	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 0	WAIT TIME 9	ROW TOTAL
1 CRITICAL CARE	5266 29.8 20.0	1291 7.3 13.6	999 5.7 14.9	1748 9.9 16.5	959 5.4 17.7	2002 11.3 16.9	627 3.6 14.9	1558 8.8 13.5	1527 8.6 15.2	217 1.2 10.4	1464 8.3 15.7	17658 16.4
2 MED SURG	5721 20.4 21.7	2993 10.7 31.6	1695 6.0 25.3	2746 9.8 25.9	1683 6.0 31.0	3652 13.0 30.8	1110 4.0 26.3	3524 12.9 31.5	2325 8.3 23.2	620 2.2 29.6	1899 6.8 20.4	28068 26.1
3 PSYCHIATRY	3362 27.2 12.8	804 6.5 8.5	920 7.4 13.7	1097 8.9 10.3	160 1.3 2.9	943 7.6 8.0	1073 8.7 25.4	1317 10.7 11.4	1321 10.7 13.2	108 .9 5.2	1261 10.2 13.6	12366 11.5
4 OB LABOR DELIVER	3025 18.9 11.5	1432 8.9 15.1	1055 6.6 15.7	1709 10.7 16.1	946 5.9 17.4	1802 11.2 15.2	428 2.7 10.1	1631 10.2 14.2	1783 11.1 17.8	498 3.1 23.8	1735 10.8 18.6	16049 14.9
5 NON NICU	4798 31.3 18.2	1264 8.3 13.4	893 5.8 13.3	1430 9.3 13.5	909 5.9 16.7	1531 10.0 12.9	416 2.7 9.9	1390 9.1 12.1	1361 8.9 13.6	303 2.0 14.5	1023 6.7 11.0	15318 14.2
6 PEDS PICU	4182 23.1 15.9	1674 9.2 17.7	1144 6.3 17.1	1873 10.3 17.7	772 4.3 14.2	1916 10.6 16.2	566 3.1 13.4	2001 11.1 17.4	1702 9.4 17.0	348 1.9 16.6	1924 10.6 20.7	18102 16.8
COLUMN TOTAL	26354 24.5	9458 8.8	6706 6.2	10603 9.9	5429 5.0	11846 11.0	4220 3.9	11521 10.7	10019 9.3	2094 1.9	9306 8.7	107556 100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 16

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERIOT	COUNT / ROW PCT / COL PCT	SERVICE: 1 CRITICAL CARE	1 MED SURG	2 PSYCHIATRY	3 OB LABOR DELIVER	4 NBN	5 NICU	6 PEDS PICU	ROW TOTAL
UNAVAILABLE	1	2290	4688	1724	2487	2157	2818		16164
		14.2	29.0	10.7	15.4	13.3	17.4		15.0
		13.0	16.7	13.9	15.5	14.1	15.6		
INDIRECT CARE	2	10102	17659	7280	10532	8363	11102		65038
		15.5	27.2	11.2	16.2	12.9	17.1		60.5
		57.2	62.9	58.9	65.6	54.6	61.3		
DIRECT CARE	3	5266	5721	3362	3025	4798	4182		26354
		20.0	21.7	12.8	11.5	18.2	15.9		24.5
		29.8	20.4	27.2	18.9	31.3	23.1		
	COLUMN TOTAL	17658	28068	12366	16044	15318	18102		107556
		16.4	26.1	11.5	14.9	14.2	16.8		100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 17

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERIOD	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU PEDS PIC U (6)	ROW TOTAL
UNAVAILABLE	1	1649	3650	1202	1926	1577	2258	12462
		13.2	30.9	9.6	15.5	12.7	18.1	17.9
		14.9	19.6	15.2	19.3	17.2	18.9	
INDIRECT CARE	2	6352	11978	4761	6280	5185	7087	41643
		15.3	28.8	11.4	15.1	12.5	17.0	59.9
		57.4	61.5	60.3	62.9	56.7	59.4	
DIRECT CARE	3	3057	3648	1927	1772	2382	2595	15381
		19.9	23.7	12.5	11.5	15.5	16.9	22.1
		27.6	18.7	24.4	17.8	26.0	21.7	
	COLUMN TOTAL	11058	19476	7890	9978	9144	11940	69486
		15.9	28.0	11.4	14.4	13.2	17.2	100.0

Table 18

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE (COUNT / ROW PCT / COL PCT)	1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN NICU	6 PEDS PICU	ROW TOTAL
UNAVAILABLE	1	502	726	448	509	467	500	3152
		15.9	23.0	14.2	16.1	14.8	15.9	12.8
		11.8	12.7	15.2	13.7	12.3	11.8	
INDIRECT CARE	2	2360	3514	1341	2413	1791	2614	14033
		16.8	25.0	9.6	17.2	12.8	18.6	56.9
		55.6	61.4	45.4	65.1	47.2	61.8	
DIRECT CARE	3	1386	1484	1163	786	1540	1116	7475
		18.5	19.9	15.6	10.5	20.6	14.9	30.3
		32.6	25.9	39.4	21.2	40.5	26.4	
	COLUMN TOTAL	4248	5724	2952	3708	3798	4230	24660
		17.2	23.2	12.0	15.0	15.4	17.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE (COUNT / ROW PCT / COL PCT)	1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN NICU	6 PEDS PICU	ROW TOTAL
UNAVAILABLE	1	139	112	74	52	113	60	550
		25.3	20.4	13.5	9.5	20.5	10.9	4.1
		5.9	3.9	4.9	2.2	4.8	3.1	
INDIRECT CARE	2	1390	2167	1178	1839	1387	1401	9362
		14.8	23.1	12.6	19.6	14.8	15.0	69.8
		59.1	75.6	77.3	78.0	58.4	72.5	
DIRECT CARE	3	823	589	272	467	876	471	3498
		23.5	16.8	7.8	13.4	25.0	13.5	26.1
		35.0	20.5	17.8	19.8	36.9	24.4	
COLUMN TOTAL		2352	2868	1524	2358	2376	1932	13410
		17.5	21.4	11.4	17.6	17.7	14.4	100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 20

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT CARE ACROSS ALL MTFs

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
COMMUNICATIVE	2	10606	9.8	16.3	16.3
MEDS SUPPLIES EQUIP	3	5435	5.0	8.3	24.6
CHARTING CLERICAL	4	11853	11.0	18.2	42.8
CONFERENCES	5	4223	3.9	6.5	49.3
TRAVEL TRANSPORT	6	11532	10.7	17.7	67.0
ADMINISTRATION	7	10054	9.3	15.4	82.4
ENVIRONMENTAL	8	2097	1.9	3.2	85.7
WAIT TIME	9	9336	8.7	14.3	100.0
OUT OF RANGE		42564	39.5	MISSING	
	TOTAL	107700	100.0	100.0	

VALID CASES 65136 MISSING CASES 42564

Table 21

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY DATA COLLECTION SITE

ACT	COUNT / ROW PCT / COL PCT	MTF: BROOKE AMC (1)	DARNALL COMM HOS (2)	GEN WOOD COMM HO (3)	CAMPBELL COMM HO (4)	FITZSIMONS AMC (5)	DEWITT COMM HOSP (6)	FORT CARSON HOSP (7)	FT DEVENS COMM H (8)	FORT LEE COMM HO (9)	ROW TOTAL
COMMUNICATIVE	2	1735	1132	1499	1266	2083	995	1110	312	474	10606
		16.4	10.7	14.1	11.9	19.6	9.4	10.5	2.9	4.5	16.3
		16.6	13.8	19.8	16.9	16.3	17.7	15.6	16.3	12.0	
MEDS SUPPLIES EQ	3	995	573	565	398	1165	584	644	145	366	5435
		18.3	10.5	10.4	7.3	21.4	10.7	11.8	2.7	6.7	8.3
		9.5	7.0	7.5	5.3	9.1	10.4	9.0	7.6	9.3	
CHARTING CLERICA	4	1615	1984	1270	1301	1966	1396	1213	293	815	11853
		13.6	16.7	10.7	11.0	16.6	11.8	10.2	2.5	6.9	18.2
		15.4	24.1	16.8	17.4	15.4	24.8	17.0	15.3	20.7	
CONFERENCES	5	762	678	479	330	1004	275	233	152	310	4223
		18.0	16.1	11.3	7.8	23.8	6.5	5.5	3.6	7.3	6.5
		7.3	8.2	6.3	4.4	7.8	4.9	3.3	7.9	7.9	
TRAVEL TRANSPORT	6	1433	1803	901	1204	2981	940	1178	346	746	11532
		12.4	15.6	7.8	10.4	25.8	8.2	10.2	3.0	6.5	17.7
		13.7	21.9	11.9	16.1	23.3	16.7	16.5	18.0	18.9	
ADMINISTRATION	7	2041	981	1068	1189	2327	662	1090	301	405	10054
		20.3	9.8	10.6	11.8	23.1	6.6	10.7	3.0	4.0	15.4
		19.5	11.9	14.1	15.9	18.2	11.8	15.2	15.7	10.3	
ENVIRONMENTAL	8	317	327	170	103	368	205	335	70	202	2097
		15.1	15.6	8.1	4.9	17.5	9.8	16.0	3.3	9.6	3.2
		3.0	4.0	2.2	1.4	2.9	3.6	4.7	3.6	5.1	
WAIT TIME	9	1566	741	1616	1679	901	572	1335	300	626	9336
		16.8	7.9	17.3	18.0	9.7	6.1	14.3	3.2	6.7	14.3
		15.0	9.0	21.4	22.5	7.0	10.2	18.7	15.6	15.9	
	COLUMN TOTAL	10464	8219	7568	7470	12795	5629	7128	1919	3944	65136
		16.1	12.6	11.6	11.5	19.6	8.6	10.9	2.9	6.1	100.0

Table 22

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT (COUNT / ROW PCT / COL PCT)	HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91F 91G (6)	AIDE (7)	WARD CLERK (8)	ROW TOTAL
2 COMMUNICATIVE	1409	795	4282	600	857	1235	570	838	10586
	13.3	7.5	40.4	5.7	8.1	11.7	5.4	7.9	16.3
	26.0	13.5	19.8	12.9	14.2	10.9	10.8	17.6	
3 MEDS SUPPLIES EQ	253	464	2282	633	588	792	375	45	5432
	4.7	8.5	42.0	11.7	10.8	14.6	6.9	.8	8.4
	4.7	7.9	10.6	13.6	9.8	7.0	7.1	.9	
4 CHARTING CLERICA	829	205	5380	701	915	1385	781	1601	11797
	7.0	1.7	45.6	5.9	7.8	11.7	6.6	13.6	18.1
	15.3	3.5	24.9	15.0	15.2	12.2	14.8	33.7	
5 CONFERENCES	562	256	1678	240	272	848	345	14	4215
	13.3	6.1	39.8	5.7	6.5	20.1	8.2	.3	6.5
	10.4	4.4	7.8	5.1	4.5	7.5	6.5	.3	
6 TRAVEL TRANSPORT	471	1000	2796	1093	1291	2940	1327	596	11514
	4.1	8.7	24.3	9.5	11.2	25.5	11.5	5.2	17.7
	8.7	17.0	12.9	23.4	21.4	25.8	25.1	12.5	
7 ADMINISTRATION	1725	2734	2218	399	370	918	284	1404	10052
	17.2	27.2	22.1	4.0	3.7	9.1	2.8	14.0	15.5
	31.8	46.5	10.3	8.6	6.1	8.1	5.4	29.5	
8 ENVIRONMENTAL	25	129	273	248	387	626	390	17	2095
	1.2	6.2	13.0	11.8	18.5	29.9	18.6	.8	3.2
	.5	2.2	1.3	5.3	6.4	5.5	7.4	.4	
9 WAIT TIME	147	297	2694	750	1342	2637	1221	238	9326
	1.6	3.2	28.9	8.0	14.4	28.3	13.1	2.6	14.3
	2.7	5.1	12.5	16.1	22.3	23.2	23.1	5.0	
COLUMN TOTAL	5421	5880	21603	4664	6022	11381	5293	4753	65017
	8.3	9.0	33.2	7.2	9.3	17.5	8.1	7.3	100.0

Table 23

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	ROW PCT / COL PCT	1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN NICU	6 PEDS PICU	ROW TOTAL
COMMUNICATIVE	2	1748	2746	1097	1709	1430	1873	10603
		16.5	25.9	10.3	16.1	13.5	17.7	16.3
		17.3	15.6	15.1	16.2	17.1	16.9	
MEDS SUPPLIES EQ	3	959	1683	160	946	909	772	5429
		17.7	31.0	2.9	17.4	16.7	14.2	8.3
		9.5	9.5	2.2	9.0	10.9	7.0	
CHARTING CLERICA	4	2002	3652	943	1802	1531	1916	11846
		16.9	30.8	8.0	15.2	12.9	16.2	18.2
		19.8	20.7	13.0	17.1	18.3	17.3	
CONFERENCES	5	627	1110	1073	428	416	566	4220
		14.9	26.3	25.4	10.1	9.9	13.4	6.5
		6.2	6.3	14.7	4.1	5.0	5.1	
TRAVEL TRANSPORT	6	1558	3624	1317	1631	1390	2001	11521
		13.5	31.5	11.4	14.2	12.1	17.4	17.7
		15.4	20.5	18.1	15.5	16.6	18.0	
ADMINISTRATION	7	1527	2325	1321	1783	1361	1702	10019
		15.2	23.2	13.2	17.8	13.6	17.0	15.4
		15.1	13.2	18.1	16.9	16.3	15.3	
ENVIRONMENTAL	8	217	620	108	498	303	348	2094
		10.4	29.6	5.2	23.8	14.5	16.6	3.2
		2.1	3.5	1.5	4.7	3.6	3.1	
WAIT TIME	9	1464	1899	1261	1735	1023	1924	9306
		15.7	20.4	13.6	18.6	11.0	20.7	14.3
		14.5	10.8	17.3	16.5	12.2	17.3	
	COLUMN TOTAL	10102	17659	7280	10532	6363	11102	65038
		15.5	27.2	11.2	16.2	12.9	17.1	100.0

TABLE 24

PERCENTAGE AND NUMBER OF TOTAL ADTS FOR EACH MTF BY ALL SHIFTS *

MFT	DAYS	EVENINGS	NIGHTS
BROOKE AMC	54.3 (n=38)	25.7 (n=18)	20.0 (n=14)
FT HOOD	51.7 (n=31)	30.0 (n=18)	18.3 (n=11)
FT LEONARD WOOD	50.0 (n=30)	28.3 (n=17)	21.7 (n=13)
FT CAMPBELL	50.0 (n=30)	30.0 (n=18)	20.0 (n=12)
FITZSIMONS AMC	50.0 (n=40)	30.0 (n=24)	20.0 (n=16)
FT BELVOIR	50.0 (n=25)	30.0 (n=15)	20.0 (n=10)
FT CARSON	50.0 (n=25)	30.0 (n=15)	20.0 (n=10)
FT DEVENS	50.0 (n=05)	30.0 (n=03)	20.0 (n=02)
FT LEE	50.0 (n=10)	30.0 (n=06)	20.0 (n=04)
MEAN % ADTS Per Shift	50.9	29.1	20.0

* ADTS range per shift (days= 0-21; evenings = 0-7; and nights = 0-8)

APPENDICES

APPENDIX 1

DEPARTMENT OF THE ARMY
US ARMY HEALTH CARE STUDIES AND CLINICAL INVESTIGATION ACTIVITY
FORT SAM HOUSTON, TEXAS 78234

HSHN-Z 2 February 1983

SUBJECT: Indirect Nursing Care Time Requirements

1. The Army Nurse Corps has long been convinced that patient census alone is an inadequate basis for establishing nursing manpower and staffing requirements. During FY 81, an Army study was completed which provided a valid and reliable methodology for the quantification of inpatients' direct nursing care needs; however, this provides only one portion of the formula needed for the determination of nursing manpower.

2. Pursuant to The Surgeon General's FY 83 Army Medical Department Study Program, under AR 5-5, the aforementioned study is to be continued with the gathering of data necessary to quantify the percentage of time spent in indirect nursing care activities. In order to assure the validity of these data, it will be necessary to study Medical Treatment Facilities (MTFs) of various sizes. Because of the size and configuration of your MTF, it has been recommended by HQ, HSC as one of the sites for data collection.

3. The proponent agency for this study is Health Care Studies and Clinical Investigation Activity (HCSCIA). Colonel Marian Walls, ANC (HQ, HSC), is the Study Director. LTC Terry R. Misener, ANC (HCSCIA) is the Principal Investigator.

4. It is planned that training for the conduct of the study (data collection) be provided at each installation by the Principal Investigator's staff. Also, it is envisioned that the Department of Nursing at each selected MEDDAC/MEDCEN provide data collectors from within its staff. These details have been discussed with your Chief Nurse, who has expressed an interest in supporting this effort. Definite timetables for the study are pending; however, training and data collection would not commence before 28 February 1983. The exact dates that our representatives could be at your facility can be coordinated with your staff.

HSHN-Z 2 February 1983
SUBJECT: Indirect Nursing Care Time Requirements

5. We would appreciate receiving your cooperation and command support for this high-priority study. A timely response granting willingness to participate would be appreciated so that study plans can be formalized.

DAVID G. BRUNNER
Colonel, Dental Corps
Commanding

List of addressees for Indirect Nursing Care Time Requirements

Commander
Colonel Florence A. Blanchfield Army Community Hospital
Ft Campbell, KY 42223

Commander
US Army Hospital
Ft Carson, CO 80913

Commander
US Dewitt Army Hospital
Ft Belvoir, VA 22060

Commander
Brooke Army Medical Center
Ft Sam Houston, TX 78234

Commander
US General Leonard Wood Army Hospital
Ft Leonard Wood, MO 65473

Commander
US Kenner Army Hospital
Ft Lee, VA 23801

Commander
US Darnell Army Hospital
Ft Hood, TX 76544

Commander
US Cutter Army Hospital
Ft Devens, MA 01433

Commander
Fitzsimons Army Medical Center
Aurora, CO 80045

APPENDIX 2

DATA COLLECTION SCHEDULE

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
DATES	2 Mar WED	3 Mar THU	4 Mar FRI	5 Mar SAT	6 Mar SUN	7 Mar MON	8 Mar TUE	9 Mar WED	10 Mar THU	11 Mar FRI	12 Mar SAT	13 Mar SUN	14 Mar MON	15 Mar TUE
DAYS	MALE SURG 43C	OB	ICU 13A	OB			OB	OB	MED 15B	MED 15B	MICU/ CCU 43E			OB
DAYS	PED & PICU	PED & PICU	PED & PICU			PED & PICU	NBN	NBN	PED & PICU	NBN			FEMALE SURG 43D	MICU/ CCU 43E
DAYS	PSY	NBN			ICU 13A	NBN	PSY	PSY	MICU/ CCU 43E			MALE SURG 43C	PSY	PSY
EVENINGS	MALE SURG 13B	OB/ L&D	PED & PICU	ICU 42A			OB/ L&D	OB/ L&D	NBN	MALE MED 43H	PED & PICU			PED & PICU
EVENINGS/ NIGHTS	Evenings PSY	PSY			ICU 13A	NBN	PSY					MED 15B	ICU 42A	NBN
	Nights							PSY	13B Male Surg					
NIGHTS			PED & PICU	ICU 42A	PED & PICU	ICU 13A	PSY			OB/ L&D	NBN	NBN	FEMALE SURG 43D	OB/ L&D

BROOKE ARMY MEDICAL CENTER

APPENDIX 3

DATA COLLECTION SCHEDULE

DATES	Day 1 5 Mar SAT	Day 2 6 Mar SUN	Day 3 7 Mar MON	Day 4 8 Mar TUE	Day 5 9 Mar WED	Day 6 10 Mar THU	Day 7 11 Mar FRI	Day 8 12 Mar SAT	Day 9 13 Mar SUN	Day 10 14 Mar MON	Day 11 15 Mar TUE	Day 12 16 Mar WED	Day 13 17 Mar THU	Day 14 18 Mar FRI
DAYS	NBN			CCU	MALE SURG 5 E	L & D	CCU	ROUTINE POST PARTUM 3 E			NBN	CCU	MALE & FEMALE SURG 4 E	MALE SURG 5 E
DAYS			MALE SURG 5 E	ROUTINE POST PARTUM 3 E	PED	PED	PED			L & D	PED	ROUTINE POST PARTUM 3 E	PED	NBN
DAYS		FEMALE SURG 3 S	PSY	PSY	PSY	NBN			ICU	NBN	PSY	PSY	CCU	
EVENINGS	FEMALE SURG 3 S			PED	MALE & FEMALE SURG 4 E	COMPLIC. POST PARTUM 2 E	L & D	CCU			COMPLIC. POST PARTUM 2 E	PED	PED	MALE SURG 5 E
EVENINGS/ NIGHTS	Evenings	PSY	CCU		PSY	NBN	NBN		CCU	NBN	PSY			
	Nights											PSY	MALE SURG 5E	
NIGHTS	PSY	NBN	MALE SURG 5 E	L & D			ICU	COMPLIC. POST PARTUM 2 E	PED	CCU	NBN			MALE SURG 5 E

DARNALL ARMY COMMUNITY HOSPITAL

APPENDIX 4

DATA COLLECTION SCHEDULE

DATES	Day 1 20 Mar SUN	Day 2 21 Mar MON	Day 3 22 Mar TUE	Day 4 23 Mar WED	Day 5 24 Mar THU	Day 6 25 Mar FRI	Day 7 26 Mar SAT	Day 8 27 Mar SUN	Day 9 28 Mar MON	Day 10 29 Mar TUE	Day 11 30 Mar WED	Day 12 31 Mar THU	Day 13 1 Apr FRI	Day 14 2 Apr SAT
DAYS			OB/ L&D	MED 2 W	OB/ L&D	MICU	OB/ L&D			SICU	OB/ L&D	MED 2W	FEMALE ORTHO 4 W	MALE ORTHO 5 E
DAYS		MED 2 W	PSY	PSY	PED	PED			OB/ L&D	PSY	PSY	PSY	NBN/ NICU	
DAYS	SICU	NBN/ NICU	CCU	PED	NBN/ NICU			NBN/ NICU	PED	NBN/ NICU	MICU	PED		
EVENINGS	MICU	NBN/ NICU	PSY	SICU	NBN/ NICU			MALE ORTHO 5 E	MICU	PSY	PSY	NBN/ NICU		
EVENINGS/ NIGHTS	Evenings		OB/L&D	MED 2 E	PED	SURG 3W	PED			PED	OB/L&D	OB/L&D		
	Nights												OB/L&D	NBN/NICU
NIGHTS	NBN/ NICU	MED 2 E	OB/ L&D	SICU	CCU			PED	PED	PSY	PSY	MED 2 E		

FITZSIMONS ARMY MEDICAL CENTER

APPENDIX 5

DATA COLLECTION SCHEDULE

DATES	Day 1 23 Mar WED	Day 2 24 Mar THU	Day 3 25 Mar FRI	Day 4 26 Mar SAT	Day 5 27 Mar SUN	Day 6 28 Mar MON	Day 7 29 Mar TUE	Day 8 30 Mar WED	Day 9 31 Mar THU	Day 10 1 Apr FRI	Day 11 2 Apr SAT	Day 12 3 Apr SUN	Day 13 4 Apr MON	Day 14 5 Apr TUE
DAYS	FEMALE SURG 4 B	OB	ICU	OB			OB	OB	MED 5 B	MALE SURG 4 A	ICU			OB
DAYS	PED	PED			PED	ICU	MALE SURG 4 A	MALE SURG 4 A	PED			NBN	ICU	NBN
DAYS/ EVENINGS	Days NBN	ICU	PED	NEO	NEO									
	Evenings							MED 5 B	MALE SURG 4A	PED	ICU	NBN		
EVENINGS	MALE SURG 4 A	OB			ICU	NBN	PED	OB	ICU			PED	NBN	OB
NIGHTS		ICU	PED	OB	PED	ICU			MED 5 B	OB	NBN	NBN	MALE SURG 4 A	

DEWITT ARMY COMMUNITY HOSPITAL
FORT BELVOIR, VIRGINIA

APPENDIX 6

DATA COLLECTION SCHEDULE

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
DATES	21 Mar MON	22 Mar TUE	23 Mar WED	24 Mar THU	25 Mar FRI	26 Mar SAT	27 Mar SUN	28 Mar MON	29 Mar TUE	30 Mar WED	31 Mar THU	1 Apr FRI	2 Apr SAT	3 Apr SUN
DAYS		OB/ L & D	GEN SURG 6 B	OB/ L & D	CCU	OB/ L&D			OB/ L&D	OB/ L&D	ARD	GEN SURG 6 B	CCU	
DAYS	GEN SURG 6 B	CCU	PED	PED	PED			PED	ORTHO 6 C	NBN	PED	NBN		
DAYS	PSY	PSY	PSY	NBN			CCU	NBN	NBN	PSY	CCU			PSY
EVENINGS		PED	GEN SURG 6 B	OB/ L&D	NBN	CCU			OB/ L&D	OB/ L&D	PED	MED 5 C	PED	
EVENINGS/ NIGHTS	Evenings CCU	PSY	PSY	PSY			CCU	NBN	NBN					MED 5 C
	Nights									PSY	GEN SURG6B			
NIGHTS	ARD	OB			PED	NBN	PED	CCU	CCU			OB	PSY	NBN

GENERAL LEONARD WOOD ARMY COMMUNITY HOSPITAL
FORT LEONARD WOOD, MISSOURI

APPENDIX 7

DATA COLLECTION SCHEDULE

DATES	Day 1 27 Mar SUN	Day 2 28 Mar MON	Day 3 29 Mar TUE	Day 4 30 Mar WED	Day 5 31 Mar THU	Day 6 1 Apr FRI	Day 7 2 Apr SAT	Day 8 3 Apr SUN	Day 9 4 Apr MON	Day 10 5 Apr TUE	Day 11 6 Apr WED	Day 12 7 Apr THU	Day 13 8 Apr FRI	Day 14 9 Apr SAT
DAYS				PED	PED					ICU	PSY	ICU	ICU	PSY
DAYS		SURG 4 AA	PSY	ORTHO 4 AB	OB/ NBN	OB/ NBN			OB/ NBN	OB/ NBN	OB/ NBN	SURG 4 AA	MED 3 AC	
DAYS	MED 3 AC	ICU	OB/ NBN	OB/ NBN	PED				PED	PED	ICU	PED	PSY	
EVENINGS			PSY	PED	OB/ NBN	ORTHO 4 AB	OB/ NBN			OB/ NBN	MED 3 AC	ICU	PED	PED
EVENINGS	MED 3 AC	PSY	ICU	PSY	ICU									
NIGHTS		SURG 4 AA	OB/ NBN			PED	ICU	PED	ICU		PSY	PSY	OB/ NBN	ORTHO 4 AB

FLORENCE A. BLANCHFIELD ARMY COMMUNITY HOSPITAL
FORT CAMPBELL, KENTUCKY

APPENDIX 8

DATA COLLECTION SCHEDULE

	Day 1 27 Mar SUN	Day 2 28 Mar MON	Day 3 29 Mar TUE	Day 4 30 Mar WED	Day 5 31 Mar THU	Day 6 1 Apr FRI	Day 7 2 Apr SAT	Day 8 3 Apr SUN	Day 9 4 Apr MON	Day 10 5 Apr TUE	Day 11 6 Apr WED	Day 12 7 Apr THU	Day 13 8 Apr FRI	Day 14 9 Apr SAT
DATES														
DAYS			PED	ORTHO	PED	PED	OB L&D PP			PED	PED	ORTHO	MALE M/S	RR/ICU
DAYS		ORTHO	NBN	NBN	NBN	M/CCU			RR/ICU	NBN	OB L&D PP	NBN	OB L&D PP	
DAYS/ EVENINGS	FEMALE M/S	OB/L&D PP	RR/ICU	M/CCU	OB/L&D PP									
	Evenings							OB/L&D PP *	FEMALE M/S	OB/L&D PP	MALE SURG	OB/L&D PP		
EVENINGS	MALE SURG	RR/ICU	PED			NBN	M/CCU	RR/ICU	NBN	NBN			PED	PED
NIGHTS	NBN	MALE SURG	OB L&D PP	PED	RR/ICU			PED	RR/ICU	NBN	OB L&D PP	FEMALE M/S		

* Snow day, collected on 10 Apr (Sun)

US ARMY MEDICAL ACTIVITY
FORT CARSON, COLORADO

APPENDIX 9

DATA COLLECTION SCHEDULE

DATES	Day 1 27 Mar SUN	Day 2 28 Mar MON	Day 3 29 Mar TUE	Day 4 30 Mar WED	Day 5 31 Mar THU	Day 6 1 Apr FRI	Day 7 2 Apr SAT	Day 8 3 Apr SUN	Day 9 4 Apr MON	Day 10 5 Apr TUE	Day 11 6 Apr WED	Day 12 7 Apr THU	Day 13 8 Apr FRI	Day 14 9 Apr SAT
DAYS	SURG	SURG		MED								SURG	MED	
EVENINGS						SURG					SURG			SURG
NIGHTS					MED				SURG					

US ARMY MEDICAL ACTIVITY
FORT DEVENS, MASSACHUSETTS

APPENDIX 10

DATA COLLECTION SCHEDULE

DATES	Day 1 6 Apr WED	Day 2 7 Apr THU	Day 3 8 Apr FRI	Day 4 9 Apr SAT	Day 5 10 Apr SUN	Day 6 11 Apr MON	Day 7 12 Apr TUE	Day 8 13 Apr WED	Day 9 14 Apr THU	Day 10 15 Apr FRI	Day 11 16 Apr SAT	Day 12 17 Apr SUN	Day 13 18 Apr MON	Day 14 19 Apr TUE
DAYS	MALE FEMALE M/S	ICU	ICU	ICU			ICU	ICU	MALE SURG	MALE SURG	MALE FEMALE M/S			MALE SURG
EVENINGS			MALE SURG	ICU	ICU					MALE FEMALE M/S	ICU	MALE FEMALE M/S		
NIGHTS		ICU				ICU			MALE SURG				MALE FEMALE M/S	

KENNER US ARMY COMMUNITY HOSPITAL

FORT LEE, VIRGINIA

APPENDIX 11A

TIME SPENT IN INDIRECT NURSING CARE STUDY

WORK SAMPLING DATA - WARD PERSONNEL

DATE: Day MO YR (1,2 / 3,4 / 5,6) DAY OF WEEK: (1=Sunday) 7

SHIFT: (1=Day,2=Even.,3=Night) 13

Type of Ward: _____

Observer: _____

MTF CODE: 8 UNIT CODE: 9-12

HOUR OBSERVED 14-17

PROVIDER CODE (1=Head Nurse,2=Wardmaster,3=RN,4=91C,5=LPN,6=91B,7=Aide/NA,8=Ward Clerk,9=Student,0=Volunteer)

	PROVIDER	DIRECT PATIENT CARE	UNAVAILABLE PERSONAL ACTV. (0)	UNAVAILABLE OFF UNIT ACTV. (1)	COMMUNICATIVE ACTS (2)	PREPARATION MEDS, SUPPL & EQUIP (3)	CLERICAL/ CHARTING (4)	CONFERENCES (5)	TRAVEL/ TRANSPORTATION (6)	ADMINISTRATION (7)	ENVIRONMENTAL CONTROLS (8)	WAIT TIME (9)	ACTIVITY CODES
18													19-21
													22-24
25													26-28
													29-31
32													33-35
													36-38
39													40-42
													43-45
46													47-49
													50-52
53													54-56
													57-59
60													61-63
													64-66
67													68-70
													71-73
74													75-77
													78-80
81													82-84
													85-87

APPENDIX 11B

INSTRUCTIONS: "WORK SAMPLING DATA - WARD PERSONNEL" FORM

This is the form that will be used to collect all data for the Indirect Nursing Care Study in which you are participating. You will be asked to complete ONE FORM for EACH HOUR of observation. In order for this study to be valid these forms must be completed precisely. Please follow the instructions carefully:

DATE: in box 1,2 place the Day of the Month (i.e., 05, 14)
in box 3,4 the Month (i.e., Feb = 02, Mar = 03, etc.)
in box 5,6 the Year which is "83"

DAY OF WEEK: in box 7 place the code for the day of the week (1=Sunday, 2=Monday, 3=Tuesday, 4=Wednesday, 5=Thursday, 6=Friday, 7=Saturday)

MTF CODE: As provided in Training Session

UNIT CODE: As provided in Training Session

CENTER BOX: Type of Ward - write "Med/Surg" or "OB" or "L & D" etc.
Observer: write your name

SHIFT: in box 13 write the code for the Shift (1=Day, 2=Evening, 3=Night)

HOUR OBSERVED: in boxes 14-17 place the hour the observation began (example: 0800 to 0900 observed = "0800")

The remainder of the form is for actual data collection. In the "Provider" column list each care provider present for duty for the shift. Indicate the provider code in boxes 18, 25, 32, etc. for each provider observed during that hour as follows:

1 = Head Nurse	4 = 91C	7 = Aide/NA	0 = Volunteer
2 = Wardmaster	5 = LPN	8 = Ward Clerk	
3 = RN	6 = 91B	9 = Student	

(Example: If the first person listed and observed is the 91C, place a code 4 in block above number 18 and "91C" in blank space under "PROVIDER" heading.)

Across the form are listed 11 different activity categories broken down into six 10-minute sections. As you make each of the six observations for that hour place a check mark in the appropriate activity column.

(Example: At 20 past the hour the observation is of the 91C talking to the RN about a patient. Place a mark on the provider line marked 91C in the COMMUNICATIVE ACTS column under "20" minutes.)

ACTIVITY CODES: LEAVE BLANK

UNIT STAFFING/CARE EVALUATION QUESTIONNAIRE

Charge Nurse: Please complete at or toward the end of each shift.

Hospital: _____

Type of Unit: _____

Unit: _____

Day of Study: _____

Shift: D E N

Date: ____/____/____
Month Day Year

Person completing form:

_____

Total Patients in Each Class at Beginning of Shift:

I	II	III	IV
____	____	____	____

STAFF ON SHIFT

PERSONNEL	NUMBER FULLTIME	NUMBER PARTTIME	NUMBER MISSING*	TOTAL HOURS
RN/CN				
RN's				
LPN's				
Aides				
Students				
Ward Clerk				
TOTALS				

* Number of personnel on schedule but not available for patient care for the entire shift (include sick/qtrs, Continuing Education, TDY, Admin absence, Comp-time, CQ,etc.; DO NOT include Leave, Days off, etc.)

Admissions _____ Discharges _____ during shift.

1. In general, did you feel that staffing for this shift was:

More than adequate	Comfortable	Adequate	Barely adequate	Inadequate
5 ( )	4 ( )	3 ( )	2 ( )	1 ( )

2. If barely adequate or inadequate, which one(s) of the following factors seemed to best describe the situation? (Check the one(s) that apply.)

2.1 Above average number of patients needing extensive nursing care, assistance, or surveillance. _____

2.2 Not enough staff on duty: e.g., to few scheduled; scheduled but not on duty, or transferred to another unit. _____

2.3 Census fluctuations: e.g., above average number of admissions this shift or previous shift, or above average number of dismissals or transfers. _____

2.4 Not an optimum mix of personnel skill levels. _____

2.5 Above average number of patients needing escort by nursing or other departments. _____

2.6 Other (please describe) _____

_____

(over)

3. In your judgement, if staffing was barely adequate or inadequate, what would have best helped the situation? (Check the one(s) that apply.)

3.1 Additional Aide all shift ____
3.2 Two additional Aides all shift. ____
3.3 Additional Aide part of shift ____
3.4 Additional LPN all shift ____
3.5 Two additional LPN's all shift ____
3.6 Additional LPN part of shift ____
3.7 Addistional RN all shift ____
3.8 Two additional RN's all shift ____
3.9 Additional RN part of shift ____
3.11 WC all shift ____
3.12 Additional WC part of shift ____
3.13 Other (please discribe) ____

4. Please judge the following aspects of care according to your best knowledge of nursing services given to at least 90% of the patients during this shift. Consider factors such as safty, accuracy, apatient comfort and satisfaction, and agreement with medical and nursing plans of care.

Check the value that best applies using the following scale:

5 = Good
4 = More than satisfactory
3 = Satisfactory
2 = Less than satisfactory
1 = Poor

4.1 Basic hygienic care (bathing, clean linen, oral hygiene, skin care).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.2 Basic feeding and toileting (assistance with meals if needed, fluids forced, prompt care of elimination needs).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.3 Mobility (turning as needed, ambulation, assistance in getting out of bed as needed, up in wheelchair, positioning).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.4 Medications, IV's (given as ordered and within time limits).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.5 Communication with patient and/or family (explanation of procedures, teaching, orientation, "therapeutic socializing").
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.6 Special procedures (oxygen maintained, dressings changed as needed, irrigations, catheter care, etc.).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.7 Observation of patients (nursing rounds, checking on signs, symptoms).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.8 Vital signs (taken as indicated or ordered).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.9 Rounds with or assist MD with special procedures.
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

4.10 Implementation of new orders without undue delay (dismissal orders, routine and stat orders).
1 ____ 2 ____ 3 ____ 4 ____ 5 ____

APPENDIX 13

OPERATIONAL DEFINITIONS

DIRECT PATIENT CARE: Physical or sensory interaction with the patient having a direct bearing on his needs such as: physical care of the patient, assisting doctor with examinations, treatment or procedure; talking with the patient.

INDIRECT PATIENT CARE: Patient-centered activities performed away from the patient such as: communications, planning his care, assessing his needs, preparation of medications, equipment, team conference, etc.

0. Personal Activities: Refers to meal time, coffee, personal telephone calls, socialization not related to work, personal toilet activities.

1. Off unit activities: Refers to activities which removes individual from the ward for less than a full 8 hour shift.

a. Doctor or Dental Appointment (Outpatient Care)
b. Mandatory Training (including ward/clinic or hospital in-service; DOES include Race Relations/Equal Opportunity Classes, etc.)
c. Seminars and Continuing Education Requirements (Seminars, short courses, etc., ward/clinic in-service)
d. Duty Roster Performance (Equivalent time-off after duty as CQ, CQ Runner, KP, Guard Duty, SDNCO, SDO (Military Only)
e. Company Duty (Inspections, Parades, etc.)
f. Compensatory Time
g. Leave Without Pay (Less than 8 hours)
h. Air Evacuation/Ambulance Runs
i. Staff and Other Administrative Meetings (non-patient conferences)
j. Educational Advancement Permitted During Duty Time
k. Absence due to illness of dependent/taking dependent to medical appointment
l. Miscellaneous (For those activities not covered by any other title, e.g., Court Duty, EEO Counselor Activities, Award Ceremonies not involving Parades, etc.)
m. Orientation
n. Inprocessing
o. Outprocessing
p. Civilian Annual Leave (Less than 8 hours) (DOES NOT include regular scheduled day(s) off during week)
q. Ill (sick leave)

2. Communicative Acts - Refers to those communicative acts that are necessary in meeting requirements for patient care. These activities include answering the phone and all communicative acts between personnel.

3. Preparation of Medications, Supplies, and Equipment - Refers to the set-up and tear-down of all patient care supplies, medications, and equipment, and checking of all emergency equipment and supplies.

OPERATIONAL DEFINITIONS

4. Charting, Chart Reference, and Clerical - Refers to all activities involving the patient's care or written materials concerning the patient to include checking or reading the Kardex, careplan/chart transcription or writing of orders, writing in chart, Kardex, or careplan. All information to include vital signs, intake and output, completing or filing of clinical reports.

5. Conferences - Refers to those meetings or planning sessions which infringe upon direct nursing care time and includes the change of shift report, medical and nursing rounds, patient care conferences, and patient care planning (include written nursing care plan development).

6. Travel and Transportation Tasks - Refers to those activities that utilize nursing personnel in transporting people and objects. These activities include the transporting of patients, transporting of all supplies and equipment, transporting specimens and traveling on the ward.

7. Administrative Tasks - Refers to those activities that are performed in meeting general management needs of the patient care unit. These activities include the time schedule, staff assignments, efficiency reports, chart audit, manpower survey records, and special written reports.

8. Environmental Control Tasks - Refers to those cleaning activities that infringe upon direct nursing care time. These activities include cleaning the patient care unit, linen control, cleaning of ward equipment, mopping and cleaning the floors and emptying the trash.

9. Wait Time - Refers to those time intervals when the individual must wait for supplies, equipment, medical approval or similar actions. Include time staff may appear to be doing nothing, but waiting to render patient care.

APPENDIX 14

TRAINING SESSIONS - INDIRECT PATIENT CARE OBSERVERS

Introductions

Discussion of purpose, objective, roles, uniform requirements, & duty schedule.

METHODOLOGY -

Work sampling technique effective/accurate over time , will observe ea 10 min.

Discussed process, data collection instrument.

Caution against bias, don't anticipate, make "snap shot" observations.

Rotate about ward, observe each staff member as approached.

Randomize start time, place, and direction.

Remove yourself from area/staff between rounds.

Inquire into absence of staff-purpose being personal or business?

Make notations on back with additional information (ie odd shifts, borrowed help)

Use operational definitions carefully, refer to list often.

Some arbitrary definitions have been made (ie hand washing is "Prep of Meds").

Interaction with staff (other than asking for assistance in locating staff members) kept to a minimum, do distractions to staff .

Answer all questions regarding the study, forms, etc (staff or patients).

All observations, proceedings on ward etc CONFIDENTIAL.

No participating in care except in an emergency situation (immediate).

DATA COLLECTION SCHEDULE -

Each of the 9 MTFs observed on each type of ward (MED, SURG, PED, NBN, OB, CCU, & PSY) as follows:

Days = 5 times, Evenings = 3 times, Nights = 2 times TOTAL = 10 times.

If more than 1 ward of a type, the ward IDs were randomized.

Day-of-the-study (1 to 14) also randomized (adjusted only to allow 5 working days with 2 days off for each observer for the 2-week period.

Discussed coding instructions.

Issued supply of forms for practice, clip boards, name tags, #2 pencils, etc.

Discussed Subjective questionnaire to be completed by Charge Nurse for each shift - it must be completed near the end of the shift inorder to reflect what transpired during that shift - no picking it up the next day, insist on getting it before they leave that shift.

Observer designated as "team leader" responsible for insuring all forms are audited and collected. Also to furnish a copy of the corrected time schedule for the dates of the study.

TESTING & PRACTICE -

After thorough discussion of operational definitions and rationale for specific decision making, administered Test #1. Reviewed test results and discussed incorrect answers until all agree on proper definition and rationale used.

Practiced in pairs for remainder of first day of training on typical wards.

Toured wards to be observed to establish boundaries and lounge area suitable for the observer to use between tours.

Meeting at beginning of second day to discuss problems/apprehension of the practice session and ask questions. After all comfortable with day one events, Test #2.

Discussed results of test #2 and practiced individually until time for exit briefing.

Trainer rotated among all wards during practice to observe abservers and discuss study/questionnaire with HNs on wards to be observed during study.

Last session at the end of day two to answer all questions, issue supply of forms, exchange contact phone numbers in case of emergency, and final review of instructions.

APPENDIX 14 (cont)

Requested complete name and address of observers for Letters of Appreciation.

Additional instructions to team leader regarding collection of data instruments and mailing instructions. Also responsible to coordinate alternate observer if needed.

APPENDIX 15

EXAMPLE OF WRITTEN TEST FOR OBSERVERS

Doing Work Sampling

1. _____ WC answering intercom.
2. _____ NA helping X-Ray Technician position patient.
3. _____ NA delivering dinner to patient.
4. _____ LPN helping patient brush teeth.
5. _____ LPN recording fluid intake.
6. _____ RN signing out a narcotic.
7. _____ NA bagging linen.
8. _____ HN off unit for administrative meeting.
9. _____ Two RN's making intershift narcotic count.
10. _____ LPN readed for staff bathroom.
11. _____ HN making out staff assignments.
12. _____ WC delivering mail to patients.
13. _____ 91B off unit for Head Count
14. _____ RN mixing an I.V. in the medicine room.
15. _____ LPN checking a surgical dressing.
16. _____ RN recording a medication given.
17. _____ LPN helping MD with a thoracentesis.
18. _____ RN showing patient how to administer own heparin injection.
19. _____ RN and LPN putting a new patient onto a Stryker frame.
20. _____ LPN helping post-op patient cough and deep breathe.
21. _____ NA applying TED's to patient's legs.
22. _____ Setting up a bladder irrigation.
23. _____ RN Checking patient's pupils.
24. _____ NA placing chux under patient.
25. _____ NA combing patient's hair.

26. _____ RN measuring T-tube drainage.

27. _____ LPN giving patient a backrub. H.S.

28. _____ RN checking emergency cart.

29. _____ RN and LPN in evaluation conference.

30. _____ LPN orienting a new LPN.

31. _____ NA off unit looking for lost wheelchair.

32. _____ WC making out TPR list.

33. _____ HN making entry in patient's chart.

34. _____ RN calling MD about patient's condition.

35. _____ Student consulting with RN about patient's order.

36. _____ HN changing order on Kardex.

37. _____ RN talking with resident about patient's diagnosis.

38. _____ HN making out referral form to VNA.

39. _____ LPN applying ice pack to patient's knee.

40. _____ NA's talking about movie seen on TV.

41. _____ RN starting oxygen on patient.

42. _____ LPN assisting patient walk down hallway.

43. _____ NA preparing room for a transfer patient.

44. _____ RN changing I.V. tubing.

45. _____ LPN checking circulation in toes of orthopedic patient.

46. _____ LPN doing range of motion exercises.

47. _____ HN making out staff hours.

48. _____ Night nurse noting swelling on patient's hand.

49. _____ HN adjusting footboard on patient's bed.

50. _____ Orderly (NA) adjusting monkey bar for patient.

EXAMPLE OF WRITTEN TEST FOR OBSERVERS (2)

Doing Work Sampling

1. _____ WC answering intercom.
2. _____ NA helping X-Ray Technician position patient.
3. _____ NA delivering dinner to patient.
4. _____ LPN helping patient brush teeth.
5. _____ LPN recording fluid intake.
6. _____ RN signing out a narcotic.
7. _____ NA bagging linen.
8. _____ HN off unit for administrative meeting.
9. _____ Two RN's making intershift narcotic count.
10. _____ LPN removing chux from under patient.
11. _____ HN making out staff assignments.
12. _____ WC delivering mail to patients.
13. _____ RN charting total intake on patient's chart.
14. _____ RN mixing an I.V. in the medicine room.
15. _____ NA placing linen in laundry chute.
16. _____ RN recording a medication given.
17. _____ RN talking with pharmacist re patients medication.
18. _____ LPN and NA taking body to morque.
19. _____ RN and LPN putting a new patient onto a Stryker frame.
20. _____ RN talking with Chaplin.
21. _____ RN checking medication Kardex.
22. _____ LPN charting intake on I and O record at bedside.
23. _____ RN checking patient's pupils.
24. _____ RN hanging blood.
25. _____ RN sorting medicine cards.

26. _____ RN measuring T-tube drainage.

27. _____ RN assisting with after death care.

28. _____ RN reviewing patient classification.

29. _____ RN and LPN in evaluation conference.

30. _____ LPN orienting a new LPN.

31. _____ NA off unit looking for lost wheelchair.

32. _____ Two RNs counting narcotics.

33. _____ HN making entry in patient's chart.

34. _____ RN calling MD about patient's condition.

35. _____ WC checking supplies.

36. _____ HN changing order on Kardex.

37. _____ RN talking with resident about patient's diagnosis.

38. _____ HN making out referral form to VNA.

39. _____ LPN applying ice pack to patient's knee.

40. _____ NA's talking about movie seen on TV.

41. _____ RN starting oxygen on patient.

42. _____ RN demonstrating crutch walking.

43. _____ NA preparing room for a transfer patient.

44. _____ LPN to CMS for catheterization tray.

45. _____ LPN checking circulation in toes of orthopedic patient.

46. _____ LPN doing range of motion exercises.

47. _____ HN making out staff hours.

48. _____ Night nurse noting swelling on patient's hand.

49. _____ HN adjusting footboard on patient's bed.

50. _____ RN adjusting IV flow.

APPENDICES 17-25

Appendices 17-25 are comprised of the site specific data for the individual Medical Treatment Facilities. Tables are isomersous of the composite data. Therefore, Tables 6, 7, 9, 11, 21, and 24 are purposefully omitted for individual Medical Treatment Facilities.

APPENDIX 17

BROOKE ARMY MEDICAL CENTER
FORT SAM HOUSTON, TEXAS

Table 1

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

MO

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	17748	100.0	100.0	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 2

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

WKDAY DAY OF WEEK

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	1272	7.2	7.2	7.2
MONDAY	2	2514	14.2	14.2	21.3
TUESDAY	3	3384	19.1	19.1	40.4
WEDNESDAY	4	3228	18.2	18.2	58.6
THURSDAY	5	3492	19.7	19.7	78.3
FRIDAY	6	2166	12.2	12.2	90.5
SATURDAY	7	1692	9.5	9.5	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 3

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

SHIFT

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	11550	65.1	65.1	65.1
EVENING	2	3894	21.9	21.9	87.0
NIGHT	3	2304	13.0	13.0	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 4

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

TYPE OF WARD

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
	-1	144	.8	.8	.8
MED	1	930	5.2	5.2	6.1
SURG	2	276	1.6	1.6	7.6
ORTHOPEDIC	4	882	5.0	5.0	12.6
OB	5	1362	7.7	7.7	20.3
OB L&D COMBO	7	1032	5.8	5.8	26.1
NEWBORN	8	1884	10.6	10.6	36.7
PEDS	9	2334	13.2	13.2	49.8
SICU	10	1944	11.0	11.0	60.8
MICU	11	912	5.1	5.1	65.9
CCU	12	336	1.9	1.9	67.8
ICU COMBO	13	672	3.8	3.8	71.6
PSYCHIATRY	16	3084	17.4	17.4	89.0
PED ICU	17	1956	11.0	11.0	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 5

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

SERVICE TYPE OF PATIENT

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
	-1.00	144	.8	.8	.8
CRITICAL CARE	1.00	3864	21.8	21.8	22.6
MED SURG	2.00	2088	11.8	11.8	34.3
PSYCHIATRY	3.00	3084	17.4	17.4	51.7
OB LABOR DELIVERY	4.00	2394	13.5	13.5	65.2
NBN NICU	5.00	1884	10.6	10.6	75.8
PEDS PICU	6.00	4290	24.2	24.2	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 8

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

ACT ACTIVITY

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	5174	29.2	29.2	29.2
PERSONAL	0	1249	7.0	7.0	36.2
OFF UNIT ACTV	1	861	4.9	4.9	41.0
COMMUNICATIVE	2	1735	9.8	9.8	50.8
MEDS SUPPLIES EQUIP	3	995	5.6	5.6	56.4
CHARTING CLERICAL	4	1615	9.1	9.1	65.5
CONFERENCES	5	762	4.3	4.3	69.8
TRAVEL TRANSPORT	6	1433	8.1	8.1	77.9
ADMINISTRATION	7	2041	11.5	11.5	89.4
ENVIRONMENTAL	8	317	1.8	1.8	91.2
WAIT TIME	9	1566	8.8	8.8	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 10

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

PROV

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
HEAD NURSE	1	1452	8.2	8.2	8.2
WARDMASTER	2	1410	7.9	7.9	16.1
RN	3	6522	36.7	36.7	52.9
91C	4	1728	9.7	9.7	62.6
LPN	5	738	4.2	4.2	66.8
91B 91F 91G	6	3324	18.7	18.7	85.5
AIDE	7	1254	7.1	7.1	92.6
WARD CLERK	8	1320	7.4	7.4	100.0
	TOTAL	17748	100.0	100.0	

VALID CASES 17748 MISSING CASES 0

Table 12

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV (COUNT / ROW PCT / COL PCT)	ACT: DIRECT CARE (-1)	PERSONAL (0)	OFF UNIT ACTV (1)	COMMUNICATIVE (2)	MEDS SUPPLIES EQ (3)	CHARTING CLERICAL (4)	CONFERENCES (5)	TRAVEL TRANSPORT (6)	ADMINISTRATION (7)	ENVIRONMENTAL (8)	WAIT TIME (9)	ROW TOTAL
1 HEAD NURSE	382	93	73	244	45	168	151	38	241	3	14	1452
	26.3	6.4	5.0	16.8	3.1	11.6	10.4	2.6	16.6	.2	1.0	8.2
	7.4	7.4	8.5	14.1	4.5	10.4	19.8	2.7	11.8	.9	.9	
2 WARDMASTER	187	111	127	82	135	7	50	147	514	40	10	1410
	13.3	7.9	9.0	5.8	9.6	.5	3.5	10.4	35.5	2.8	.7	7.9
	3.6	8.9	14.8	4.7	13.6	.4	6.6	10.3	25.2	12.6	.6	
3 RN	2133	385	140	750	470	856	330	455	329	72	562	6522
	32.7	5.9	2.1	12.1	7.2	13.1	5.1	7.0	5.0	1.1	8.6	36.7
	41.2	30.8	16.3	45.5	47.2	53.0	43.3	31.8	15.1	22.7	35.9	
4 91C	650	133	144	134	113	143	53	138	61	40	119	1728
	37.6	7.7	8.3	7.8	6.5	8.3	3.1	8.0	3.5	2.3	6.9	9.7
	12.6	10.6	16.7	7.7	11.4	8.9	7.0	9.6	3.0	12.6	7.6	
5 LPN	184	41	9	67	59	58	29	101	6	36	148	738
	24.9	5.6	1.2	9.1	8.0	7.9	3.9	13.7	.8	4.9	20.1	4.2
	3.6	3.3	1.0	3.9	5.9	3.6	3.8	7.0	.3	11.4	9.5	
6 91B 91F 91G	1088	254	149	237	110	180	109	327	298	64	508	3324
	32.7	7.6	4.5	7.1	3.3	5.4	3.3	9.8	9.0	1.9	15.3	18.7
	21.0	20.3	17.3	13.7	11.1	11.1	14.3	22.8	14.6	20.2	32.4	
7 AIDE	504	68	84	39	59	53	38	140	40	57	172	1254
	40.2	5.4	6.7	3.1	4.7	4.2	3.0	11.2	3.2	4.5	13.7	7.1
	9.7	5.4	9.8	2.2	5.9	3.3	5.0	9.8	2.0	18.0	11.0	
8 WARD CLERK	46	164	135	142	4	150	2	87	552	5	33	1320
	3.5	12.4	10.2	10.8	.3	11.4	.2	6.6	41.8	.4	2.5	7.4
	.9	13.1	15.7	8.2	.4	9.3	.3	6.1	27.0	1.6	2.1	
COLUMN TOTAL	5174	1249	861	1735	995	1615	762	1433	2041	317	1566	17748
	29.2	7.0	4.9	9.8	5.6	9.1	4.3	8.1	11.5	1.8	8.8	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 13

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERIOD	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
UNAVAILABLE	1	166	238	525	277	50	403	152	299	2110
		7.9	11.3	24.9	13.1	2.4	19.1	7.2	14.2	11.9
		11.4	16.9	8.0	16.0	6.8	12.1	12.1	22.7	
INDIRECT CARE	2	904	985	3864	801	504	1333	598	975	10454
		8.6	9.4	36.9	7.7	4.8	17.5	5.7	9.3	59.0
		62.3	69.9	59.2	46.4	68.3	55.1	47.7	73.9	
DIRECT CARE	3	382	187	2133	650	184	1088	504	46	5174
		7.4	3.6	41.2	12.6	3.6	21.0	9.7	.9	29.2
		26.3	13.3	32.7	37.6	24.9	32.7	40.2	3.5	
	COLUMN TOTAL	1452	1410	5522	1728	738	3324	1254	1320	17748
		8.2	7.9	36.7	9.7	4.2	18.7	7.1	7.4	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 14

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	COUNT / ROW PCT / COL PCT	PROV: HEAD NURSE (1)	WARDMASTER (2)	RN 91C (3)	LPN (4)	91B 91F 91G (5)	AIDE (6)	WARD CLERK (7)	ROW TOTAL
CRITICAL CARE	1	240 6.2 16.9	240 6.2 17.2	2052 53.1 31.7	768 19.9 44.4	258 6.7 35.0	162 4.2 4.9	144 3.7 11.1	3864 21.9
MED SURG	2	192 9.2 13.6	192 9.2 13.8	510 24.4 7.9	288 13.8 16.7	96 4.6 13.0	474 22.7 14.3	114 5.5 9.1	222 10.6 17.1	2088 11.9
PSYCHIATRY	3	240 7.8 16.9	162 5.3 11.6	540 17.5 8.3			1360 44.7 41.7	522 16.9 41.6	240 7.8 18.4	3084 17.5
OB LABOR DELIVER	4	192 8.0 13.6	192 8.0 13.8	912 38.1 14.1	48 2.0 2.8	288 12.0 39.0	450 18.8 13.6	96 4.0 7.7	216 9.0 16.6	2394 13.6
NBN NICU	5	228 12.1 16.1	222 11.8 15.9	720 38.2 11.1	48 2.5 2.8	48 2.5 6.5	138 7.3 4.2	240 12.7 19.1	240 12.7 18.4	1884 10.7
PEDS PICU	6	324 7.6 22.9	384 9.0 27.6	1734 40.4 26.8	576 13.4 33.3	48 1.1 6.5	702 15.4 21.2	282 6.6 22.5	240 5.6 18.4	4290 24.4
	COLUMN TOTAL	1416 8.0	1392 7.9	6468 36.7	1728 9.8	738 4.2	3306 18.8	1254 7.1	1302 7.4	17604 100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 15

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	COUNT / ROW PCT / COL PCT	ACT / INDIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICA 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	1366	260	247	399	246	339	174	281	291	62	197	3864
		35.4	6.7	6.4	10.3	6.4	8.8	4.5	7.3	7.5	1.6	5.1	21.9
		26.5	21.1	28.9	23.0	24.9	21.1	22.9	19.8	14.5	19.7	12.8	
MED SURG	2	636	125	68	172	168	229	85	208	261	40	96	2088
		30.5	6.0	3.3	8.2	8.0	11.0	4.1	10.0	12.5	1.9	4.6	11.9
		12.3	10.2	8.0	9.9	17.0	14.2	11.2	14.6	13.0	12.7	6.3	
PSYCHIATRY	3	834	198	143	327	66	203	246	171	483	15	393	3084
		27.0	6.4	4.6	10.6	2.1	6.6	8.0	5.5	15.8	.5	12.7	17.5
		16.2	16.1	16.7	18.9	6.7	12.6	32.4	12.0	24.3	4.8	25.6	
OB LABOR DELIVER	4	526	152	120	305	170	186	90	205	226	50	364	2394
		22.0	6.3	5.0	12.7	7.1	7.8	3.8	8.6	9.4	2.1	15.2	13.6
		10.2	12.4	14.0	17.6	17.2	11.6	11.9	14.4	11.3	15.9	23.7	
NBN NICU	5	491	169	149	125	117	170	35	151	321	40	116	1884
		26.1	9.0	7.9	6.6	6.2	9.0	1.9	8.0	17.0	2.1	6.2	10.7
		9.5	13.7	17.4	7.2	11.8	10.6	4.6	10.6	16.0	12.7	7.6	
PEDS PICU	6	1298	326	128	404	222	481	129	406	419	107	370	4290
		30.3	7.6	3.0	9.4	5.2	11.2	3.0	9.5	9.8	2.5	8.6	24.4
		25.2	26.5	15.0	23.3	22.4	29.9	17.0	28.6	20.9	34.1	24.1	
	COLUMN TOTAL	5153	1230	855	1732	989	1608	759	1422	2006	314	1536	17604
		29.3	7.0	4.9	9.8	5.6	9.1	4.3	8.1	11.4	1.8	8.7	100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 16

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
UNAVAILABLE	1	507	193	341	272	318	454	2085
		24.3	9.3	16.4	13.0	15.3	21.8	11.8
		13.1	9.2	11.1	11.4	16.9	10.6	
INDIRECT CARE	2	1989	1259	1909	1596	1075	2538	10366
		19.2	12.1	18.4	15.4	10.4	24.5	58.9
		51.5	60.3	61.9	66.7	57.1	59.2	
DIRECT CARE	3	1368	636	834	526	491	1298	5153
		26.5	12.3	16.2	10.2	9.5	25.2	29.3
		35.4	30.5	27.0	22.0	26.1	30.3	
	COLUMN TOTAL	3864	2088	3084	2394	1884	4290	17604
		21.9	11.9	17.5	13.6	10.7	24.4	100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 17

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
UNAVAILABLE	1	332	155	244	221	241	394	1587
		20.9	9.8	15.4	13.9	15.2	24.8	13.9
		12.1	11.5	12.2	16.2	20.3	14.2	
INDIRECT CARE	2	1337	769	1234	751	694	1522	6307
		21.2	12.2	19.6	11.9	11.0	24.1	55.3
		48.9	57.0	61.9	55.1	58.4	54.8	
DIRECT CARE	3	1067	426	514	390	253	862	3512
		30.4	12.1	14.6	11.1	7.2	24.5	30.8
		39.0	31.6	25.8	28.6	21.3	31.0	
	COLUMN TOTAL	2736	1350	1992	1362	1188	2778	11406
		24.0	11.8	17.5	11.9	10.4	24.4	100.0

NUMBER OF MISSING OBSERVATIONS = 144

Table 18

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: 1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN	6 NICU PEDS PICU	ROW TOTAL
UNAVAILABLE	1	88	38	86	40	48	50	350
		25.1	10.9	24.6	11.4	13.7	14.3	9.0
		12.6	7.2	14.1	6.7	11.3	4.8	
INDIRECT CARE	2	392	347	290	439	203	677	2348
		16.7	14.8	12.4	18.7	8.6	28.8	60.3
		56.3	65.7	47.4	73.2	47.7	65.6	
DIRECT CARE	3	216	143	236	121	175	305	1196
		18.1	12.0	19.7	10.1	14.6	25.5	30.7
		31.0	27.1	38.6	20.2	41.1	29.6	
	COLUMN TOTAL	696	528	612	600	426	1032	3894
		17.9	13.6	15.7	15.4	10.9	26.5	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
UNAVAILABLE	1	87		11	11	29	10	148
		58.8		7.4	7.4	19.6	6.8	6.4
		20.1		2.3	2.5	10.7	2.1	
INDIRECT CARE	2	260	143	385	406	178	339	1711
		15.2	8.4	22.5	23.7	10.4	19.8	74.3
		60.2	68.1	80.2	94.0	65.9	70.6	
DIRECT CARE	3	85	67	84	15	63	131	445
		19.1	15.1	18.9	3.4	14.2	29.4	19.3
		19.7	31.9	17.5	3.5	23.3	27.3	
	COLUMN TOTAL	432	210	480	432	270	480	2304
		18.8	9.1	20.8	18.8	11.7	20.8	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT NURSING

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	1735	16.6
MEDS SUPPLIES EQUIP	3	995	9.5
CHARTING CLERICAL	4	1615	15.4
CONFERENCES	5	762	7.3
TRAVEL TRANSPORT	6	1433	13.7
ADMINISTRATION	7	2041	19.5
ENVIRONMENTAL	8	317	3.0
WAIT TIME	9	1565	15.0
	TOTAL	10464	100.0

VALID CASES 10464 MISSING CASES 0

Table 22
BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	PROV COUNT / ROW PCT / COL PCT	HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
2 COMMUNICATIVE		244 14.1 27.0	82 4.7 8.3	790 45.5 20.4	134 7.7 16.7	67 3.9 13.3	237 13.7 12.9	39 2.2 6.5	142 8.2 14.6	1735 16.6
3 MEDS SUPPLIES E		45 4.5 5.0	135 13.6 13.7	470 47.2 12.2	113 11.4 14.1	59 5.9 11.7	110 11.1 6.0	59 5.9 9.9	4 .4 .4	995 9.5
4 CHARTING CLERICA		168 10.4 18.6	7 .4 .7	856 53.0 22.2	143 8.9 17.9	58 3.6 11.5	180 11.1 9.8	53 3.3 8.9	150 9.3 15.4	1615 15.4
5 CONFERENCES		151 19.8 16.7	50 6.6 5.1	330 43.3 8.5	53 7.0 6.6	29 3.8 5.8	109 14.3 5.9	38 5.0 6.4	2 .3 .2	762 7.3
6 TRAVEL TRANSPORT		36 2.7 4.2	147 10.3 14.9	455 31.8 11.8	136 9.6 17.2	101 7.0 20.0	327 22.8 17.8	140 9.8 23.4	87 6.1 8.9	1433 13.7
7 ADMINISTRATION		241 11.8 26.7	514 25.2 52.2	329 16.1 8.5	61 3.0 7.6	6 .3 1.2	298 14.6 15.3	40 2.0 6.7	552 27.0 56.6	2041 19.5
8 ENVIRONMENTAL		3 .9 .3	40 12.6 4.1	72 22.7 1.9	40 12.6 5.0	36 11.4 7.1	64 20.2 3.5	57 18.0 9.5	5 1.6 .5	317 3.0
9 WAIT TIME		14 .9 1.5	10 .6 1.0	562 35.9 14.5	119 7.6 14.9	148 9.5 29.4	508 32.4 27.7	172 11.0 28.8	33 2.1 3.4	1566 15.0
COLUMN TOTAL		904 8.6	985 9.4	3864 36.9	801 7.7	504 4.8	1833 17.5	598 5.7	975 9.3	10464 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 23
BAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVERY (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
COMMUNICATIVE (2)	399	172	327	305	125	404	1732
	23.0	9.9	18.9	17.6	7.2	23.3	16.7
	20.1	13.7	17.1	19.1	11.6	15.9	
MEDS SUPPLIES ED (3)	246	168	66	170	117	222	989
	24.9	17.0	6.7	17.2	11.8	22.4	9.5
	12.4	13.3	3.5	10.7	10.9	8.7	
CHARTING CLERICA (4)	339	229	233	186	170	481	1608
	21.1	14.2	12.6	11.6	10.6	29.9	15.5
	17.0	18.2	10.6	11.7	15.8	19.0	
CONFERENCES (5)	174	85	246	90	35	129	759
	22.9	11.2	32.4	11.9	4.6	17.0	7.3
	8.7	6.8	12.9	5.6	3.3	5.1	
TRAVEL TRANSPORT (6)	281	208	171	205	151	406	1422
	19.8	14.6	12.0	14.4	10.6	28.6	13.7
	14.1	16.5	9.0	12.8	14.0	16.0	
ADMINISTRATION (7)	291	261	488	226	321	419	2006
	14.5	13.0	24.3	11.3	16.0	23.9	19.4
	14.6	20.7	25.6	14.2	29.9	16.5	
ENVIRONMENTAL (8)	62	40	15	50	40	107	314
	19.7	12.7	4.8	15.9	12.7	34.1	3.0
	3.1	3.2	.8	3.1	3.7	4.2	
WAIT TIME (9)	197	96	393	364	116	370	1536
	12.8	6.3	25.6	23.7	7.6	24.1	14.8
	9.9	7.6	20.6	22.8	10.8	14.6	
COLUMN TOTAL	1989	1259	1939	1596	1075	2538	10366
	19.2	12.1	18.4	15.4	10.4	24.5	100.0

NUMBER OF MISSING OBSERVATIONS = 98

APPENDIX 18

DARNALL ARMY COMMUNITY HOSPITAL
FORT HOOD, TEXAS

Table 1

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

MO

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	13932	100.0	100.0	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 2
Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	996	7.1	7.1	7.1
MONDAY	2	2118	15.2	15.2	22.4
TUESDAY	3	2292	16.5	16.5	38.8
WEDNESDAY	4	2514	18.0	18.0	56.8
THURSDAY	5	2766	19.9	19.9	76.7
FRIDAY	6	2322	16.7	16.7	93.4
SATURDAY	7	924	6.6	6.6	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 3

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

SHIFT

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	8718	62.6	62.6	62.6
EVENING	2	3390	24.3	24.3	86.9
NIGHT	3	1824	13.1	13.1	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 4

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED	1	1398	10.0	10.0	10.0
SURG	2	1866	13.4	13.4	23.4
OB	5	876	6.3	6.3	29.7
LABOR & DELIVERY	6	1386	9.9	9.9	39.7
NEWBORN	8	2736	19.6	19.6	59.3
PEDS	9	2010	14.4	14.4	73.7
CCU	12	972	7.0	7.0	80.7
ICU COMBD	13	312	2.2	2.2	82.9
PSYCHIATRY	16	2376	17.1	17.1	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 5

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
CRITICAL CARE	1.00	1284	9.2	9.2	9.2
MED SURG	2.00	3264	23.4	23.4	32.6
PSYCHIATRY	3.00	2376	17.1	17.1	49.7
OB LABOR DELIVERY	4.00	2262	16.2	16.2	65.9
NBN NICU	5.00	2736	19.6	19.6	85.6
PEDS PICU	6.00	2010	14.4	14.4	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 8

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

ACT ACTIVITY

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	3784	27.2	27.2	27.2
PERSONAL	0	1290	9.3	9.3	36.4
OFF UNIT ACTV	1	639	4.6	4.6	41.0
COMMUNICATIVE	2	1132	8.1	8.1	49.1
MEDS SUPPLIES EQUIP	3	573	4.1	4.1	53.2
CHARTING CLERICAL	4	1984	14.2	14.2	67.5
CONFERENCES	5	678	4.9	4.9	72.4
TRAVEL TRANSPORT	6	1803	12.9	12.9	85.3
ADMINISTRATION	7	981	7.0	7.0	92.3
ENVIRONMENTAL	8	327	2.3	2.3	94.7
WAIT TIME	9	741	5.3	5.3	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 10

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
	-1	186	1.3	1.3	1.3
HEAD NURSE	1	930	6.7	6.7	8.0
WARDMASTER	2	1152	8.3	8.3	16.3
RN	3	4698	33.7	33.7	50.0
91C	4	342	2.5	2.5	52.5
LPN	5	324	2.3	2.3	54.8
91B 91F 91G	6	3360	24.1	24.1	78.9
AIDE	7	2226	16.0	16.0	94.9
WARD CLERK	8	714	5.1	5.1	100.0
	TOTAL	13932	100.0	100.0	

VALID CASES 13932 MISSING CASES 0

Table 12

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	ACT (COUNT / ROW PCT / COL PCT)	-1 INDIRECT CARE	0 PERSONAL ACTV	1 OFF UNIT ACTV	2 COMMUNICATIVE	3 NEEDS SUPPLIES EQ	4 CHARTING CLERICAL	5 CONFERENCES	6 TRAVEL TRANSPORT	7 ADMINISTRATION	8 ENVIRONMENTAL	9 WAITING	ROW TOTAL
HEAD NURSE	1	156	53	108	145	24	84	88	114	152		4	930
		17.0	5.7	11.6	15.6	2.6	9.0	9.5	12.3	16.3		.4	6.8
		4.3	4.1	17.0	12.9	4.2	4.3	13.1	6.4	15.5		.5	
WARDMASTER	2	132	118	85	83	34	46	43	152	417	5	37	1152
		11.5	10.2	7.4	7.2	3.0	4.0	3.7	13.2	36.2	.4	3.2	8.4
		3.6	9.2	13.4	7.4	6.0	2.4	6.4	8.5	42.6	1.5	5.0	
RN	3	1203	396	199	470	333	904	279	456	202	24	232	4698
		25.6	8.4	4.2	10.0	7.1	19.2	5.9	9.7	4.3	.5	4.9	34.2
		32.7	31.0	31.3	41.7	58.4	46.2	41.4	25.5	20.6	7.4	31.5	
91C	4	86	34	6	28	16	37	12	72	24	17	8	342
		25.7	9.9	1.8	8.2	4.7	10.8	3.5	21.1	7.0	5.0	2.3	2.5
		2.4	2.7	.9	2.5	2.8	1.9	1.8	4.0	2.5	5.2	1.1	
LPN	5	112	55	2	18	2	41	11	67	4	4	8	324
		34.6	17.0	.6	5.6	.6	12.7	3.4	20.7	1.2	1.2	2.5	2.4
		3.0	4.3	.3	1.6	.4	2.1	1.6	3.8	.4	1.2	1.1	
91B 91F 91G	6	1099	338	136	171	95	358	117	546	79	182	239	3360
		32.7	10.1	4.0	5.1	2.8	10.7	3.5	16.3	2.4	5.4	7.1	24.4
		29.9	26.4	21.4	15.2	16.7	18.3	17.4	30.6	8.1	55.8	32.4	
AIDE	7	643	186	27	102	56	281	122	297	27	93	192	2226
		37.9	8.4	1.2	4.6	2.5	12.6	5.5	13.3	1.2	4.2	8.6	16.2
		22.9	14.5	4.3	9.0	9.8	14.4	18.1	16.6	2.8	28.5	26.1	
WARD CLERK	8	40	99	72	111	10	206	2	82	74	1	17	714
		5.6	13.9	10.1	15.5	1.4	23.9	.3	11.5	10.4	.1	2.4	5.2
		1.1	7.7	11.3	9.8	1.8	10.5	.3	4.6	7.6	.3	2.3	
	COLUMN TOTAL	3675	1279	635	1128	570	1957	674	1786	979	326	737	13746
		26.7	9.3	4.6	8.2	4.1	14.2	4.9	13.0	7.1	2.4	5.4	100.0

NUMBER OF MISSING OBSERVATIONS = 186

Table 13

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERTOT	PROV: COUNT / ROW PCT / COL PCT	HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91F 91G (6)	AIDE (7)	WARD CLERK (8)	ROW TOTAL
UNAVAILABLE	1	161	203	595	40	57	474	213	171	1914
		8.4	10.6	31.1	2.1	3.0	24.8	11.1	8.9	13.9
		17.3	17.6	12.7	11.7	17.6	14.1	9.6	23.9	
INDIRECT CARE	2	611	817	2900	214	155	1787	1170	503	8157
		7.5	10.0	35.6	2.6	1.9	21.9	14.3	6.2	59.3
		65.7	70.9	61.7	62.6	47.8	53.2	52.6	70.4	
DIRECT CARE	3	158	132	1203	88	112	1099	843	40	3675
		4.3	3.6	32.7	2.4	3.0	29.9	22.9	1.1	26.7
		17.0	11.5	25.6	25.7	34.6	32.7	37.9	5.6	
	COLUMN TOTAL	930	1152	4698	342	324	3360	2226	714	13746
		6.8	8.4	34.2	2.5	2.4	24.4	16.2	5.2	100.0

NUMBER OF MISSING OBSERVATIONS = 186

Table 14

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	PROV COUNT / ROW PCT / COL PCT	1 HEAD NURSE	2 WARDMASTER	3 RN	4 91C	5 LPN	6 91B 91F 91G	7 AIDE	8 WARD CLERK	ROW TOTAL
CRITICAL CARE	1	66 5.1 7.1	144 11.2 12.5	582 45.3 12.4	102 7.9 29.8		390 30.4 11.6			1284 9.3
MED SURG	2	144 4.4 15.5	192 5.9 16.7	1152 35.3 24.5	48 1.5 14.0	96 2.9 29.6	810 24.8 24.1	672 20.6 30.2	150 4.6 21.0	3264 23.7
PSYCHIATRY	3	144 6.3 15.5	246 10.8 21.4	570 25.0 12.1		96 4.2 29.6	450 19.7 13.4	774 33.9 34.8		2280 16.6
OB LABOR DELIVER	4	144 6.4 15.5	192 8.5 16.7	888 39.3 18.9	96 4.2 28.1		522 23.1 15.5	252 11.1 11.3	168 7.4 23.5	2262 15.5
NEN NICU	5	192 7.3 20.6	192 7.3 16.7	960 36.3 20.4	96 3.6 28.1	132 5.0 40.7	582 22.0 17.3	336 12.7 15.1	156 5.9 21.8	2646 19.2
PEDS PICU	6	240 11.9 25.8	186 9.3 16.1	546 27.2 11.6			506 30.1 18.0	192 9.6 8.6	240 11.9 33.6	2010 14.6
	COLUMN TOTAL	930 6.8	1152 8.4	4698 34.2	342 2.5	324 2.4	3360 24.4	2226 16.2	714 5.2	13746 100.0

NUMBER OF MISSING OBSERVATIONS = 186

Table 15

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	COUNT / ROW PCT / COL PCT	ACT / DIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICA 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	382	60	74	95	37	264	76	123	87	9	77	1284
		29.8	4.7	5.8	7.4	2.9	20.6	5.9	9.6	6.8	.7	6.0	9.2
		10.1	4.7	11.6	8.4	6.5	13.3	11.2	6.8	8.9	2.8	10.4	
MED SURG	2	671	366	104	266	202	533	154	573	193	64	138	3264
		20.6	11.2	3.2	8.1	6.2	16.3	4.7	17.6	5.9	2.0	4.2	23.4
		17.7	28.4	16.3	23.5	35.3	26.9	22.7	31.8	19.7	19.6	18.6	
PSYCHIATRY	3	831	147	75	162	22	305	158	218	191	37	230	2376
		35.0	6.2	3.2	6.8	.9	12.8	6.6	9.2	8.0	1.6	9.7	17.1
		22.0	11.4	11.7	14.3	3.8	15.4	23.3	12.1	19.5	11.3	31.0	
OB LABOR DELIVER	4	458	204	138	220	118	325	67	289	241	114	88	2262
		20.2	9.0	6.1	9.7	5.2	14.4	3.0	12.8	10.7	5.0	3.9	16.2
		12.1	15.8	21.6	19.4	20.6	16.4	9.9	16.0	24.6	34.9	11.9	
NBN NICU	5	957	262	56	187	114	359	134	378	124	60	105	2736
		35.0	9.6	2.0	6.8	4.2	13.1	4.9	13.8	4.5	2.2	3.8	19.6
		25.3	20.3	8.8	16.5	19.9	18.1	19.8	21.0	12.6	18.3	14.2	
PEDS PICU	6	485	251	192	202	80	198	89	222	145	43	103	2010
		24.1	12.5	9.6	10.0	4.0	9.9	4.4	11.0	7.2	2.1	5.1	14.4
		12.8	19.5	30.0	17.8	14.0	10.0	13.1	12.3	14.8	13.1	13.9	
	COLUMN TOTAL	3784	1290	639	1132	573	1984	678	1803	991	327	741	13932
		27.2	9.3	4.6	8.1	4.1	14.2	4.9	12.9	7.0	2.3	5.3	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE 1 CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU PEDS PICU (6)	ROW TOTAL
UNAVAILABLE	1	134	470	222	342	318	443	1929
		6.9	24.4	11.5	17.7	16.5	23.0	13.8
		10.4	14.4	9.3	15.1	11.6	22.0	
INDIRECT CARE	2	768	2123	1323	1462	1461	1082	8219
		9.3	25.8	16.1	17.8	17.8	13.2	59.0
		59.8	65.0	55.7	64.6	53.4	53.8	
DIRECT CARE	3	382	671	831	458	957	485	3784
		10.1	17.7	22.0	12.1	25.3	12.8	27.2
		29.8	20.6	35.0	20.2	35.0	24.1	
	COLUMN TOTAL	1284	3264	2376	2262	2736	2010	13932
		9.2	23.4	17.1	16.2	19.6	14.4	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: 1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN NICU	6 PEDS PICU	ROW TOTAL
UNAVAILABLE	1	88	390	167	257	189	319	1410
		6.2	27.7	11.8	18.2	13.4	22.6	16.2
		11.3	17.8	10.5	19.3	12.9	23.4	
INDIRECT CARE	2	470	1378	867	867	853	775	5210
		9.0	26.4	16.6	16.6	16.4	14.9	59.8
		60.3	62.9	54.7	65.1	58.0	56.9	
DIRECT CARE	3	222	422	550	208	428	268	2098
		10.6	20.1	26.2	9.9	20.4	12.8	24.1
		28.5	19.3	34.7	15.6	29.1	19.7	
	COLUMN TOTAL	780	2190	1584	1332	1470	1362	8718
		8.9	25.1	18.2	15.3	16.9	15.6	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU (6)	PEDS PICU (7)	ROW TOTAL
UNAVAILABLE	1	38	73	50	84	102	124		471
		8.1	15.5	10.6	17.8	21.7	26.3		13.9
		12.2	11.4	9.9	13.1	13.8	22.5		
INDIRECT CARE	2	154	398	232	397	318	244		1743
		8.8	22.8	13.3	22.8	18.2	14.0		51.4
		49.4	62.0	46.0	61.8	43.1	44.2		
DIRECT CARE	3	120	171	222	161	318	184		1176
		10.2	14.5	18.9	13.7	27.0	15.6		34.7
		38.5	26.6	44.0	25.1	43.1	33.3		
	COLUMN TOTAL	312	642	504	642	738	552		3390
		9.2	18.9	14.9	18.9	21.8	16.3		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU (6)	PEDS PICU	ROW TOTAL
UNAVAILABLE	1	8	7	5	1	27			48
		16.7	14.6	10.4	2.1	56.3			2.6
		4.2	1.6	1.7	.3	5.1			
INDIRECT CARE	2	144	347	224	198	290	63		1266
		11.4	27.4	17.7	15.6	22.9	5.0		69.4
		75.0	80.3	77.8	68.8	54.9	65.6		
DIRECT CARE	3	40	78	59	89	211	33		510
		7.8	15.3	11.6	17.5	41.4	6.5		28.0
		20.8	18.1	20.5	30.9	40.0	34.4		
	COLUMN TOTAL	192	432	288	288	528	96		1824
		10.5	23.7	15.8	15.8	28.9	5.3		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT CARE

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	1132	13.8
MEDS SUPPLIES EQUIP	3	573	7.0
CHARTING CLERICAL	4	1984	24.1
CONFERENCES	5	573	8.2
TRAVEL TRANSPORT	6	1803	21.9
ADMINISTRATION	7	981	11.9
ENVIRONMENTAL	8	327	4.0
WAIT TIME	9	741	9.0
	TOTAL	8219	100.0

VALID CASES 8219 MISSING CASES 0

Table 22
Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	PROV (COUNT / ROW PCT / COL PCT)	1 HEAD NURSE	2 WARDMASTER	3 RN	4 91C	5 LPN	6 91B 91F 91G	7 AIDE	8 WARD CLERK	9 CLE	ROW TOTAL
COMMUNICATIVE	2	145	83	470	28	18	171	102	111		1128
		12.9	7.4	41.7	2.5	1.6	15.2	9.0	9.8		13.8
		23.7	10.2	16.2	13.1	11.6	9.6	8.7	22.1		
MEDS SUPPLIES EQ	3	24	34	333	16	2	95	56	10		570
		4.2	6.0	58.4	2.8	.4	15.7	9.8	1.8		7.0
		3.9	4.2	11.5	7.5	1.3	5.3	4.8	2.0		
CHARTING CLERICA	4	84	46	904	37	41	358	281	206		1957
		4.3	2.4	46.2	1.9	2.1	18.3	14.4	10.5		24.0
		13.7	5.6	31.2	17.3	26.5	20.0	24.0	41.0		
CONFERENCES	5	88	43	279	12	11	117	122	2		674
		13.1	6.4	41.4	1.8	1.6	17.4	18.1	.3		8.3
		14.4	5.3	9.6	5.6	7.1	6.5	10.4	.4		
TRAVEL TRANSPORT	6	114	152	456	72	67	546	297	82		1786
		6.4	8.5	25.5	4.0	3.8	30.6	16.6	4.6		21.9
		18.7	18.6	15.7	33.6	43.2	30.6	25.4	16.3		
ADMINISTRATION	7	152	417	202	24	4	79	27	74		979
		15.5	42.6	20.6	2.5	.4	8.1	2.8	7.6		12.0
		24.9	51.0	7.0	11.2	2.6	4.4	2.3	14.7		
ENVIRONMENTAL	8		5	24	17	4	182	93	1		326
			1.5	7.4	5.2	1.2	55.8	28.5	.3		4.0
			.6	.8	7.9	2.6	10.2	7.9	.2		
WAIT TIME	9	4	37	232	8	8	239	192	17		737
		.5	5.0	31.5	1.1	1.1	32.4	26.1	2.3		9.0
		.7	4.5	8.0	3.7	5.2	13.4	16.4	3.4		
COLUMN TOTAL		611	817	2900	214	155	1787	1170	503		8157
		7.5	10.0	35.6	2.6	1.9	21.9	14.3	6.2		100.0

NUMBER OF MISSING OBSERVATIONS = 62

Table 23
Darnall

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
COMMUNICATIVE	2	95	266	162	220	187	202	1132
		8.4	23.5	14.3	19.4	16.5	17.8	13.8
		12.4	12.5	12.2	15.0	12.8	13.7	
MEDS SUPPLIES EQ	3	37	202	22	116	114	80	573
		6.5	35.3	3.8	20.6	19.9	14.0	7.0
		4.6	9.5	1.7	8.1	7.8	7.4	
CHARTING CLERICA	4	264	533	305	325	359	198	1984
		13.3	26.9	15.4	16.4	18.1	10.0	24.1
		34.4	25.1	23.1	22.2	24.6	15.3	
CONFERENCES	5	76	154	158	67	134	89	678
		11.2	22.7	23.3	9.9	19.8	13.1	8.2
		9.9	7.3	11.9	4.6	9.2	8.2	
TRAVEL TRANSPORT	6	123	573	218	269	378	222	1803
		6.8	31.8	12.1	16.0	21.0	12.3	21.9
		16.0	27.0	16.5	19.8	25.9	20.5	
ADMINISTRATION	7	87	193	191	241	124	145	981
		8.9	19.7	19.5	24.6	12.6	14.8	11.9
		11.3	9.1	14.4	16.5	8.5	13.4	
ENVIRONMENTAL	8	9	64	37	114	60	43	327
		2.8	19.6	11.3	34.9	18.3	13.1	4.0
		1.2	3.0	2.8	7.8	4.1	4.0	
WAIT TIME	9	77	138	230	88	105	103	741
		10.4	18.6	31.0	11.9	14.2	13.9	9.0
		10.0	6.5	17.4	6.0	7.2	9.5	
	COLUMN TOTAL	768	2123	1323	1462	1461	1082	8219
		9.3	25.8	16.1	17.8	17.8	13.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

APPENDIX 19

GENERAL LEONARD WOOD ARMY COMMUNITY HOSPITAL
FORT LEONARD WOOD, MISSOURI

Table 1

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

MO

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	10728	85.3	85.3	85.3
APRIL	4	1854	14.7	14.7	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 2

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	1002	8.0	8.0	8.0
MONDAY	2	1650	13.1	13.1	21.1
TUESDAY	3	3042	24.2	24.2	45.3
WEDNESDAY	4	2322	18.5	18.5	63.7
THURSDAY	5	2160	17.2	17.2	80.9
FRIDAY	6	1596	12.7	12.7	93.6
SATURDAY	7	810	6.4	6.4	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 3

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	7878	62.6	62.6	62.6
EVENING	2	3168	25.2	25.2	87.8
NIGHT	3	1536	12.2	12.2	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 4

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
CRITICAL CARE	1.00	2394	19.0	19.0	19.0
MED SURG	2.00	3126	24.8	24.8	43.9
PSYCHIATRY	3.00	2196	17.5	17.5	61.3
OB LABOR DELIVERY	4.00	2136	17.0	17.0	78.3
NBN NICU	5.00	1410	11.2	11.2	89.5
PEDS PICU	6.00	1320	10.5	10.5	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 5

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED	1	960	7.6	7.6	7.6
SURG	2	1734	13.8	13.8	21.4
ORTHOPEDIC	4	432	3.4	3.4	24.8
OB	5	288	2.3	2.3	27.1
LABOR & DELIVERY	6	252	2.0	2.0	29.1
OB L&D COMBO	7	1596	12.7	12.7	41.8
NEWBORN	8	1410	11.2	11.2	53.0
PEDS	9	1320	10.5	10.5	63.5
ICU COMBO	13	2394	19.0	19.0	82.5
PSYCHIATRY	16	2196	17.5	17.5	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 8

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	2347	18.7	18.7	18.7
PERSONAL	0	1012	8.0	8.0	26.7
OFF UNIT ACTV	1	1655	13.2	13.2	39.9
COMMUNICATIVE	2	1499	11.9	11.9	51.8
MEDS SUPPLIES EQUIP	3	565	4.5	4.5	56.3
CHARTING CLERICAL	4	1270	10.1	10.1	66.3
CONFERENCES	5	479	3.8	3.8	70.2
TRAVEL TRANSPORT	6	901	7.2	7.2	77.3
ADMINISTRATION	7	1068	8.5	8.5	85.8
ENVIRONMENTAL	8	170	1.4	1.4	87.2
WAIT TIME	9	1616	12.8	12.8	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 10

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
HEAD NURSE	1	1110	8.8	8.8	8.8
WARDMASTER	2	1200	9.5	9.5	18.4
RN	3	3786	30.1	30.1	48.5
91C	4	966	7.7	7.7	56.1
LPN	5	1194	9.5	9.5	65.6
91B 91F 91G	6	3102	24.7	24.7	90.3
AIDE	7	816	6.5	6.5	96.8
WARD CLERK	8	409	3.2	3.2	100.0
	TOTAL	12582	100.0	100.0	

VALID CASES 12582 MISSING CASES 0

Table 12

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	COUNT / ROW PCT / COL PCT	ACT: INDIRECT CARE (-1)	PERSONAL (0)	OFF UNIT ACTV (1)	COMMUNICATIVE (2)	MEDS SUPPLIES EQ (3)	CHARTING CLERICAL (4)	CONFERENCES (5)	TRAVEL TRANSPORT (6)	ADMINISTRATION (7)	ENVIRONMENTAL (8)	WAIT TIME (9)	ROW TOTAL
HEAD NURSE	1	41	43	236	208	30	48	76	37	328		63	1110
		3.7	3.9	21.3	18.7	2.7	4.3	6.8	3.3	29.5		5.7	8.8
		1.7	4.2	14.3	13.9	5.3	3.8	15.9	4.1	30.7		3.9	
WARDMASTER	2	46	105	342	179	30	53	27	94	252	4	68	1200
		3.8	8.8	28.5	14.9	2.5	4.4	2.3	7.8	21.0	.3	5.7	9.5
		2.0	10.4	20.7	11.9	5.3	4.2	5.6	10.4	23.6	2.4	4.2	
RN	3	624	231	624	560	204	453	177	167	255	28	463	3786
		16.5	6.1	16.5	14.8	5.4	12.0	4.7	4.4	6.7	.7	12.2	30.1
		26.6	22.8	37.7	37.4	36.1	35.7	37.0	18.5	23.9	16.5	28.7	
91C	4	303	80	87	91	55	121	23	102	41	13	50	966
		31.4	8.3	9.0	9.4	5.7	12.5	2.4	10.6	4.2	1.3	5.2	7.7
		12.9	7.9	5.3	6.1	9.7	9.5	4.8	11.3	3.8	7.6	3.1	
LPN	5	309	111	17	144	61	147	30	97	18	33	227	1194
		25.9	9.3	1.4	12.1	5.1	12.3	2.5	8.1	1.5	2.8	19.0	9.5
		13.2	11.0	1.0	9.6	10.8	11.6	6.3	10.8	1.7	19.4	14.0	
91B 91F 91G	6	801	300	326	234	159	241	121	297	92	57	474	3102
		25.8	9.7	10.5	7.5	5.1	7.8	3.9	9.6	3.0	1.8	15.3	24.7
		34.1	29.6	19.7	15.6	28.1	19.0	25.3	33.0	8.6	33.5	29.3	
AIDE	7	207	66	6	43	25	76	25	75	22	35	236	816
		25.4	8.1	.7	5.3	3.1	9.3	3.1	9.2	2.7	4.3	28.9	6.5
		8.8	6.5	.4	2.9	4.4	6.0	5.2	8.3	2.1	20.6	14.6	
WARD CLERK	8	16	76	17	40	1	131		32	60		35	408
		3.9	18.6	4.2	9.8	.2	32.1		7.8	14.7		8.6	3.2
		.7	7.5	1.0	2.7	.2	10.3		3.6	5.6		2.2	
	COLUMN TOTAL	2347	1012	1655	1499	565	1270	479	901	1068	170	1616	12582
		18.7	8.0	13.2	11.9	4.5	10.1	3.8	7.2	8.5	1.4	12.8	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 13

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERTOT	PROV: COUNT / ROW PCT / COL PCT	1 HEAD NURSE	2 WARDMASTER	3 RN	4 91C	5 LPN	6 91B 91F 91G	7 AIDE	8 WARD CLERK	ROW TOTAL
UNAVAILABLE	1	279	447	855	167	128	626	72	93	2667
		10.5	16.8	32.1	6.3	4.8	23.5	2.7	3.5	21.2
		25.1	37.3	22.6	17.3	10.7	20.2	8.8	22.8	
INDIRECT CARE	2	790	707	2307	496	757	1675	537	299	7568
		10.4	9.3	30.5	6.6	10.0	22.1	7.1	4.0	60.1
		71.2	58.9	60.9	51.3	63.4	54.0	65.8	73.3	
DIRECT CARE	3	41	46	624	303	309	801	207	16	2347
		1.7	2.0	26.6	12.9	13.2	34.1	8.8	.7	18.7
		3.7	3.8	16.5	31.4	25.9	25.8	25.4	3.9	
	COLUMN TOTAL	1110	1200	3786	966	1194	3102	816	408	12582
		8.8	9.5	30.1	7.7	9.5	24.7	6.5	3.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 14

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	PROV (COUNT / ROW PCT / COL PCT)	1 HEAD NURSE	2 WARDMASTER	3 RN	4 91C	5 LPN	6 91B 91G	7 91F	8 AIDE	WARD CLERK	ROW TOTAL
CRITICAL CARE	1	234 9.8 21.1	144 6.0 12.0	534 22.3 14.1	480 20.1 49.7	378 15.8 31.7	384 16.0 12.4	240 10.0 29.4			2394 19.0
MED SURG	2	192 6.1 17.3	240 7.7 20.0	720 23.0 19.0	474 15.2 49.1	240 7.7 20.1	864 27.6 27.9	192 6.1 23.5	204 6.5 50.0		3126 24.8
PSYCHIATRY	3	240 10.9 21.6	192 8.7 16.0	864 39.3 22.8			846 38.5 27.3	54 2.5 6.6			2196 17.5
OB LABOR DELIVER	4	192 9.0 17.3	192 9.0 16.0	624 29.2 16.5	12 .6 1.2	336 15.7 28.1	528 24.7 17.0	48 2.2 5.9	204 9.6 50.0		2136 17.0
NBN NICU	5	252 17.9 22.7	240 17.0 20.0	504 35.7 13.3			240 17.0 7.7	174 12.3 21.3			1410 11.2
PEDS PICU	6		192 14.5 16.0	540 40.9 14.3		240 18.2 20.1	240 18.2 7.7	108 8.2 13.2			1320 10.5
	COLUMN TOTAL	1110 8.8	1200 9.5	3786 30.1	966 7.7	1194 9.5	3102 24.7	816 6.5	408 3.2		12582 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 15

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	ACT COUNT / ROW PCT / COL PCT	DIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	739	111	198	270	174	331	80	157	154	36	144	2394
		30.9	4.6	8.3	11.3	7.3	13.8	3.3	6.6	5.4	1.5	6.0	19.0
		31.5	11.0	12.0	18.0	30.8	26.1	16.7	17.4	14.4	21.2	8.9	
MED SURG	2	575	310	307	375	143	469	118	341	247	36	205	3126
		18.4	9.9	9.8	12.0	4.6	15.0	3.8	10.9	7.9	1.2	6.6	24.8
		24.5	30.6	18.5	25.0	25.3	36.9	24.6	37.8	23.1	21.2	12.7	
PSYCHIATRY	3	486	115	454	267	24	151	187	111	130	16	255	2196
		22.1	5.2	20.7	12.2	1.1	6.9	8.5	5.1	5.9	.7	11.6	17.5
		20.7	11.4	27.4	17.8	4.2	11.9	39.0	12.3	12.2	9.4	15.8	
OB LABOR DELIVER	4	215	228	232	202	113	158	30	192	212	47	507	2136
		10.1	10.7	10.9	9.5	5.3	7.4	1.4	9.0	9.9	2.2	23.7	17.0
		9.2	22.5	14.0	13.5	20.0	12.4	6.3	21.3	19.9	27.6	31.4	
NBN NICU	5	128	102	318	198	92	51	34	44	181	19	243	1410
		9.1	7.2	22.6	14.0	6.5	3.6	2.4	3.1	12.8	1.3	17.2	11.2
		5.5	10.1	19.2	13.2	16.3	4.0	7.1	4.9	16.9	11.2	15.0	
PEDS PICU	6	204	146	146	187	19	110	30	56	144	16	262	1320
		15.5	11.1	11.1	14.2	1.4	8.3	2.3	4.2	10.9	1.2	19.8	10.5
		8.7	14.4	8.8	12.5	3.4	8.7	6.3	6.2	13.5	9.4	16.2	
	COLUMN TOTAL	2347	1012	1655	1499	565	1270	479	901	1068	170	1616	12582
		18.7	8.0	13.2	11.9	4.5	10.1	3.8	7.2	8.5	1.4	12.8	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PIC U (6)	ROW TOTAL
UNAVAILABLE	1	309	617	569	460	420	292	2667
		11.6	23.1	21.3	17.2	15.7	10.9	21.2
		12.9	19.7	25.9	21.5	29.8	22.1	
INDIRECT CARE	2	1346	1934	1141	1461	862	824	7568
		17.8	25.6	15.1	19.3	11.4	10.9	60.1
		56.2	61.9	52.0	68.4	61.1	62.4	
DIRECT CARE	3	739	575	486	215	128	204	2347
		31.5	24.5	20.7	9.2	5.5	8.7	18.7
		30.9	18.4	22.1	10.1	9.1	15.5	
	COLUMN TOTAL	2394	3126	2196	2136	1410	1320	12582
		19.0	24.8	17.5	17.0	11.2	10.5	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE (COUNT / ROW PCT / COL PCT)	1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN	6 NICU PEDS PICU	ROW TOTAL
UNAVAILABLE	1	209	547	288	409	291	250	1994
		10.5	27.4	14.4	20.5	14.6	12.5	25.3
		15.1	25.4	22.9	28.2	33.9	32.6	
INDIRECT CARE	2	788	1224	734	935	519	409	4609
		17.1	26.6	15.9	20.3	11.3	8.9	58.5
		56.9	56.8	58.3	64.4	60.5	53.3	
DIRECT CARE	3	389	383	238	108	48	109	1275
		30.5	30.0	18.7	8.5	3.8	8.5	16.2
		28.1	17.8	18.9	7.4	5.6	14.2	
	COLUMN TOTAL	1386	2154	1260	1452	858	768	7878
		17.6	27.3	16.0	18.4	10.9	9.7	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE COUNT ROW PCT COL PCT	1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN	6 NICU PEDS PICU	ROW TOTAL
UNAVAILABLE	1	95 16.4 13.2	58 10.0 9.1	226 39.0 33.0	43 7.4 10.9	128 22.1 32.3	29 5.0 8.6	579 18.3
INDIRECT CARE	2	385 21.0 53.5	445 24.2 70.0	257 14.0 37.6	283 15.4 71.5	221 12.0 55.8	246 13.4 73.2	1837 58.0
DIRECT CARE	3	240 31.9 33.3	133 17.7 20.9	201 26.7 29.4	70 9.3 17.7	47 6.3 11.9	61 8.1 18.2	752 23.7
	COLUMN TOTAL	720 22.7	636 20.1	684 21.6	396 12.5	396 12.5	336 10.6	3168 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU (6)	PEDS PICU	ROW TOTAL
UNAVAILABLE	1	5	12	55	8	1	13		94
		5.3	12.8	58.5	8.5	1.1	13.8		6.1
		1.7	3.6	21.8	2.8	.6	6.0		
INDIRECT CARE	2	173	265	150	243	122	169		1122
		15.4	23.6	13.4	21.7	10.9	15.1		73.0
		60.1	78.9	59.5	84.4	78.2	78.2		
DIRECT CARE	3	110	59	47	37	33	34		320
		34.4	18.4	14.7	11.6	10.3	10.6		20.8
		38.2	17.6	18.7	12.8	21.2	15.7		
	COLUMN TOTAL	288	336	252	288	156	216		1536
		18.8	21.9	16.4	18.8	10.2	14.1		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT CARE

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	1499	19.8
MEDS SUPPLIES EQUIP	3	565	7.5
CHARTING CLERICAL	4	1270	16.8
CONFERENCES	5	479	6.3
TRAVEL TRANSPORT	6	901	11.9
ADMINISTRATION	7	1068	14.1
ENVIRONMENTAL	8	170	2.2
WAIT TIME	9	1615	21.4
	TOTAL	7568	100.0

VALID CASES 7568 MISSING CASES 0

Table 22
General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
COMMUNICATIVE	2	208	179	560	91	144	234	43	40	1499
		13.9	11.9	37.4	6.1	9.6	15.6	2.9	2.7	19.8
		26.3	25.3	24.3	18.3	19.0	14.0	8.0	13.4	
MEDS SUPPLIES EQ	3	30	30	204	55	61	159	25	1	565
		5.3	5.3	36.1	9.7	10.8	28.1	4.4	.2	7.5
		3.8	4.2	8.8	11.1	8.1	9.5	4.7	.3	
CHARTING CLERICA	4	48	53	453	121	147	241	76	131	1270
		3.8	4.2	35.7	9.5	11.6	19.0	6.0	10.3	16.8
		6.1	7.5	19.6	24.4	19.4	14.4	14.2	43.8	
CONFERENCES	5	76	27	177	23	30	121	25		479
		15.9	5.6	37.0	4.8	6.3	25.3	5.2		6.3
		9.6	3.8	7.7	4.6	4.0	7.2	4.7		
TRAVEL TRANSPORT	6	37	94	167	102	97	297	75	32	901
		4.1	10.4	18.5	11.3	10.8	33.0	8.3	3.6	11.9
		4.7	13.3	7.2	20.6	12.8	17.7	14.0	10.7	
ADMINISTRATION	7	328	252	255	41	18	92	22	60	1068
		30.7	23.6	23.9	3.8	1.7	8.6	2.1	5.6	14.1
		41.5	35.6	11.1	8.3	2.4	5.5	4.1	20.1	
ENVIRONMENTAL	8		4	28	13	33	57	35		170
			2.4	16.5	7.6	19.4	33.5	20.6		2.2
			.6	1.2	2.6	4.4	3.4	6.5		
WAIT TIME	9	63	68	463	50	227	474	236	35	1616
		3.9	4.2	28.7	3.1	14.0	29.3	14.6	2.2	21.4
		8.0	9.6	20.1	10.1	30.0	28.3	43.9	11.7	
	COLUMN TOTAL	790	707	2307	496	757	1675	537	299	7568
		10.4	9.3	30.5	6.6	10.0	22.1	7.1	4.0	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 23
General Wood

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ALT	SERVICE (COUNT / ROW PCT / COL PCT)	CRITICAL CARE 1	MED SURG 2	PSYCHIATRY 3	OB LABOR DELIVERY 4	NBN NICU 5	PEDS PIC 6	ROW TOTAL
COMMUNICATIVE	2	270	375	257	202	198	187	1499
		18.0	25.0	17.6	13.5	13.2	12.5	19.8
		20.1	19.4	23.4	13.8	23.0	22.7	
NEDS SUPPLIES EQ	3	174	143	24	113	92	19	565
		30.8	25.3	4.2	20.0	16.3	3.4	7.5
		12.9	7.4	2.1	7.7	10.7	2.3	
CHARTING CLERICA	4	331	469	151	158	51	110	1270
		26.1	36.9	11.9	12.4	4.0	8.7	16.8
		24.6	24.3	13.2	10.8	5.9	13.3	
CONFERENCES	5	80	118	187	30	34	30	479
		16.7	24.6	39.0	6.3	7.1	6.3	6.3
		5.9	6.1	16.4	2.1	3.9	3.6	
TRAVEL TRANSPORT	6	157	341	111	192	44	56	901
		17.4	37.8	12.3	21.3	4.9	6.2	11.9
		11.7	17.6	9.7	13.1	5.1	5.8	
ADMINISTRATION	7	154	247	130	212	181	144	1068
		14.4	23.1	12.2	19.9	16.9	13.5	14.1
		11.4	12.8	11.4	14.5	21.0	17.5	
ENVIRONMENTAL	8	36	36	16	47	19	16	170
		21.2	21.2	9.4	27.6	11.2	9.4	2.2
		2.7	1.9	1.4	3.2	2.2	1.9	
WAIT TIME	9	144	205	255	507	243	262	1616
		8.9	12.7	15.8	31.4	15.0	15.2	21.4
		10.7	10.6	22.3	34.7	28.2	31.8	
	COLUMN TOTAL	1346	1934	1141	1461	862	824	7568
		17.8	25.6	15.1	19.3	11.4	10.9	100.0

NUMBER OF MISSING OBSERVATIONS = 0

APPENDIX 20

FORT CAMPBELL COMMUNITY HOSPITAL
FORT CAMPBELL, KENTUCKY

Table 1

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

MO

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	4830	39.3	39.3	39.3
APRIL	4	7452	60.7	60.7	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 2

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTIONS

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	504	4.1	4.1	4.1
MONDAY	2	1506	12.3	12.3	16.4
TUESDAY	3	2832	23.1	23.1	39.4
WEDNESDAY	4	2256	18.4	18.4	57.8
THURSDAY	5	2580	21.0	21.0	78.8
FRIDAY	6	1752	14.3	14.3	93.1
SATURDAY	7	852	6.9	6.9	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 3

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	8136	66.2	66.2	66.2
EVENING	2	2670	21.7	21.7	88.0
NIGHT	3	1476	12.0	12.0	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 4

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED	1	888	7.2	7.2	7.2
SURG	2	1104	9.0	9.0	16.2
ORTHOPEDIC	4	324	2.6	2.6	18.9
OB	5	1776	14.5	14.5	33.3
NEWBORN	8	2328	19.0	19.0	52.3
PEDS	9	1962	16.0	16.0	68.2
ICU COMBO	13	2544	20.7	20.7	89.0
PSYCHIATRY	16	1356	11.0	11.0	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 5

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
CRITICAL CARE	1.00	2544	20.7	20.7	20.7
MED SURG	2.00	2316	18.9	18.9	39.6
PSYCHIATRY	3.00	1356	11.0	11.0	50.6
OB LABOR DELIVERY	4.00	1776	14.5	14.5	65.1
NBN NICU	5.00	2328	19.0	19.0	84.0
PEDS PICU	6.00	1962	16.0	16.0	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 8

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	3076	25.0	25.0	25.0
PERSONAL	0	1096	8.9	8.9	34.0
OFF UNIT ACTV	1	640	5.2	5.2	39.2
COMMUNICATIVE	2	1266	10.3	10.3	49.5
MEDS SUPPLIES EQUIP	3	398	3.2	3.2	52.7
CHARTING CLERICAL	4	1301	10.6	10.6	63.3
CONFERENCES	5	330	2.7	2.7	66.0
TRAVEL TRANSPORT	6	1204	9.8	9.8	75.8
ADMINISTRATION	7	1189	9.7	9.7	85.5
ENVIRONMENTAL	8	103	.8	.8	86.3
WAIT TIME	9	1679	13.7	13.7	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 10

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
	-1	48	.4	.4	.4
HEAD NURSE	1	954	7.8	7.8	8.2
WARDMASTER	2	1116	9.1	9.1	17.2
RN	3	3540	28.8	28.8	46.1
91C	4	630	5.1	5.1	51.2
LPN	5	1866	15.2	15.2	66.4
91B 91F 91G	6	1842	15.0	15.0	81.4
AIDE	7	1614	13.1	13.1	94.5
WARD CLERK	8	672	5.5	5.5	100.0
	TOTAL	12282	100.0	100.0	

VALID CASES 12282 MISSING CASES 0

Table 12

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	COUNT / ROW PCT / COL PCT	ACT -1 DIRECT CARE	0 PERSONAL	1 OFF UNIT ACTV	2 COMMUNICATIVE	3 MEDS SUP PLIES EQ	4 CHARTING CLERICAL	5 CONFERENCES	6 TRAVEL TRANSPORT	7 ADMINISTRATION	8 ENVIRONMENTAL	9 WAIT TIME	ROW TOTAL
HEAD NURSE	1	150	59	63	208	15	142	36	56	197	3	25	954
		15.7	6.2	6.6	21.8	1.6	14.9	3.8	5.9	20.6	.3	2.6	7.8
		4.9	5.4	9.9	16.5	3.8	11.1	11.0	4.7	16.6	2.9	1.5	
WARDMASTER	2	91	92	177	144	40	35	29	116	314	6	72	1116
		8.2	8.2	15.9	12.9	3.6	3.1	2.6	10.4	28.1	.5	6.5	9.1
		3.0	8.4	27.7	11.4	10.1	2.7	8.9	9.6	26.4	5.8	4.3	
RN	3	863	232	97	446	142	598	136	303	225	17	481	3540
		24.4	6.6	2.7	12.6	4.0	16.9	3.8	8.6	6.4	.5	13.6	28.9
		28.2	21.2	15.2	35.4	35.7	46.6	41.7	25.2	19.9	16.5	28.7	
91C	4	182	82	38	37	15	26	10	75	38	1	126	630
		28.9	13.0	6.0	5.9	2.4	4.1	1.6	11.9	6.0	.2	20.0	5.1
		5.9	7.5	6.0	2.9	3.8	2.0	3.1	6.2	3.2	1.0	7.5	
LPN	5	584	204	38	148	76	171	43	200	81	19	302	1866
		31.3	10.9	2.0	7.9	4.1	9.2	2.3	10.7	4.3	1.0	16.2	15.3
		19.1	18.7	6.0	11.7	19.1	13.3	13.2	16.6	6.8	18.4	18.0	
91B 91F 91G	6	709	201	109	91	47	67	37	184	72	25	300	1842
		38.5	10.9	5.9	4.9	2.6	3.6	2.0	10.0	3.9	1.4	16.3	15.1
		23.1	18.4	17.1	7.2	11.6	5.2	11.3	15.3	6.1	24.3	17.9	
AIDE	7	463	150	56	118	54	112	34	209	68	29	321	1614
		28.7	9.3	3.5	7.3	3.3	6.9	2.1	12.9	4.2	1.8	19.9	13.2
		15.1	13.7	8.8	9.4	13.6	8.7	10.4	17.4	5.7	28.2	19.2	
WARD CLERK	8	22	72	60	69	9	133	1	61	194	3	48	672
		3.3	10.7	8.9	10.3	1.3	19.8	.1	9.1	28.9	.4	7.1	5.5
		.7	6.6	9.4	5.5	2.3	10.4	.3	5.1	16.3	2.9	2.9	
	COLUMN TOTAL	3064	1092	638	1261	398	1284	326	1204	1199	103	1675	12234
		25.0	8.9	5.2	10.3	3.3	10.5	2.7	9.8	9.7	.8	13.7	100.0

NUMBER OF MISSING OBSERVATIONS = 48

Table 13

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING SCTIVITY CATEGORIES BY CARE PROVIDER

PERTOT	PROV COUNT ROW PCT COL PCT	1 HEAD NURSE 1	2 WARDMASTER 11	3 RN 21	4 91C 31	5 LPN 41	6 91B 91F 91G 51	7 AIDE 61	8 WARD CLERK 71	9 ROW TOTAL 81
UNAVAILABLE	1	122 7.1 12.8	269 15.5 24.1	329 19.0 9.3	120 6.9 19.0	242 14.0 13.0	310 17.9 16.8	206 11.9 12.8	132 7.6 19.6	1730 14.1
INDIRECT CARE	2	682 9.2 71.5	756 10.2 67.7	2348 31.6 66.3	328 4.4 52.1	1040 14.0 55.7	823 11.1 44.7	945 12.7 58.6	518 7.0 77.1	7440 60.8
DIRECT CARE	3	150 4.9 15.7	91 3.0 8.2	863 28.2 24.4	182 5.9 28.9	584 19.1 31.3	709 23.1 38.5	463 15.1 28.7	22 .7 3.3	3064 25.0
	COLUMN TOTAL	954 7.6	1116 9.1	3540 28.9	630 5.1	1866 15.3	1842 15.1	1614 13.2	672 5.5	12234 100.0

NUMBER OF MISSING OBSERVATIONS = 48

Table 14

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE (PROV)	1 HEAD NURSE	2 WARDMASTER	3 RN	4 91C	5 LPN	6 91B 91F 91G	7 AIDE	8 WARD CLERK	ROW TOTAL
1 CRITICAL CARE	240	48	816	582	240	378		240	2544
	9.4	1.9	32.1	22.9	9.4	14.9		9.4	20.8
	25.2	4.3	23.1	92.4	12.9	20.5		35.7	
2 MED SURG	186	234	528		516	192	468	144	2268
	8.2	10.3	23.3		22.8	8.5	20.6	6.3	18.5
	19.5	21.0	14.9		27.7	10.4	29.0	21.4	
3 PSYCHIATRY		144	432		6	540	234		1356
		10.6	31.9		.4	39.8	17.3		11.1
		12.9	12.2		.3	29.3	14.5		
4 OB LABOR DELIVER	240	246	588	6	150	156	342	48	1776
	13.5	13.9	33.1	.3	8.4	8.8	19.3	2.7	14.5
	25.2	22.0	16.6	1.0	8.0	8.5	21.2	7.1	
5 NBN NICU	192	210	648	42	522	240	330	144	2328
	8.2	9.0	27.8	1.8	22.4	10.3	14.2	6.2	19.0
	20.1	18.8	18.3	6.7	28.0	13.0	20.4	21.4	
6 PEDS PICU	96	234	528		432	336	240	96	1962
	4.9	11.9	26.9		22.0	17.1	12.2	4.9	16.0
	10.1	21.0	14.9		23.2	18.2	14.9	14.3	
COLUMN TOTAL	954	1116	3540	630	1866	1942	1614	672	12234
	7.8	9.1	28.9	5.1	15.3	15.1	13.2	5.5	100.0

NUMBER OF MISSING OBSERVATIONS = 48

Table 15

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	COUNT / ROW PCT / COL PCT	ACT / DIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICA 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	560	205	110	232	68	198	58	286	394	9	424	2544
		22.0	8.1	4.3	9.1	2.7	7.8	2.3	11.2	15.5	.4	16.7	20.7
		18.2	18.7	17.2	18.3	17.1	15.2	17.6	23.8	33.1	8.7	25.3	
MED SURG	2	410	295	79	325	145	310	92	267	168	20	205	2316
		17.7	12.7	3.4	14.0	6.3	13.4	4.0	11.5	7.3	.9	8.9	18.9
		13.3	26.9	12.3	25.7	36.4	23.8	27.9	22.2	14.1	19.4	12.2	
PSYCHIATRY	3	546	61	93	117	12	101	44	99	98	9	176	1356
		40.3	4.5	6.9	8.6	.9	7.4	3.2	7.3	7.2	.7	13.0	11.0
		17.8	5.6	14.5	9.2	3.0	7.8	13.3	8.2	8.2	8.7	10.5	
OB LABOR DELIVER	4	342	123	159	204	55	257	45	164	137	16	274	1776
		19.3	6.9	9.0	11.5	3.1	14.5	2.5	9.2	7.7	.9	15.4	14.5
		11.1	11.2	24.8	16.1	13.8	19.8	13.6	13.6	11.5	15.5	16.3	
NBN NICU	5	867	189	95	210	80	271	39	188	186	32	171	2328
		37.2	8.1	4.1	9.0	3.4	11.6	1.7	8.1	8.0	1.4	7.3	19.0
		28.2	17.2	14.8	16.6	20.1	20.8	11.8	15.6	15.6	31.1	10.2	
PEDS PICU	6	351	223	104	178	38	164	52	200	206	17	429	1962
		17.9	11.4	5.3	9.1	1.9	8.4	2.7	10.2	10.5	.9	21.9	16.0
		11.4	20.3	16.3	14.1	9.5	12.6	15.8	16.6	17.3	16.5	25.6	
	COLUMN TOTAL	3076	1096	640	1266	398	1301	330	1204	1189	103	1679	12282
		25.0	8.9	5.2	10.3	3.2	10.6	2.7	9.8	9.7	.8	13.7	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU (6)	PEDS PICU	ROW TOTAL
1 UNAVAILABLE	315	374	154	282	284	327		1736
	18.1	21.5	8.9	16.2	16.4	19.8		14.1
	12.4	16.1	11.4	15.9	12.2	15.7		
2 INDIRECT CARE	1669	1532	656	1152	1177	1284		7470
	22.3	20.5	8.8	15.4	15.8	17.2		60.8
	65.6	66.1	48.4	64.9	50.6	65.4		
3 DIRECT CARE	560	410	546	342	867	351		3076
	18.2	13.3	17.8	11.1	28.2	11.4		25.0
	22.0	17.7	40.3	19.3	37.2	17.9		
COLUMN TOTAL	2544	2316	1356	1776	2328	1962		12282
	20.7	18.9	11.0	14.5	19.0	16.0		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU (6)	PEDS PICU	ROW TOTAL
UNAVAILABLE	1	227	284	108	244	245	255		1363
		16.7	20.8	7.9	17.9	18.0	18.7		16.8
		13.5	17.5	14.8	20.3	15.7	19.0		
INDIRECT CARE	2	1129	1072	334	721	777	867		4900
		23.0	21.9	6.8	14.7	15.9	17.7		60.2
		67.2	66.2	45.6	60.1	49.8	64.5		
DIRECT CARE	3	324	264	290	235	538	222		1873
		17.3	14.1	15.5	12.5	28.7	11.9		23.0
		19.3	16.3	39.6	19.6	34.5	16.5		
	COLUMN TOTAL	1680	1620	732	1200	1560	1344		8136
		20.6	19.9	9.0	14.7	19.2	16.5		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE 1	MED SURG 2	PSYCHIATRY 3	OB LABOR DELIVER 4	NBN 5	NICU 6	PEDS PICU	ROW TOTAL
UNAVAILABLE	1	75	76	46	31	22	52		302
		24.8	25.2	15.2	10.3	7.3	17.2		11.3
		13.0	16.2	10.6	9.2	4.6	13.8		
INDIRECT CARE	2	354	291	152	246	246	253		1542
		23.0	18.9	9.9	16.0	16.0	16.4		57.8
		61.5	62.2	35.2	73.2	51.3	66.9		
DIRECT CARE	3	147	101	234	59	212	73		826
		17.8	12.2	28.3	7.1	25.7	8.8		30.9
		25.5	21.6	54.2	17.6	44.2	19.3		
	COLUMN TOTAL	576	468	432	336	480	378		2670
		21.6	17.5	16.2	12.6	18.0	14.2		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN (5)	NICU (6)	PEDS PICU (7)	ROW TOTAL
UNAVAILABLE	1	13	14		7	17	20		71
		18.3	19.7		9.9	23.9	28.2		4.8
		4.5	6.1		2.9	5.9	8.3		
INDIRECT CARE	2	186	169	170	185	154	164		1028
		18.1	16.4	16.5	18.0	15.0	16.0		69.6
		64.6	74.1	88.5	77.1	53.5	68.3		
DIRECT CARE	3	89	45	22	48	117	56		377
		23.6	11.9	5.8	12.7	31.0	14.9		25.5
		30.9	19.7	11.5	20.0	40.6	23.3		
	COLUMN TOTAL	288	228	192	240	288	240		1476
		19.5	15.4	13.0	16.3	19.5	16.3		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT CARE

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	1265	16.9
MEDS SUPPLIES EQUIP	3	393	5.3
CHARTING CLERICAL	4	1301	17.4
CONFERENCES	5	330	4.4
TRAVEL TRANSPORT	6	1204	16.1
ADMINISTRATION	7	1189	15.9
ENVIRONMENTAL	8	103	1.4
WAIT TIME	9	1679	22.5
	TOTAL	7470	100.0

VALID CASES 7470 MISSING CASES 0

Table 22
Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	PROV (COUNT / ROW PCT / COL PCT)	1 HEAD NURSE	2 NURSE MANAGER	3 RN	4 91C	5 LPN	6 91B 91F 91G	7 AIDE	8 WARD CLERK	ROW TOTAL
COMMUNICATIVE	2	208	144	446	37	148	91	118	69	1261
		16.5	11.4	35.4	2.9	11.7	7.2	9.4	5.5	16.9
		30.5	19.0	19.0	11.3	14.2	11.1	12.5	13.3	
MEDS SUPPLIES EQ	3	15	40	142	15	76	47	54	9	398
		3.8	10.1	35.7	3.8	19.1	11.8	13.6	2.3	5.3
		2.2	5.3	6.0	4.6	7.3	5.7	5.7	1.7	
CHARTING CLERICA	4	142	35	598	26	171	67	112	133	1284
		11.1	2.7	46.6	2.0	13.3	5.2	8.7	10.4	17.3
		20.8	4.6	25.5	7.9	16.4	8.1	11.9	25.7	
CONFERENCES	5	36	29	136	10	43	37	34	1	326
		11.0	8.9	41.7	3.1	13.2	11.3	10.4	.3	4.4
		5.3	3.8	5.8	3.0	4.1	4.5	3.6	.2	
TRAVEL TRANSPORT	6	56	116	303	75	200	184	209	61	1204
		4.7	9.6	25.2	6.2	16.6	15.3	17.4	5.1	16.2
		8.2	15.3	12.9	22.9	19.2	22.4	22.1	11.8	
ADMINISTRATION	7	197	314	225	38	81	72	68	194	1189
		16.6	26.4	18.9	3.2	6.8	6.1	5.7	16.3	16.0
		28.9	41.5	9.6	11.6	7.8	8.7	7.2	37.5	
ENVIRONMENTAL	8	3	6	17	1	19	25	29	3	103
		2.9	5.8	16.5	1.0	18.4	24.3	28.2	2.9	1.4
		.4	.8	.7	.3	1.8	3.0	3.1	.6	
WAIT TIME	9	25	72	491	126	302	300	321	48	1675
		1.5	4.3	28.7	7.5	18.0	17.9	19.2	2.9	22.5
		3.7	9.5	20.5	38.4	29.0	35.5	34.0	9.3	
	COLUMN TOTAL	682	756	2348	328	1040	823	945	518	7440
		9.2	10.2	31.6	4.4	14.0	11.1	12.7	7.0	100.0

NUMBER OF MISSING OBSERVATIONS = 30

Table 23
Campbell

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
2 COMMUNICATIVE	232 18.3 13.9	325 25.7 21.2	117 9.2 17.8	204 16.1 17.7	210 16.6 17.8	178 14.1 13.9	1266 16.9
3 MEDS SUPPLIES EQ	68 17.1 4.1	145 36.4 9.5	12 3.0 1.8	55 13.8 4.8	80 20.1 6.8	38 9.5 3.0	398 5.3
4 CHARTING CLERICA	198 15.2 11.9	310 23.8 20.2	101 7.8 15.4	257 19.8 22.3	271 20.8 23.0	164 12.6 12.8	1301 17.4
5 CONFERENCES	58 17.6 3.5	92 27.9 6.0	44 13.3 6.7	45 13.6 3.9	39 11.8 3.3	52 15.8 4.0	330 4.4
6 TRAVEL TRANSPORT	286 23.8 17.1	267 22.2 17.4	39 6.2 15.1	164 13.6 14.2	188 15.6 16.0	200 16.6 15.6	1204 16.1
7 ADMINISTRATION	394 33.1 23.6	168 14.1 11.0	98 8.2 14.9	137 11.5 11.9	186 15.6 15.8	206 17.3 16.0	1189 15.9
8 ENVIRONMENTAL	9 8.7 .5	20 19.4 1.3	9 8.7 1.4	16 15.5 1.4	32 31.1 2.7	17 15.5 1.3	103 1.4
9 WAIT TIME	424 25.3 25.4	205 12.2 13.4	176 10.5 26.8	274 16.3 23.8	171 10.2 14.5	429 25.6 33.4	1679 22.5
COLUMN TOTAL	1669 22.3	1532 20.5	656 8.8	1152 15.4	1177 15.8	1284 17.2	7470 100.0

NUMBER OF MISSING OBSERVATIONS = 0

APPENDIX 21

FITZSIMONS ARMY MEDICAL CENTER
DENVER, COLORADO

Table 1

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
FEBRUARY	2	18	.1	.1	.1
MARCH	3	19692	92.6	92.6	92.6
APRIL	4	1566	7.4	7.4	100.0
	TOTAL	21276	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 2

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	1362	6.4	6.4	6.4
MONDAY	2	3294	15.5	15.5	21.9
TUESDAY	3	4434	20.8	20.8	42.7
WEDNESDAY	4	4320	20.3	20.3	63.0
THURSDAY	5	4800	22.6	22.6	85.6
FRIDAY	6	2148	10.1	10.1	95.7
SATURDAY	7	918	4.3	4.3	100.0
	TOTAL	21276	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 3

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	13512	63.5	63.5	63.5
EVENING	2	4968	23.4	23.4	86.9
NIGHT	3	2796	13.1	13.1	100.0
	TOTAL	21276	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 4

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED	1	1890	8.9	8.9	8.9
SURG	2	1146	5.4	5.4	14.3
ORTHOPEDIC	4	144	.7	.7	14.9
OB	5	1566	7.4	7.4	22.3
LABOR & DELIVERY	6	1752	8.2	8.2	30.5
NEWBORN	8	2220	10.4	10.4	41.0
PEDS	9	3978	18.7	18.7	59.7
SICU	10	1440	6.8	6.8	66.4
MICU	11	1038	4.9	4.9	71.3
CCU	12	432	2.0	2.0	73.4
NICU	14	2316	10.9	10.9	84.2
PSYCHIATRY	16	3354	15.8	15.8	100.0
	TOTAL	21276	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 5

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
CRITICAL CARE	1.00	2910	13.7	13.7	13.7
MED SURG	2.00	3180	14.9	14.9	28.6
PSYCHIATRY	3.00	3354	15.8	15.8	44.4
OB LABOR DELIVERY	4.00	3318	15.6	15.6	60.0
NBN NICU	5.00	4536	21.3	21.3	81.3
PEDS PICU	6.00	3978	18.7	18.7	100.0
	TOTAL	21275	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 8

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	5302	24.9	24.9	24.9
PERSONAL	0	1913	9.0	9.0	33.9
OFF UNIT ACTV	1	1266	6.0	6.0	39.9
COMMUNICATIVE	2	2083	9.8	9.8	49.7
MEDS SUPPLIES EQUIP	3	1165	5.5	5.5	55.1
CHARTING CLERICAL	4	1966	9.2	9.2	64.4
CONFERENCES	5	1004	4.7	4.7	69.1
TRAVEL TRANSPORT	6	2981	14.0	14.0	83.1
ADMINISTRATION	7	2327	10.9	10.9	94.0
ENVIRONMENTAL	8	368	1.7	1.7	95.8
WAIT TIME	9	901	4.2	4.2	100.0
	TOTAL	21276	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 10

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
HEAD NURSE	1	1506	7.1	7.1	7.1
WARDMASTER	2	1524	7.2	7.2	14.2
RN	3	7962	37.4	37.4	51.7
91C	4	1218	5.7	5.7	57.4
LPN	5	2622	12.3	12.3	69.7
91B 91F 91G	6	3978	18.7	18.7	88.4
AIDE	7	1194	5.6	5.6	94.0
WARD CLERK	8	1272	6.0	6.0	100.0
	TOTAL	21276	100.0	100.0	

VALID CASES 21276 MISSING CASES 0

Table 12

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	COUNT / ROW PCT / COL PCT	ACT -1 INDIRECT CARE	0 PERSONAL	1 OFF UNIT ACTV	2 COMMUNICATIVE	3 MEDS SUPPLIES EQ	4 CHARTING CLERICAL	5 CONFERENCES	6 TRAVEL TRANSPORT	7 ADMINISTRATION	8 ENVIRONMENTAL	9 WAIT TIME	ROW TOTAL
HEAD NURSE	1	129	135	205	160	48	111	114	89	508	6	1	1506
		8.6	9.0	13.6	10.6	3.2	7.4	7.6	5.9	33.7	.4	.1	7.1
		2.4	7.1	16.2	7.7	4.1	5.6	11.4	3.0	21.8	1.6	.1	
WARDMASTER	2	86	122	258	104	125	8	40	246	497	18	20	1524
		5.6	8.0	16.9	6.8	8.2	.5	2.6	16.1	32.6	1.2	1.3	7.2
		1.6	6.4	20.4	5.0	10.7	.4	4.0	8.3	21.4	4.9	2.2	
RN	3	2402	609	294	962	535	1043	388	875	561	63	230	7962
		30.2	7.6	3.7	12.1	6.7	13.1	4.9	11.0	7.0	.8	2.9	37.4
		45.3	31.8	23.2	46.2	45.9	53.1	38.6	29.4	24.1	17.1	25.5	
91C	4	380	148	57	78	133	69	28	176	76	31	42	1218
		31.2	12.2	4.7	6.4	10.9	5.7	2.3	14.4	6.2	2.5	3.4	5.7
		7.2	7.7	4.5	3.7	11.4	3.5	2.8	5.9	3.3	8.4	4.7	
LPN	5	781	255	92	238	165	198	74	404	158	121	136	2622
		29.8	9.7	3.5	9.1	6.3	7.6	2.8	15.4	6.0	4.6	5.2	12.3
		14.7	13.3	7.3	11.4	14.2	10.1	7.4	13.6	6.8	32.9	15.1	
91B 91F 91G	6	1167	394	224	222	100	159	293	742	223	78	376	3978
		29.3	9.9	5.6	5.6	2.5	4.0	7.4	18.7	5.6	2.0	9.5	18.7
		22.0	20.6	17.7	10.7	8.6	8.1	29.2	24.9	9.6	21.2	41.7	
AIDE	7	320	102	17	120	46	94	67	280	42	45	61	1194
		26.8	8.5	1.4	10.1	3.9	7.9	5.6	23.5	3.5	3.8	5.1	5.6
		6.0	5.3	1.3	5.8	3.9	4.8	6.7	9.4	1.8	12.2	6.8	
WARD CLERK	8	37	148	119	159	13	284		169	262	6	35	1272
		2.9	11.6	9.4	15.6	1.0	22.3		13.3	20.6	.5	2.8	6.0
		.7	7.7	9.4	9.6	1.1	14.4		5.7	11.3	1.6	3.9	
	COLUMN TOTAL	5302	1913	1266	2083	1165	1966	1004	2981	2327	368	901	21276
		24.9	9.0	6.0	9.8	5.5	9.2	4.7	14.0	10.9	1.7	4.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

TABLE 13
FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERIOT	PROV COUNT / ROW PCT / COL PCT	HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
UNAVAILABLE	1	340	380	903	205	347	518	119	267	3179
		10.7	12.0	28.4	6.4	10.9	19.4	3.7	8.4	14.9
		22.6	24.9	11.3	16.8	13.2	15.5	10.0	21.0	
INDIRECT CARE	2	1037	1058	4657	633	1494	2193	755	968	12795
		8.1	8.3	36.4	4.9	11.7	17.1	5.9	7.6	60.1
		68.9	69.4	58.5	52.0	57.0	55.1	63.2	76.1	
DIRECT CARE	3	129	86	2402	380	781	1167	320	37	5302
		2.4	1.6	45.3	7.2	14.7	22.0	6.0	.7	24.9
		8.6	5.6	30.2	31.2	29.8	29.3	26.8	2.9	
	COLUMN TOTAL	1506	1524	7952	1218	2622	3978	1194	1272	21276
		7.1	7.2	37.4	5.7	12.3	18.7	5.6	6.0	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 14

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	COUNT / ROW PCT / COL PCT	PROV: HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91F 91G (6)	AIDE (7)	WARD CLERK (8)	ROW TOTAL
CRITICAL CARE	1	96	168	1596	480	384			186	2910
		3.3	5.8	54.8	16.5	13.2			6.4	13.7
		6.4	11.0	20.0	39.4	14.6			14.6	
MED SURG	2	228	198	954	258	450	726	96	270	3180
		7.2	6.2	30.0	8.1	14.2	22.8	3.0	8.5	14.9
		15.1	13.0	12.0	21.2	17.2	18.3	8.0	21.2	
PSYCHIATRY	3	144	480	672			1428	390	240	3354
		4.3	14.3	20.0			42.6	11.6	7.2	15.8
		9.6	31.5	8.4			35.9	32.7	18.9	
OB LABOR DELIVER	4	408	414	1194	96	762	348	96		3318
		12.3	12.5	36.0	2.9	23.0	10.5	2.9		15.6
		27.1	27.2	15.0	7.9	29.1	8.7	8.0		
NON NICU	5	390	168	2346	288	402	432	324	186	4536
		8.6	3.7	51.7	6.3	8.9	9.5	7.1	4.1	21.3
		25.9	11.0	29.5	23.6	15.3	10.9	27.1	14.6	
PEDS PICU	6	240	96	1200	96	624	1044	288	390	3978
		6.0	2.4	30.2	2.4	15.7	25.2	7.2	9.8	18.7
		15.9	6.3	15.1	7.9	23.8	25.2	24.1	30.7	
	COLUMN TOTAL	1506	1524	7962	1218	2622	3978	1194	1272	21276
		7.1	7.2	37.4	5.7	12.3	18.7	5.6	5.0	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 15

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	ACT COUNT / ROW PCT / COL PCT	DIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUP PLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	864	255	210	325	147	265	92	344	276	28	104	2910
		29.7	8.8	7.2	11.2	5.1	9.1	3.2	11.8	9.5	1.0	3.6	13.7
		16.3	13.3	16.6	15.6	12.6	13.5	9.2	11.5	11.9	7.6	11.5	
MED SURG	2	705	277	242	312	238	346	109	442	367	48	94	3180
		22.2	8.7	7.6	9.8	7.5	10.9	3.4	13.9	11.5	1.5	3.0	14.9
		13.3	14.5	19.1	15.0	20.4	17.6	10.9	14.8	15.8	13.0	10.4	
PSYCHIATRY	3	665	283	155	224	36	183	438	718	414	31	207	3354
		19.8	8.4	4.6	6.7	1.1	5.5	13.1	21.4	12.3	.9	6.2	15.8
		12.5	14.8	12.2	10.8	3.1	9.3	43.6	24.1	17.8	8.4	23.0	
OB LABOR DELIVER	4	622	316	239	345	226	352	116	355	527	122	98	3318
		18.7	9.5	7.2	10.4	6.8	10.6	3.5	10.7	15.9	3.7	3.0	15.6
		11.7	16.5	18.9	16.6	19.4	17.9	11.6	11.9	22.6	33.2	10.9	
NON NICU	5	1672	376	195	420	369	445	121	451	344	85	58	4536
		36.9	8.3	4.3	9.3	8.1	9.8	2.7	9.9	7.6	1.9	1.3	21.3
		31.5	19.7	15.4	20.2	31.7	22.6	12.1	15.1	14.8	23.1	6.4	
PEDS PICU	6	774	406	225	457	149	375	128	671	399	54	340	3978
		19.5	10.2	5.7	11.5	3.7	9.4	3.2	16.9	10.0	1.4	8.5	18.7
		14.6	21.2	17.8	21.9	12.8	19.1	12.7	22.5	17.1	14.7	37.7	
	COLUMN TOTAL	5302	1913	1266	2083	1165	1966	1004	2981	2327	368	901	21276
		24.9	9.0	6.0	9.8	5.5	9.2	4.7	14.0	10.9	1.7	4.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE 1	MED SURG 2	PSYCHIATRY 3	OB LABOR DELIVER 4	NBN 5	NICU 6	PEDS PICU 7	ROW TOTAL
UNAVAILABLE	1	465	519	438	555	571	631		3179
		14.6	16.3	13.8	17.5	18.0	19.8		14.9
		16.0	16.3	13.1	16.7	12.6	15.9		
INDIRECT CARE	2	1581	1956	2251	2141	2293	2573		12795
		12.4	15.3	17.6	16.7	17.9	20.1		60.1
		54.3	61.5	67.1	64.5	50.6	64.7		
DIRECT CARE	3	664	705	665	622	1672	774		5302
		16.3	13.3	12.5	11.7	31.5	14.6		24.9
		29.7	22.2	19.8	18.7	36.9	19.5		
	COLUMN TOTAL	2910	3180	3354	3318	4536	3978		21276
		13.7	14.9	15.8	15.6	21.3	18.7		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE COUNT ROW PCT COL PCT	1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN	6 NICU PEDS PICU	ROW TOTAL
UNAVAILABLE	1	397 16.2 23.3	314 12.8 16.5	395 16.1 17.0	414 16.9 18.9	444 18.1 15.9	486 19.8 18.7	2450 18.1
INDIRECT CARE	2	996 11.9 58.5	1203 14.3 63.2	1592 19.0 68.6	1371 16.3 62.6	1610 19.2 57.6	1618 19.3 62.3	8390 62.1
DIRECT CARE	3	311 11.6 18.3	385 14.4 20.2	335 12.5 14.4	405 15.2 18.5	742 27.8 26.5	494 18.5 19.0	2672 19.8
	COLUMN TOTAL	1704 12.6	1902 14.1	2322 17.2	2190 16.2	2796 20.7	2598 19.2	13512 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: 1 CRITICAL CARE	2 MED SURG	3 PSYCHIATRY	4 OB LABOR DELIVER	5 NBN NICU	6 PEDS PICU	ROW TOTAL
UNAVAILABLE	1	52	194	40	123	94	140	643
		8.1	30.2	6.2	19.1	14.6	21.8	12.9
		7.2	21.7	5.6	17.8	9.1	15.6	
INDIRECT CARE	2	322	505	410	445	317	587	2586
		12.5	19.5	15.9	17.2	12.3	22.7	52.1
		44.4	56.5	56.9	64.5	30.5	65.2	
DIRECT CARE	3	352	195	270	122	627	173	1739
		20.2	11.2	15.5	7.0	36.1	9.9	35.0
		48.5	21.8	37.5	17.7	60.4	19.2	
	COLUMN TOTAL	726	894	720	690	1038	900	4968
		14.6	18.0	14.5	13.9	20.9	18.1	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
UNAVAILABLE	1	16	11	3	18	33	5	86
		18.6	12.8	3.5	20.9	38.4	5.8	3.1
		3.3	2.9	1.0	4.1	4.7	1.0	
INDIRECT CARE	2	263	248	249	325	366	368	1819
		14.5	13.6	13.7	17.9	20.1	20.2	65.1
		54.8	64.6	79.8	74.2	52.1	76.7	
DIRECT CARE	3	201	125	60	95	303	107	891
		22.6	14.0	6.7	10.7	34.0	12.0	31.9
		41.9	32.6	19.2	21.7	43.2	22.3	
	COLUMN TOTAL	480	384	312	438	702	480	2796
		17.2	13.7	11.2	15.7	25.1	17.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT CARE

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT
COMMUNICATIVE	2	2083	16.3	16.3
MEDS SUPPLIES EQUIP	3	1165	9.1	9.1
CHARTING CLERICAL	4	1965	15.4	15.4
CONFERENCES	5	1004	7.8	7.8
TRAVEL TRANSPORT	6	2981	23.3	23.3
ADMINISTRATION	7	2327	18.2	18.2
ENVIRONMENTAL	8	363	2.9	2.9
WAIT TIME	9	901	7.0	7.0
	TOTAL	12795	100.0	100.0

VALID CASES 12795 MISSING CASES 0

Table 22
FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
COMMUNICATIVE	2	160	104	962	78	238	222	120	199	2083
		7.7	5.0	46.2	3.7	11.4	10.7	5.8	9.6	16.3
		15.4	9.8	20.7	12.3	15.9	10.1	15.9	20.6	
MEDS SUPPLIES EQ	3	48	125	535	133	165	100	46	13	1165
		4.1	10.7	45.9	11.4	14.2	8.6	3.9	1.1	9.1
		4.6	11.8	11.5	21.0	11.0	4.6	6.1	1.3	
CHARTING CLERICA	4	111	8	1043	69	198	159	94	284	1966
		5.6	.4	53.1	3.5	10.1	8.1	4.8	14.4	15.4
		10.7	.8	22.4	10.9	13.3	7.3	12.5	29.3	
CONFERENCES	5	114	40	388	28	74	293	67		1004
		11.4	4.0	38.6	2.8	7.4	29.2	6.7		7.8
		11.0	3.8	8.3	4.4	5.0	13.4	8.9		
TRAVEL TRANSPORT	6	89	246	875	176	404	742	280	169	2981
		3.0	8.3	29.4	5.9	13.6	24.9	9.4	5.7	23.3
		8.6	23.3	18.8	27.8	27.0	33.8	37.1	17.5	
ADMINISTRATION	7	508	497	561	76	158	223	42	262	2327
		21.8	21.4	24.1	3.3	6.8	9.6	1.8	11.3	18.2
		49.0	47.0	12.0	12.0	10.6	10.2	5.6	27.1	
ENVIRONMENTAL	8	6	18	63	31	121	78	45	6	368
		1.6	4.9	17.1	8.4	32.9	21.2	12.2	1.6	2.9
		.6	1.7	1.4	4.9	8.1	3.6	6.0	.6	
WAIT TIME	9	1	20	230	42	136	376	61	35	901
		.1	2.2	25.5	4.7	15.1	41.7	6.8	3.9	7.0
		.1	1.9	4.9	6.6	9.1	17.1	8.1	3.6	
	COLUMN TOTAL	1037	1058	4657	633	1494	2193	755	968	12795
		8.1	8.3	36.4	4.9	11.7	17.1	5.9	7.6	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 23
FAMC

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	PSYCHIATRY (3)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PICU (6)	ROW TOTAL
COMMUNICATIVE	2	325	312	224	345	420	457	2083
		15.6	15.0	10.8	16.6	20.2	21.9	16.3
		20.6	16.0	10.0	16.1	18.3	17.8	
MEDS SUPPLIES EQ	3	147	238	36	226	369	149	1165
		12.6	20.4	3.1	19.4	31.7	12.8	9.1
		9.3	12.2	1.6	10.6	16.1	5.8	
CHARTING CLERICA	4	265	346	183	352	445	375	1966
		13.5	17.6	9.3	17.9	22.6	19.1	15.4
		16.8	17.7	8.1	16.4	19.4	14.6	
CONFERENCES	5	92	109	438	116	121	128	1004
		9.2	10.9	43.6	11.6	12.1	12.7	7.8
		5.8	5.6	19.5	5.4	5.3	5.0	
TRAVEL TRANSPORT	6	344	442	718	355	451	671	2981
		11.5	14.8	24.1	11.9	15.1	22.5	23.3
		21.8	22.6	31.9	16.6	19.7	26.1	
ADMINISTRATION	7	276	367	414	527	344	399	2327
		11.9	15.8	17.8	22.6	14.8	17.1	18.2
		17.5	18.8	18.4	24.6	15.0	15.5	
ENVIRONMENTAL	8	28	48	31	122	85	54	368
		7.6	13.0	8.4	33.2	23.1	14.7	2.9
		1.8	2.5	1.4	5.7	3.7	2.1	
WAIT TIME	9	104	94	207	98	58	340	901
		11.5	10.4	23.0	10.9	6.4	37.7	7.0
		6.6	4.8	9.2	4.6	2.5	13.2	
	COLUMN TOTAL	1581	1956	2251	2141	2293	2573	12795
		12.4	15.3	17.6	16.7	17.9	20.1	100.0

NUMBER OF MISSING OBSERVATIONS = 0

APPENDIX 22

DEWITT COMMUNITY HOSPITAL
FORT BELVOIR, VIRGINIA

Table 1

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	6426	69.2	69.2	69.2
APRIL	4	2856	30.8	30.8	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 2

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	852	9.2	9.2	9.2
MONDAY	2	972	10.5	10.5	19.7
TUESDAY	3	1482	16.0	16.0	35.6
WEDNESDAY	4	1746	18.8	18.8	54.4
THURSDAY	5	2034	21.9	21.9	76.3
FRIDAY	6	1158	12.5	12.5	88.8
SATURDAY	7	1038	11.2	11.2	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 3

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	5592	60.2	60.2	60.2
EVENING	2	2454	26.4	26.4	86.7
NIGHT	3	1236	13.3	13.3	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 4

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED	1	774	8.3	8.3	8.3
SURG	2	1434	15.4	15.4	23.8
OB	5	1440	15.5	15.5	39.3
NEWBORN	8	996	10.7	10.7	50.0
PEDS	9	2130	22.9	22.9	73.0
ICU COMBO	13	2508	27.0	27.0	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 5

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERIVCES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
CRITICAL CARE	1.00	2508	27.0	27.0	27.0
MED SURG	2.00	2208	23.8	23.8	50.8
OB LABOR DELIVERY	4.00	1440	15.5	15.5	66.3
NBN NICU	5.00	996	10.7	10.7	77.1
PEDS PICU	6.00	2130	22.9	22.9	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 8

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	2524	27.2	27.2	27.2
PERSONAL	0	730	7.9	7.9	35.1
OFF UNIT ACTV	1	399	4.3	4.3	39.4
COMMUNICATIVE	2	995	10.7	10.7	50.1
MEDS SUPPLIES EQUIP	3	584	6.3	6.3	56.4
CHARTING CLERICAL	4	1396	15.0	15.0	71.4
CONFERENCES	5	275	3.0	3.0	74.4
TRAVEL TRANSPORT	6	940	10.1	10.1	84.5
ADMINISTRATION	7	662	7.1	7.1	91.6
ENVIRONMENTAL	8	205	2.2	2.2	93.8
WAIT TIME	9	572	6.2	6.2	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 10

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
	-1	84	.9	.9	.9
HEAD NURSE	1	774	8.3	8.3	9.2
WARDMASTER	2	888	9.6	9.6	18.8
RN	3	2880	31.0	31.0	49.8
91C	4	1668	18.0	18.0	67.8
LPN	5	192	2.1	2.1	69.9
91B 91F 91G	6	1452	15.6	15.6	85.5
AIDE	7	762	8.2	8.2	93.7
WARD CLERK	8	582	6.3	6.3	100.0
	TOTAL	9282	100.0	100.0	

VALID CASES 9282 MISSING CASES 0

Table 12

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	COUNT / ROW PCT / COL PCT	ACT -1 DIRECT CARE	0 PERSONAL	1 OFF UNIT ACTV	2 COMMUNICATIVE	3 MEDS SUP PLIES EQ	4 CHARTING CLERICAL	5 CONFERENCES	6 TRAVEL TRANSPORT	7 ADMINISTRATION	8 ENVIRONMENTAL	9 WAIT TIME	ROW TOTAL
HEAD NURSE	1	146	42	32	177	46	143	31	57	93	2	5	774
		18.9	5.4	4.1	22.9	5.9	18.5	4.0	7.4	12.0	.3	.6	8.4
		5.9	5.8	8.2	18.0	7.9	10.3	11.3	6.1	14.0	1.0	.9	
WARDMASTER	2	114	62	62	98	49	47	21	127	265	37	6	888
		12.8	7.0	7.0	11.0	5.5	5.3	2.4	14.3	29.8	4.2	.7	9.7
		4.6	8.6	15.9	10.0	8.4	3.4	7.6	13.5	40.0	18.1	1.1	
RN	3	897	194	45	371	202	625	115	156	122	20	133	2880
		31.1	6.7	1.6	12.9	7.0	21.7	4.0	5.4	4.2	.7	4.6	31.3
		36.1	27.0	11.6	37.7	34.6	45.2	41.8	16.6	18.4	9.8	23.3	
91C	4	544	167	99	97	107	150	54	182	43	51	174	1669
		32.6	10.0	5.9	5.8	6.4	9.0	3.2	10.9	2.6	3.1	10.4	18.1
		21.9	23.2	25.4	9.9	18.3	10.8	19.6	19.4	6.5	25.0	30.5	
LPN	5	115	6		12	9	29	2	7	1	9	2	192
		59.9	3.1		6.3	4.7	15.1	1.0	3.6	.5	4.7	1.0	2.1
		4.6	.8		1.2	1.5	2.1	.7	.7	.2	4.4	.4	
91B 91F 91G	6	442	137	58	80	111	140	36	204	25	43	176	1452
		30.4	9.4	4.0	5.5	7.6	9.6	2.5	14.0	1.7	3.0	12.1	15.8
		17.8	19.1	14.9	8.1	19.0	10.1	13.1	21.7	3.8	21.1	30.9	
AIDE	7	214	46	21	56	59	56	8	156	32	42	72	762
		28.1	6.0	2.8	7.3	7.7	7.3	1.0	20.5	4.2	5.5	9.4	8.3
		8.6	6.4	5.4	5.7	10.1	4.0	2.9	16.6	4.8	20.6	12.6	
WARD CLERK	8	16	65	72	93	1	194	8	50	81		2	562
		2.7	11.2	12.4	16.0	.2	33.3	1.4	8.6	13.9		.3	6.3
		.6	9.0	18.5	9.5	.2	14.0	2.9	5.3	12.2		.4	
	COLUMN TOTAL	2488	719	389	984	584	1384	275	939	662	204	570	9198
		27.0	7.8	4.2	10.7	6.3	15.0	3.0	10.2	7.2	2.2	6.2	100.0

NUMBER OF MISSING OBSERVATIONS = 84

TABLE 13
DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERIOD	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91G (6)	91F (7)	AIDE (8)	WARD CLERK	ROW TOTAL
UNAVAILABLE	1	74	124	239	266	6	195	67	137		1108
		6.7	11.2	21.6	24.0	.5	17.6	6.0	12.4		12.0
		9.6	14.0	8.3	15.9	3.1	13.4	8.8	23.5		
INDIRECT CARE	2	554	650	1744	858	71	815	481	429		5602
		9.9	11.6	31.1	15.3	1.3	14.5	8.6	7.7		60.9
		71.6	73.2	60.6	51.4	37.0	55.1	63.1	73.7		
DIRECT CARE	3	146	114	897	544	115	442	214	16		2488
		5.9	4.6	36.1	21.9	4.6	17.8	8.6	.6		27.0
		18.9	12.8	31.1	32.6	59.9	30.4	28.1	2.7		
	COLUMN TOTAL	774	888	2880	1668	192	1452	762	582		9198
		8.4	9.7	31.3	18.1	2.1	15.8	8.3	6.3		100.0

NUMBER OF MISSING OBSERVATIONS = 84

Table 14

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	COUNT / ROW PCT / COL PCT	PROV 1 HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
CRITICAL CARE	1	144	144	930	810	192	288			2508
		5.7	5.7	37.1	32.3	7.7	11.5			27.3
		18.6	16.2	32.3	48.6	100.0	19.8			
MED SURG	2	240	240	390	318		504	270	246	2208
		10.9	10.9	17.7	14.4		22.8	12.2	11.1	24.0
		31.0	27.0	13.5	19.1		34.7	35.4	42.3	
OB LABOR DELIVER	4	126	198	492	240		192		192	1440
		8.8	13.8	34.2	16.7		13.3		13.3	15.7
		16.3	22.3	17.1	14.4		13.2		33.0	
NBN NICU	5	96	48	426	96		186	60		912
		10.5	5.3	46.7	10.5		20.4	6.6		9.9
		12.4	5.4	14.8	5.8		12.8	7.9		
PEDS PICU	6	168	258	642	204		282	432	144	2130
		7.9	12.1	30.1	9.6		13.2	20.3	6.8	23.2
		21.7	29.1	22.3	12.2		19.4	56.7	24.7	
	COLUMN TOTAL	774	888	2880	1668	192	1452	762	582	9198
		8.4	9.7	31.3	18.1	2.1	15.8	8.3	6.3	100.0

NUMBER OF MISSING OBSERVATIONS = 84

Table 15

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	ACT COUNT / ROW PCT / COL PCT	DIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUP PLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	896	179	60	254	142	381	93	161	132	38	172	2508
		35.7	7.1	2.4	10.1	5.7	15.2	3.7	6.4	5.3	1.5	6.9	27.0
		35.5	24.5	15.0	25.5	24.3	27.3	33.8	17.1	19.9	18.5	30.1	
MED SURG	2	501	177	112	251	151	352	46	350	151	67	50	2208
		22.7	8.0	5.1	11.4	6.8	15.9	2.1	15.9	6.8	3.0	2.3	23.8
		19.8	24.2	28.1	25.2	25.9	25.2	16.7	37.2	22.8	32.7	8.7	
OB LABOR DELIVER	4	277	137	48	184	92	207	31	161	142	32	129	1440
		19.2	9.5	3.3	12.8	6.4	14.4	2.2	11.2	9.9	2.2	9.0	15.5
		11.0	18.8	12.0	18.5	15.8	14.8	11.3	17.1	21.5	15.6	22.6	
NBN NICU	5	366	80	48	109	61	127	27	60	39	19	60	996
		36.7	8.0	4.8	10.9	6.1	12.8	2.7	6.0	3.9	1.9	6.0	10.7
		14.5	11.0	12.0	11.0	10.4	9.1	9.8	6.4	5.9	9.3	10.5	
PEDS PICU	6	484	157	131	197	138	329	78	208	198	49	161	2130
		22.7	7.4	6.2	9.2	6.5	15.4	3.7	9.8	9.3	2.3	7.6	22.9
		19.2	21.5	32.8	19.8	23.6	23.6	28.4	22.1	29.9	23.9	28.1	
	COLUMN TOTAL	2524	730	399	995	584	1396	275	940	662	205	572	9282
		27.2	7.9	4.3	10.7	6.3	15.0	3.0	10.1	7.1	2.2	6.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	OB LABOR DELIVER (4)	NBN (5)	NICU PEDS PIC U (6)	ROW TOTAL
UNAVAILABLE	1	239	289	185	128	288	1129
		21.2	25.6	16.4	11.3	25.5	12.2
		9.5	13.1	12.8	12.9	13.5	
INDIRECT CARE	2	1373	1418	978	502	1358	5629
		24.4	25.2	17.4	8.9	24.1	60.6
		54.7	64.2	67.9	50.4	63.8	
DIRECT CARE	3	896	501	277	366	484	2524
		35.5	19.8	11.0	14.5	19.2	27.2
		35.7	22.7	19.2	36.7	22.7	
	COLUMN TOTAL	2508	2208	1440	996	2130	9282
		27.0	23.8	15.5	10.7	22.9	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	OB LABOR DELIVER (4)	NBN (5)	NICU PEDS U (6)	PIC	ROW TOTAL
1 UNAVAILABLE	124	223	90	91	219		747
	16.6	29.9	12.0	12.2	29.3		13.4
	9.3	14.3	11.4	17.6	15.8		
2 INDIRECT CARE	782	1022	554	248	865		3471
	22.5	29.4	16.0	7.1	24.9		62.1
	58.4	65.5	69.9	48.1	62.4		
3 DIRECT CARE	432	315	148	177	302		1374
	31.4	22.9	10.8	12.9	22.0		24.6
	32.3	20.2	18.7	34.3	21.8		
COLUMN TOTAL	1338	1560	792	516	1386		5592
	23.9	27.9	14.2	9.2	24.8		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	OB LABOR DELIVER (4)	NBN (5)	NICU PEDS U (6)	PIC	ROW TOTAL
1 UNAVAILABLE	112	64	93	37	59		365
	30.7	17.5	25.5	10.1	16.2		14.9
	14.2	14.0	22.8	12.8	11.4		
2 INDIRECT CARE	446	262	235	150	333		1426
	31.3	18.4	16.5	10.5	23.4		58.1
	56.7	57.5	57.6	52.1	64.5		
3 DIRECT CARE	228	130	80	101	124		663
	34.4	19.6	12.1	15.2	18.7		27.0
	29.0	28.5	19.6	35.1	24.0		
COLUMN TOTAL	786	456	408	288	516		2454
	32.0	18.6	16.6	11.7	21.0		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: 1 CRITICAL CARE	2 MED SURG	4 OB LABOR DELIVER	5 NBN	6 NICU PEDS PIC U	ROW TOTAL
UNAVAILABLE	1	3	2	2		10	17
		17.6	11.8	11.8		58.8	1.4
		.8	1.0	.8		4.4	
INDIRECT CARE	2	145	134	189	104	160	732
		19.8	18.3	25.8	14.2	21.9	59.2
		37.8	69.8	78.8	54.2	70.2	
DIRECT CARE	3	236	56	49	88	58	487
		48.5	11.5	10.1	18.1	11.9	39.4
		61.5	29.2	20.4	45.8	25.4	
	COLUMN TOTAL	384	192	240	192	228	1236
		31.1	15.5	19.4	15.5	18.4	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT CARE

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	995	17.7
MEDS SUPPLIES EQUIP	3	584	10.4
CHARTING CLERICAL	4	1396	24.8
CONFERENCES	5	275	4.9
TRAVEL TRANSPORT	6	940	16.7
ADMINISTRATION	7	662	11.8
ENVIRONMENTAL	8	205	3.6
WAIT TIME	9	572	10.2
	TOTAL	5629	100.0

VALID CASES 5629 MISSING CASES 0

Table 22
DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
COMMUNICATIVE	2	177	98	371	97	12	80	56	93	984
		18.0	10.0	37.7	9.9	1.2	8.1	5.7	9.5	17.6
		31.9	15.1	21.3	11.3	16.9	9.8	11.6	21.7	
MEDS SUPPLIES EQ	3	46	49	202	107	9	111	59	1	584
		7.9	8.4	34.6	18.3	1.5	19.0	10.1	.2	10.4
		8.3	7.5	11.6	12.5	12.7	13.6	12.3	.2	
CHARTING CLERICA	4	143	47	625	150	29	140	56	194	1384
		10.3	3.4	45.2	10.8	2.1	10.1	4.0	14.0	24.7
		25.8	7.2	35.8	17.5	40.8	17.2	11.6	45.2	
CONFERENCES	5	31	21	115	54	2	36	8	8	275
		11.3	7.6	41.8	19.6	.7	13.1	2.9	2.9	4.9
		5.6	3.2	6.6	6.3	2.8	4.4	1.7	1.9	
TRAVEL TRANSPORT	6	57	127	156	182	7	204	156	50	939
		6.1	13.5	16.6	19.4	.7	21.7	16.6	5.3	16.8
		10.3	19.5	8.9	21.2	9.9	25.0	32.4	11.7	
ADMINISTRATION	7	93	265	122	43	1	25	32	81	662
		14.0	40.0	18.4	6.5	.2	3.8	4.8	12.2	11.8
		16.8	40.8	7.0	5.0	1.4	3.1	6.7	18.9	
ENVIRONMENTAL	8	2	37	20	51	9	43	42		204
		1.0	18.1	9.8	25.0	4.4	21.1	20.6		3.6
		.4	5.7	1.1	5.9	12.7	5.3	8.7		
WAIT TIME	9	5	6	133	174	2	176	72	2	570
		.9	1.1	23.3	30.5	.4	30.9	12.6	.4	10.2
		.9	.9	7.6	20.3	2.8	21.6	15.0	.5	
	COLUMN TOTAL	554	650	1744	858	71	315	481	429	5602
		9.9	11.6	31.1	15.3	1.3	14.5	8.6	7.7	100.0

NUMBER OF MISSING OBSERVATIONS = 27

Table 23
DeWitt

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERIVCE

ACT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	OB LABOR DELIVER (4)	NBN (5)	NICU PEDS PIC U (6)	ROW TOTAL
2 COMMUNICATIVE	254 25.5 18.5	251 25.2 17.7	184 18.5 18.8	109 11.0 21.7	197 19.8 14.5	995 17.7
3 MEDS SUPPLIES EQ	142 24.3 10.3	151 25.9 10.6	92 15.8 9.4	61 10.4 12.2	138 23.6 10.2	584 10.4
4 CHARTING CLERICA	381 27.3 27.7	352 25.2 24.8	207 14.8 21.2	127 9.1 25.3	329 23.6 24.2	1396 24.8
5 CONFERENCES	93 33.8 6.8	46 16.7 3.2	31 11.3 3.2	27 9.8 5.4	78 28.4 5.7	275 4.9
6 TRAVEL TRANSPORT	161 17.1 11.7	350 37.2 24.7	161 17.1 16.5	60 6.4 12.0	208 22.1 15.3	940 16.7
7 ADMINISTRATION	132 19.9 9.6	151 22.8 10.6	142 21.5 14.5	39 5.9 7.8	198 29.9 14.6	662 11.8
8 ENVIRONMENTAL	38 18.5 2.8	67 32.7 4.7	32 15.6 3.3	19 9.3 3.8	49 23.9 3.6	205 3.6
9 WAIT TIME	172 30.1 12.5	50 8.7 3.5	129 22.6 13.2	60 10.5 12.0	161 28.1 11.9	572 10.2
COLUMN TOTAL	1373 24.4	1418 25.2	978 17.4	502 8.9	1358 24.1	5629 100.0

NUMBER OF MISSING OBSERVATIONS = 0

APPENDIX 23

US ARMY MEDICAL ACTIVITY
FORT CARSON, COLORADO

Table 1

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	4470	39.9	39.9	39.9
APRIL	4	6744	60.1	60.1	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 2

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	714	6.4	6.4	6.4
MONDAY	2	1656	14.8	14.8	21.1
TUESDAY	3	2040	18.2	18.2	39.3
WEDNESDAY	4	2100	18.7	18.7	58.1
THURSDAY	5	2196	19.6	19.6	77.6
FRIDAY	6	1836	16.4	16.4	94.0
SATURDAY	7	672	6.0	6.0	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 3

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	7368	65.7	65.7	65.7
EVENING	2	2502	22.3	22.3	88.0
NIGHT	3	1344	12.0	12.0	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 4

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED SURG COMBO	3	1536	13.7	13.7	13.7
ORTHOPEDIC	4	966	8.6	8.6	22.3
OB	5	708	6.3	6.3	28.6
OB L&D COMBO	7	2010	17.9	17.9	46.5
NEWBORN	8	1428	12.7	12.7	59.3
PEDS	9	2412	21.5	21.5	80.8
ICU COMBO	13	2154	19.2	19.2	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 5

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
CRITICAL CARE	1.00	2154	19.2	19.2	19.2
MED SURG	2.00	2502	22.3	22.3	41.5
OB LABOR DELIVERY	4.00	2718	24.2	24.2	65.8
NBN NICU	5.00	1428	12.7	12.7	78.5
PEDS PICU	6.00	2412	21.5	21.5	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 8

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	2396	21.4	21.4	21.4
PERSONAL	0	1026	9.1	9.1	30.5
OFF UNIT ACTV	1	664	5.9	5.9	36.4
COMMUNICATIVE	2	1110	9.9	9.9	46.3
MEDS SUPPLIES EQUIP	3	644	5.7	5.7	52.1
CHARTING CLERICAL	4	1213	10.8	10.8	62.9
CONFERENCES	5	233	2.1	2.1	65.0
TRAVEL TRANSPORT	6	1178	10.5	10.5	75.5
ADMINISTRATION	7	1080	9.6	9.6	85.1
ENVIRONMENTAL	8	335	3.0	3.0	88.1
WAIT TIME	9	1335	11.9	11.9	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 10

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
HEAD NURSE	1	720	6.4	6.4	6.4
WARDMASTER	2	768	6.8	6.8	13.3
RN	3	3174	28.3	28.3	41.6
91C	4	1542	13.8	13.8	55.3
LPN	5	2400	21.4	21.4	76.7
91B 91F 91G	6	1194	10.6	10.6	87.4
AIDE	7	624	5.6	5.6	92.9
WARD CLERK	8	792	7.1	7.1	100.0
	TOTAL	11214	100.0	100.0	

VALID CASES 11214 MISSING CASES 0

Table 12

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	ACT (COUNT / ROW PCT / COL PCT)	-1 INDIRECT CARE	0 PERSONAL	1 OFF UNIT ACTV	2 COMMUNICATIVE	3 NEEDS SUPPLIES EQ	4 CHARTING CLERICAL	5 CONFERENCES	6 TRAVEL TRANSPORT	7 ADMINISTRATION	8 ENVIRONMENTAL	9 WAIT TIME	ROW TOTAL
HEAD NURSE	1	102	67	63	180	24	74	21	48	114	9	18	720
		14.2	9.3	8.8	25.0	3.3	10.3	2.9	6.7	15.8	1.3	2.5	6.4
		4.3	6.5	9.5	16.2	3.7	6.1	9.0	4.1	10.6	2.7	1.3	
WARDMASTER	2	24	77	114	63	37	7	8	81	297	15	45	768
		3.1	10.0	14.8	8.2	4.8	.9	1.0	10.5	38.7	2.0	5.9	6.8
		1.0	7.5	17.2	5.7	5.7	.6	3.4	6.9	27.5	4.5	3.4	
RN	3	664	217	83	416	166	525	113	216	358	27	389	3174
		20.9	6.8	2.6	13.1	5.2	16.5	3.6	6.8	11.3	.9	12.3	28.3
		27.7	21.2	12.5	37.5	25.8	43.3	48.5	18.3	33.1	8.1	29.1	
91C	4	394	133	191	82	133	81	20	212	57	81	158	1542
		25.6	8.6	12.4	5.3	8.6	5.3	1.3	13.7	3.7	5.3	10.2	13.8
		16.4	13.0	28.8	7.4	20.7	6.7	8.6	18.0	5.3	24.2	11.8	
LPN	5	721	258	50	142	158	160	42	283	86	125	375	2400
		30.0	10.8	2.1	5.9	6.6	6.7	1.8	11.8	3.6	5.2	15.6	21.4
		30.1	25.1	7.5	12.8	24.5	13.2	18.0	24.0	3.0	37.3	28.1	
91B 91F 91G	6	309	115	76	65	78	64	18	185	56	36	192	1194
		25.9	9.6	6.4	5.4	6.5	5.4	1.5	15.5	4.7	3.0	16.1	10.6
		12.9	11.2	11.4	5.9	12.1	5.3	7.7	15.7	5.2	10.7	14.4	
AIDE	7	173	59	16	38	43	34	11	85	19	40	106	624
		27.7	9.5	2.6	6.1	6.9	5.4	1.8	13.6	3.0	6.4	17.0	5.6
		7.2	5.8	2.4	3.4	6.7	2.8	4.7	7.2	1.8	11.9	7.9	
WARD CLERK	8	9	100	71	124	5	268		68	93	2	52	792
		1.1	12.6	9.0	15.7	.6	33.8		8.6	11.7	.3	6.6	7.1
		.4	9.7	10.7	11.2	.8	22.1		5.8	8.6	.6	3.9	
COLUMN TOTAL		2396	1026	664	1110	644	1213	233	1178	1080	335	1335	11214
		21.4	9.1	5.9	9.9	5.7	10.8	2.1	10.5	9.6	3.0	11.9	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 13

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERTOT	COUNT / ROW PCT / COL PCT	PROV: HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91F 91G (6)	AIDE (7)	WARD CLERK (8)	ROW TOTAL
UNAVAILABLE	1	130	191	300	324	308	191	75	171	1690
		7.7	11.3	17.8	19.2	18.2	11.3	4.4	10.1	15.1
		18.1	24.9	9.5	21.0	12.8	16.0	12.0	21.6	
INDIRECT CARE	2	488	553	2210	824	1371	694	376	512	7128
		6.8	7.8	31.0	11.6	19.2	9.7	5.3	8.6	63.6
		67.8	72.0	69.6	53.4	57.1	58.1	60.3	77.3	
DIRECT CARE	3	102	24	664	394	721	309	173	9	2396
		4.3	1.0	27.7	16.4	30.1	12.9	7.2	.4	21.4
		14.2	3.1	20.9	25.6	30.0	25.9	27.7	1.1	
	COLUMN TOTAL	720	768	3174	1542	2400	1194	624	792	11214
		6.4	6.8	28.3	13.8	21.4	10.6	5.6	7.1	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 14

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
CRITICAL CARE	1	192	192	438	372	528	240	96	96	2154
		8.9	8.9	20.3	17.3	24.5	11.1	4.5	4.5	19.2
		26.7	25.0	13.8	24.1	22.0	20.1	15.4	12.1	
MED SURG	2	144	144	558	306	582	384	144	240	2502
		5.8	5.8	22.3	12.2	23.3	15.3	5.8	9.6	22.3
		20.0	18.8	17.6	19.8	24.3	32.2	23.1	30.3	
OB LABOR DELIVER	4	144	192	1038	288	714	144		198	2718
		5.3	7.1	38.2	10.6	26.3	5.3		7.3	24.2
		20.0	25.0	32.7	18.7	29.8	12.1		25.0	
NBN NICU	5	144		660		144	96	384		1428
		10.1		46.2		10.1	5.7	26.9		12.7
		20.0		20.8		6.0	8.0	61.5		
PEDS PICU	6	96	240	480	576	432	330		258	2412
		4.0	10.0	19.9	23.9	17.9	13.7		10.7	21.5
		13.3	31.3	15.1	37.4	18.0	27.6		32.6	
	COLUMN TOTAL	720	768	3174	1542	2400	1194	624	792	11214
		6.4	6.8	28.3	13.8	21.4	10.6	5.6	7.1	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 15

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	COUNT / ROW PCT / COL PCT	ACT INDIRECT CARE -1	PERSONAL 0	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
CRITICAL CARE	1	457	221	100	173	145	224	54	206	193	35	346	2154
		21.2	10.3	4.6	8.0	6.7	10.4	2.5	9.6	9.0	1.6	16.1	19.2
		19.1	21.5	15.1	15.6	22.5	18.5	23.2	17.5	17.9	10.4	25.9	
MED SURG	2	451	282	195	259	125	305	44	351	232	73	185	2502
		18.0	11.3	7.8	10.4	5.0	12.2	1.8	14.0	9.3	2.9	7.4	22.3
		18.8	27.5	29.4	23.3	19.4	25.1	18.9	29.8	21.5	21.8	13.9	
OB LABOR DELIVER	4	585	272	119	249	172	317	49	265	298	117	275	2718
		21.5	10.0	4.4	9.2	6.3	11.7	1.8	9.7	11.0	4.3	10.1	24.2
		24.4	26.5	17.9	22.4	26.7	26.1	21.0	22.5	27.5	34.9	20.6	
NBN NICU	5	317	86	32	181	76	108	26	118	166	48	270	1428
		22.2	6.0	2.2	12.7	5.3	7.6	1.8	8.3	11.6	3.4	18.9	12.7
		13.2	8.4	4.8	16.3	11.8	8.9	11.2	10.0	15.4	14.3	20.2	
PEDS PICU	6	586	165	218	248	126	259	60	238	191	62	259	2412
		24.3	6.8	9.0	10.3	5.2	10.7	2.5	9.9	7.9	2.6	10.7	21.5
		24.5	16.1	32.8	22.3	19.6	21.4	25.8	20.2	17.7	18.5	19.4	
	COLUMN TOTAL	2396	1026	664	1110	644	1213	233	1178	1080	335	1335	11214
		21.4	9.1	5.9	9.9	5.7	10.8	2.1	10.5	9.6	3.0	11.9	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PLRTOT	SERVICE (COUNT / ROW PCT / COL PCT)	1 CRITICAL CARE	2 MED SURG	4 OB LABOR DELIVER	5 NBN	6 NICU PEDS PICU	ROW TOTAL
UNAVAILABLE	1	321 19.0 14.9	477 28.2 19.1	391 23.1 14.4	118 7.0 8.3	383 22.7 15.9	1690 15.1
INDIRECT CARE	2	1376 19.3 63.9	1574 22.1 62.9	1742 24.4 64.1	993 13.9 69.5	1443 20.2 59.8	7128 63.6
DIRECT CARE	3	457 19.1 21.2	451 18.8 18.0	585 24.4 21.5	317 13.2 22.2	586 24.5 24.3	2396 21.4
	COLUMN TOTAL	2154 19.2	2502 22.3	2718 24.2	1428 12.7	2412 21.5	11214 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: CRITICAL CARE 1	MED SURG 2	OB LABOR DELIVER 4	NBN 5	NICU PEDS U 6	PIC	ROW TOTAL
UNAVAILABLE	1	272	431	291	76	335		1405
		19.4	30.7	20.7	5.4	23.8		19.1
		19.0	23.6	17.6	10.1	19.7		
INDIRECT CARE	2	850	1111	1081	484	1031		4557
		18.7	24.4	23.7	10.6	22.6		61.8
		59.3	60.9	65.5	64.0	60.5		
DIRECT CARE	3	312	282	278	196	338		1406
		22.2	20.1	19.8	13.9	24.0		19.1
		21.8	15.5	16.8	25.9	19.8		
	COLUMN TOTAL	1434	1824	1650	756	1704		7368
		19.5	24.8	22.4	10.3	23.1		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE COUNT ROW PCT COL PCT	1 CRITICAL CARE	11 MED SURG	21 OB LABOR DELIVER	41 NBN	51 NICU	61 PEDS PIC U	ROW TOTAL
UNAVAILABLE	1	42 15.9 9.7	45 17.0 9.3	95 36.0 14.9	36 13.6 8.3	46 17.4 8.9		264 10.6
INDIRECT CARE	2	307 19.3 71.1	305 19.2 62.8	368 23.1 57.9	336 21.1 77.8	274 17.2 53.1		1590 63.5
DIRECT CARE	3	83 12.8 19.2	136 21.0 28.0	173 26.7 27.2	60 9.3 13.9	196 30.2 38.0		648 25.9
	COLUMN TOTAL	432 17.3	486 19.4	636 25.4	432 17.3	516 20.6		2502 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	SERVICE COUNT ROW PCT COL PCT	CRITICAL CARE 1	MED SURG 2	OB LABOR DELIVER 4	NBN 5	NICU PEDS PIC U 6	ROW TOTAL
UNAVAILABLE	1	7 33.3 2.4	1 4.8 .5	5 23.8 1.2	6 28.6 2.5	2 9.5 1.0	21 1.6
INDIRECT CARE	2	219 22.3 76.0	158 16.1 82.3	293 29.9 67.8	173 17.6 72.1	138 14.1 71.9	981 73.0
DIRECT CARE	3	62 .8.1 21.5	33 9.6 17.2	134 39.2 31.0	61 17.8 25.4	52 15.2 27.1	342 25.4
	COLUMN TOTAL	288 21.4	192 14.3	432 32.1	240 17.9	192 14.3	1344 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT NURSING

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	1110	15.6
MEDS SUPPLIES EQUIP	3	644	9.0
CHARTING CLERICAL	4	1213	17.0
CONFERENCES	5	233	3.3
TRAVEL TRANSPORT	6	1178	16.5
ADMINISTRATION	7	1080	15.2
ENVIRONMENTAL	8	335	4.7
WAIT TIME	9	1335	18.7
	TOTAL	7128	100.0

VALID CASES 7128 MISSING CASES 0

Table 22
Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
COMMUNICATIVE	2	180	63	416	82	142	65	38	124	1110
		16.2	5.7	37.5	7.4	12.8	5.9	3.4	11.2	15.6
		36.9	11.4	18.8	10.0	10.4	9.4	10.1	20.3	
MEDS SUPPLIES EQ	3	24	37	166	133	158	78	43	5	644
		3.7	5.7	25.8	20.7	24.5	12.1	6.7	.8	9.0
		4.9	6.7	7.5	16.1	11.5	11.2	11.4	.8	
CHARTING CLERICA	4	74	7	525	81	160	64	34	268	1213
		6.1	.6	43.3	6.7	13.2	5.3	2.8	22.1	17.0
		15.2	1.3	23.8	9.8	11.7	9.2	9.0	43.8	
CONFERENCES	5	21	8	113	20	42	18	11		233
		9.0	3.4	48.5	8.6	18.0	7.7	4.7		3.3
		4.3	1.4	5.1	2.4	3.1	2.6	2.9		
TRAVEL TRANSPORT	6	46	81	216	212	283	185	85	68	1178
		4.1	6.9	18.3	18.0	24.0	15.7	7.2	5.8	16.5
		9.8	14.6	9.8	25.7	20.6	26.7	22.6	11.1	
ADMINISTRATION	7	114	297	358	57	86	56	19	93	1080
		10.6	27.5	33.1	5.3	8.0	5.2	1.8	8.6	15.2
		23.4	53.7	16.2	6.9	6.3	8.1	5.1	15.2	
ENVIRONMENTAL	8	9	15	27	81	125	36	40	2	335
		2.7	4.5	8.1	24.2	37.3	10.7	11.9	.6	4.7
		1.8	2.7	1.2	9.8	9.1	5.2	10.6	.3	
WAIT TIME	9	18	45	389	158	375	192	106	52	1335
		1.3	3.4	29.1	11.8	28.1	14.4	7.9	3.9	18.7
		3.7	8.1	17.6	19.2	27.4	27.7	28.2	8.5	
	COLUMN TOTAL	488	553	2210	824	1371	694	376	612	7128
		6.8	7.8	31.0	11.6	19.2	9.7	5.3	8.6	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 23
Ft Carson

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	SERVICE: CRITICAL CARE (1)	MED SURG (2)	OB LABOR DELIVER (4)	NBN NICU (5)	PEDS PIC U (6)	ROW TOTAL
2 COMMUNICATIVE	173 15.6 12.6	259 23.3 16.5	249 22.4 14.3	181 16.3 18.2	248 22.3 17.2	1110 15.6
3 MEDS SUPPLIES EQ	145 22.5 10.5	125 19.4 7.9	172 26.7 9.9	76 11.8 7.7	126 19.6 8.7	644 9.0
4 CHARTING CLERICA	224 18.5 16.3	305 25.1 19.4	317 26.1 18.2	108 8.9 10.9	259 21.4 17.9	1213 17.0
5 CONFERENCES	54 23.2 3.9	44 18.9 2.8	49 21.0 2.8	26 11.2 2.6	60 25.8 4.2	233 3.3
6 TRAVEL TRANSPORT	206 17.5 15.0	351 29.8 22.3	265 22.5 15.2	118 10.0 11.9	238 20.2 16.5	1178 16.5
7 ADMINISTRATION	193 17.9 14.0	232 21.5 14.7	298 27.6 17.1	166 15.4 16.7	191 17.7 13.2	1080 15.2
8 ENVIRONMENTAL	35 10.4 2.5	73 21.8 4.6	117 34.9 6.7	48 14.3 4.8	62 18.5 4.3	335 4.7
9 WAIT TIME	346 25.9 25.1	185 13.9 11.8	275 20.6 15.8	270 20.2 27.2	259 19.4 17.9	1335 18.7
COLUMN TOTAL	1376 19.3	1574 22.1	1742 24.4	993 13.9	1443 20.2	7128 100.0

NUMBER OF MISSING OBSERVATIONS = 0

APPENDIX 24

US ARMY MEDICAL ACTIVITY
FORT DEVENS, MASSACHUSETTES

Table 1

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MARCH	3	1284	39.2	39.2	39.2
APRIL	4	1992	60.8	60.8	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 2

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	168	5.1	5.1	5.1
MONDAY	2	480	14.7	14.7	19.8
TUESDAY	3	108	3.3	3.3	23.1
WEDNESDAY	4	864	26.4	26.4	49.5
THURSDAY	5	576	17.6	17.6	67.0
FRIDAY	6	912	27.8	27.8	94.9
SATURDAY	7	168	5.1	5.1	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 3

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	2358	72.0	72.0	72.0
EVENING	2	600	18.3	18.3	90.3
NIGHT	3	318	9.7	9.7	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 4

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED	1	1392	42.5	42.5	42.5
SURG	2	1884	57.5	57.5	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 5

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED SURG	2.00	3276	100.0	100.0	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 8

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	702	21.4	21.4	21.4
PERSONAL	0	382	11.7	11.7	33.1
OFF UNIT ACTV	1	273	8.3	8.3	41.4
COMMUNICATIVE	2	312	9.5	9.5	50.9
MEDS SUPPLIES EQUIP	3	145	4.4	4.4	55.4
CHARTING CLERICAL	4	293	8.9	8.9	64.3
CONFERENCES	5	152	4.6	4.6	69.0
TRAVEL TRANSPORT	6	346	10.6	10.6	79.5
ADMINISTRATION	7	301	9.2	9.2	88.7
ENVIRONMENTAL	8	70	2.1	2.1	90.8
WAIT TIME	9	300	9.2	9.2	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 10

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
HEAD NURSE	1	192	5.9	5.9	5.9
WARDMASTER	2	192	5.9	5.9	11.7
RN	3	570	17.4	17.4	29.1
91C	4	336	10.3	10.3	39.4
LPN	5	156	4.8	4.8	44.1
91B 91F 91G	6	1338	40.8	40.8	85.0
AIDE	7	300	9.2	9.2	94.1
WARD CLERK	8	192	5.9	5.9	100.0
	TOTAL	3276	100.0	100.0	

VALID CASES 3276 MISSING CASES 0

Table 12

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	ACT (COUNT / ROW PCT / COL PCT)	INDIRECT CARE -1	PERSONAL C	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICAL 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
HEAD NURSE	1	21	13	17	42	6	30	18	11	28	2	4	192
		10.9	6.8	8.9	21.9	3.1	15.6	9.4	5.7	14.6	1.0	2.1	5.9
		3.0	3.4	6.2	13.5	4.1	10.2	11.8	3.2	9.3	2.9	1.3	
WARDMASTER	2	10	13	34	16	7		7	17	65	2	21	192
		5.2	6.8	17.7	8.3	3.6		3.6	8.9	33.9	1.0	10.9	5.9
		1.4	3.4	12.5	5.1	4.8		4.6	4.9	21.6	2.9	7.0	
RN	3	81	56	39	84	40	92	38	32	60	4	44	570
		14.2	9.8	6.8	14.7	7.0	16.1	6.7	5.6	10.5	.7	7.7	17.4
		11.5	14.7	14.3	26.9	27.6	31.4	25.0	9.2	19.9	5.7	14.7	
91C	4	80	35	13	24	27	25	10	59	37	3	23	336
		23.8	10.4	3.9	7.1	8.0	7.4	3.0	17.6	11.0	.9	6.8	10.3
		11.4	9.2	4.8	7.7	18.6	8.5	6.6	17.1	12.3	4.3	7.7	
LPN	5	19	15	18	13	8	17	10	7	6	4	39	156
		12.2	9.6	11.5	8.3	5.1	10.9	6.4	4.5	3.8	2.6	25.0	4.8
		2.7	3.9	6.6	4.2	5.5	5.8	6.6	2.0	2.0	5.7	13.0	
91B 91F 91G	6	400	172	119	84	48	79	53	179	23	48	133	1338
		29.9	12.9	8.9	6.3	3.6	5.9	4.0	13.4	1.7	3.6	9.9	40.8
		57.0	45.0	43.6	26.9	33.1	27.0	34.9	51.7	7.6	68.6	44.3	
AIDE	7	86	53	12	30	9	19	16	22	18	7	28	300
		28.7	17.7	4.0	10.0	3.0	6.3	5.3	7.3	6.0	2.3	9.3	9.2
		12.3	13.9	4.4	9.6	6.2	6.5	10.5	6.4	6.0	10.0	9.3	
WARD CLERK	8	5	25	21	19		31		19	64		8	192
		2.6	13.0	10.9	9.9		16.1		9.9	33.3		4.2	5.9
		.7	6.5	7.7	6.1		10.6		5.5	21.3		2.7	
COLUMN TOTAL		702	382	273	312	145	293	152	346	301	70	300	3276
		21.4	11.7	8.3	9.5	4.4	8.9	4.6	10.6	9.2	2.1	9.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 13

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERTOT	PROV: HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91F 91G (6)	AIDE (7)	WARD CLERK (8)	ROW TOTAL
UNAVAILABLE (1)	30	47	95	48	33	291	65	46	655
	4.6	7.2	14.5	7.3	5.0	44.4	9.9	7.0	20.0
	15.6	24.5	16.7	14.3	21.2	21.7	21.7	24.0	
INDIRECT CARE (2)	141	135	394	208	104	647	149	141	1919
	7.3	7.0	20.5	10.8	5.4	33.7	7.8	7.3	58.6
	73.4	70.3	69.1	61.9	66.7	48.4	49.7	73.4	
DIRECT CARE (3)	21	10	81	80	19	400	86	5	702
	3.0	1.4	11.5	11.4	2.7	57.0	12.3	.7	21.4
	10.9	5.2	14.2	23.8	12.2	29.9	28.7	2.6	
COLUMN TOTAL	192	192	570	336	156	1338	300	192	3276
	5.9	5.9	17.4	10.3	4.8	40.8	9.2	5.9	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 14

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	PROV COUNT ROW PCT COL PCT	HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
MED SURG	2	192 5.9 100.0	192 5.9 100.0	570 17.4 100.0	336 10.3 100.0	156 4.8 100.0	1338 40.8 100.0	300 9.2 100.0	192 5.9 100.0	3276 100.0
	COLUMN TOTAL	192 5.9	192 5.9	570 17.4	336 10.3	156 4.8	1338 40.8	300 9.2	192 5.9	3276 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 15

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	COUNT / ROW PCT / COL PCT	ACT 1 DIRECT CARE 1	C PERSONAL -1	OFF UNIT ACTV 0	COMMUNIC ATIVE 1	MEDS SUP PLIES EQ 2	CHARTING CLERICA 3	CONFEREN CES 4	TRAVEL T RANSPORT 5	ADMINIST RATION 6	ENVIRONM ENTAL 7	WAIT TIM IE 8	9	ROW TOTAL
MED SURG	2	702	382	273	312	145	293	152	346	301	70	300		3276
		21.4	11.7	8.3	9.5	4.4	8.9	4.6	10.6	9.2	2.1	9.2		100.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
	COLUMN TOTAL	702	382	273	312	145	293	152	346	301	70	300		3276
		21.4	11.7	8.3	9.5	4.4	8.9	4.6	10.6	9.2	2.1	9.2		100.0

NUMBER OF MISSING OBSERVATIONS = 0

TABLE 16
Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: 1 IMED SURG	2	ROW TOTAL
UNAVAILABLE	1	655 100.0 20.0		655 20.0
INDIRECT CARE	2	1919 100.0 58.6		1919 58.6
DIRECT CARE	3	702 100.0 21.4		702 21.4
	COLUMN TOTAL	3276 100.0		3276 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: IMED SURG (2)	ROW TOTAL
UNAVAILABLE	1	503 100.0 21.3	503 21.3
INDIRECT CARE	2	1346 100.0 57.1	1346 57.1
DIRECT CARE	3	509 100.0 21.6	509 21.6
	COLUMN TOTAL	2358 100.0	2358 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: MED SURG (1)	SERVICE: (2)	ROW TOTAL
UNAVAILABLE	1	109 100.0 18.2		109 18.2
INDIRECT CARE	2	324 100.0 54.0		324 54.0
DIRECT CARE	3	167 100.0 27.8		167 27.8
	COLUMN TOTAL	600 100.0		600 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: IMED SURG (2)	ROW TOTAL
UNAVAILABLE	1	43 100.0 13.5	43 13.5
INDIRECT CARE	2	249 100.0 78.3	249 78.3
DIRECT CARE	3	26 100.0 8.2	26 8.2
	COLUMN TOTAL	318 100.0	318 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT NURSING

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	312	16.3
MEDS SUPPLIES EQUIP	3	145	7.6
CHARTING CLERICAL	4	293	15.3
CONFERENCES	5	152	7.9
TRAVEL TRANSPORT	6	346	18.0
ADMINISTRATION	7	301	15.7
ENVIRONMENTAL	8	70	3.6
WAIT TIME	9	300	15.6
	TOTAL	1919	100.0

VALID CASES 1919 MISSING CASES 0

Table 22
Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	COUNT / ROW PCT / COL PCT	PROV HEAD NURSE 1	WARDMASTER 2	RN 3	91C 4	LPN 5	91B 91F 91G 6	AIDE 7	WARD CLERK 8	ROW TOTAL
COMMUNICATIVE	2	42	16	84	24	13	84	30	19	312
		13.5	5.1	26.9	7.7	4.2	25.9	9.6	6.1	16.3
		29.8	11.9	21.3	11.5	12.5	13.0	20.1	13.5	
MEDS SUPPLIES EQ	3	6	7	40	27	8	48	9		145
		4.1	4.8	27.6	18.6	5.5	33.1	6.2		7.6
		4.3	5.2	10.2	13.0	7.7	7.4	6.0		
CHARTING CLERICA	4	30		92	25	17	79	19	31	293
		10.2		31.4	8.5	5.8	27.0	6.5	10.6	15.3
		21.3		23.4	12.0	16.3	12.2	12.8	22.0	
CONFERENCES	5	18	7	38	10	10	53	16		152
		11.8	4.6	25.0	6.6	6.6	34.9	10.5		7.9
		12.8	5.2	9.6	4.8	9.6	8.2	10.7		
TRAVEL TRANSPORT	6	11	17	32	59	7	179	22	19	346
		3.2	4.9	9.2	17.1	2.0	51.7	6.4	5.5	18.0
		7.8	12.6	8.1	28.4	6.7	27.7	14.8	13.5	
ADMINISTRATION	7	28	65	60	37	6	23	18	64	301
		9.3	21.6	19.9	12.3	2.0	7.6	6.0	21.3	15.7
		19.9	48.1	15.2	17.8	5.8	3.6	12.1	45.4	
ENVIRONMENTAL	8	2	2	4	3	4	48	7		70
		2.9	2.9	5.7	4.3	5.7	68.6	10.0		3.6
		1.4	1.5	1.0	1.4	3.8	7.4	4.7		
WAIT TIME	9	4	21	44	23	39	133	28	8	300
		1.3	7.0	14.7	7.7	13.0	44.3	9.3	2.7	15.6
		2.8	15.6	11.2	11.1	37.5	20.6	18.8	5.7	
	COLUMN TOTAL	141	135	394	208	104	647	149	141	1919
		7.3	7.0	20.5	10.8	5.4	33.7	7.8	7.3	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 23

Ft Devens

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	COUNT / ROW PCT / COL PCT	SERVICE: IMED SURG (2)	ROW TOTAL
COMMUNICATIVE	2	312 100.0 16.3	312 16.3
MEDS SUPPLIES EQ	3	145 100.0 7.6	145 7.6
CHARTING CLERICA	4	293 100.0 15.3	293 15.3
CONFERENCES	5	152 100.0 7.9	152 7.9
TRAVEL TRANSPORT	6	346 100.0 18.0	346 18.0
ADMINISTRATION	7	301 100.0 15.7	301 15.7
ENVIRONMENTAL	8	70 100.0 3.6	70 3.6
WAIT TIME	9	300 100.0 15.6	300 15.6
	COLUMN TOTAL	1919 100.0	1919 100.0

NUMBER OF MISSING OBSERVATIONS = 1357

APPENDIX 25

KENNER ARMY COMMUNITY HOSPITAL
FORT LEE, VIRGINIA

Table 1

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

MONTHS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
APRIL	4	6108	100.0	100.0	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 2

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

WEEKDAYS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SUNDAY	1	336	5.5	5.5	5.5
MONDAY	2	36	.6	.6	6.1
TUESDAY	3	1446	23.7	23.7	29.8
WEDNESDAY	4	960	15.7	15.7	45.5
THURSDAY	5	1086	17.8	17.8	63.3
FRIDAY	6	1476	24.2	24.2	87.4
SATURDAY	7	768	12.6	12.6	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 3

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

SHIFTS OF DATA COLLECTION

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DAY	1	4518	74.0	74.0	74.0
EVENING	2	1014	16.6	16.6	90.6
NIGHT	3	576	9.4	9.4	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 4

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

ORIGINAL CLINICAL SETTING

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
SURG	2	1902	31.1	31.1	31.1
MED SURG COMBO	3	1014	16.6	16.6	47.7
ICU STEP DOWN M S	18	3192	52.3	52.3	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 5

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

CLINICAL SERVICES

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
MED SURG	2.00	6108	100.0	100.0	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 8

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

ACTIVITIES OBSERVED

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
DIRECT CARE	-1	1070	17.5	17.5	17.5
PERSONAL	0	779	12.8	12.8	30.3
OFF UNIT ACTV	1	315	5.2	5.2	35.4
COMMUNICATIVE	2	474	7.8	7.8	43.2
MEDS SUPPLIES EQUIP	3	366	6.0	6.0	49.2
CHARTING CLERICAL	4	815	13.3	13.3	62.5
CONFERENCES	5	310	5.1	5.1	67.6
TRAVEL TRANSPORT	6	746	12.2	12.2	79.8
ADMINISTRATION	7	405	6.6	6.6	86.4
ENVIRONMENTAL	8	202	3.3	3.3	89.8
WAIT TIME	9	626	10.2	10.2	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 10

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER

VALUE LABEL	VALUE	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
HEAD NURSE	1	288	4.7	4.7	4.7
WARDMASTER	2	384	6.3	6.3	11.0
RN	3	1680	27.5	27.5	38.5
91C	4	558	9.1	9.1	47.6
LPN	5	816	13.4	13.4	61.0
91B 91F 91G	6	1530	25.0	25.0	86.1
AIDE	7	474	7.8	7.8	93.8
WARD CLERK	8	378	6.2	6.2	100.0
	TOTAL	6108	100.0	100.0	

VALID CASES 6108 MISSING CASES 0

Table 12

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

CARE PROVIDER BY ACTIVITY PERFORMED

PROV	COUNT / ROW PCT / COL PCT	ACT / DIRECT CARE -1	PERSONAL C	OFF UNIT ACTV 1	COMMUNICATIVE 2	MEDS SUPPLIES EQ 3	CHARTING CLERICA 4	CONFERENCES 5	TRAVEL TRANSPORT 6	ADMINISTRATION 7	ENVIRONMENTAL 8	WAIT TIME 9	ROW TOTAL
HEAD NURSE	1	18	27	29	45	15	29	27	21	64		13	288
		6.3	9.4	10.1	15.6	5.2	10.1	9.4	7.3	22.2		4.5	4.7
		1.7	3.5	9.2	9.5	4.1	3.6	8.7	2.8	15.8		2.1	
WARDMASTER	2	14	65	86	26	7	2	31	20	113	2	18	384
		3.6	16.9	22.4	6.8	1.8	.5	8.1	5.2	29.4	.5	4.7	6.3
		1.3	8.3	27.3	5.5	1.9	.2	10.0	2.7	27.9	1.0	2.9	
RN	3	343	131	27	183	190	284	102	136	106	18	160	1660
		20.4	7.8	1.6	10.9	11.3	16.9	6.1	8.1	6.3	1.1	9.5	27.5
		32.1	16.8	8.6	38.6	51.9	34.8	32.9	18.2	26.2	8.9	25.6	
91C	4	121	83	52	29	34	49	30	77	22	11	50	558
		21.7	14.9	9.3	5.2	6.1	8.8	5.4	13.8	3.9	2.0	9.0	9.1
		11.3	10.7	16.5	6.1	9.3	6.0	9.7	10.3	5.4	5.4	8.0	
LPN	5	159	92	39	75	50	94	31	125	10	36	105	816
		19.5	11.3	4.8	9.2	6.1	11.5	3.8	15.3	1.2	4.4	12.9	13.4
		14.9	11.8	12.4	15.8	13.7	11.5	10.0	16.8	2.5	17.8	16.8	
91B 91F 91G	6	295	267	54	51	44	97	64	276	50	93	239	1530
		19.3	17.5	3.5	3.3	2.9	6.3	4.2	18.0	3.3	6.1	15.6	25.0
		27.6	34.3	17.1	10.8	12.0	11.9	20.6	37.0	12.3	46.0	38.2	
AIDE	7	119	60	13	24	24	56	24	63	16	42	33	474
		25.1	12.7	2.7	5.1	5.1	11.8	5.1	13.3	3.4	8.9	7.0	7.8
		11.1	7.7	4.1	5.1	6.6	6.9	7.7	8.4	4.0	20.8	5.3	
WARD CLERK	8	1	54	15	41	2	204	1	28	24		8	378
		.3	14.3	4.0	10.8	.5	54.0	.3	7.4	6.3		2.1	6.2
		.1	6.9	4.8	8.6	.5	25.0	.3	3.8	5.9		1.3	
	COLUMN TOTAL	1070	779	315	474	366	815	310	746	405	202	626	6108
		17.5	12.8	5.2	7.8	6.0	13.3	5.1	12.2	6.6	3.3	10.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 13
Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY CARE PROVIDER

PERIOD	PROV: COUNT / ROW PCT / COL PCT	HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91F 91G (6)	AIDE (7)	WARD CLERK (8)	ROW TOTAL
UNAVAILABLE	1	56	151	158	135	131	321	73	69	1094
		5.1	13.8	14.4	12.3	12.0	29.3	6.7	6.3	17.9
		19.4	39.3	9.4	24.2	16.1	21.0	15.4	18.3	
INDIRECT CARE	2	214	219	1179	302	526	914	282	308	3944
		5.4	5.6	29.9	7.7	13.3	23.2	7.2	7.8	64.6
		74.3	57.0	70.2	54.1	64.5	59.7	59.5	81.5	
DIRECT CARE	3	18	14	343	121	159	295	119	1	1070
		1.7	1.3	32.1	11.3	14.9	27.6	11.1	.1	17.5
		6.3	3.6	20.4	21.7	19.5	19.3	25.1	.3	
	COLUMN TOTAL	288	384	1690	558	816	1530	474	378	6108
		4.7	6.3	27.5	9.1	13.4	25.0	7.8	6.2	100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 14
Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY CARE PROVIDER

SERVICE	COUNT / ROW PCT / COL PCT	PROV: HEAD NURSE (1)	WARDMASTER (2)	RN (3)	91C (4)	LPN (5)	91B 91G (6)	91F (7)	AIDE (8)	WARD CLERK (9)
MED SURG	2	288	384	1680	558	816	1530	474	378	
		4.7	6.3	27.5	9.1	13.4	25.0	7.8	6.2	
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
	COLUMN TOTAL	288	384	1680	558	816	1530	474	378	
		4.7	6.3	27.5	9.1	13.4	25.0	7.8	6.2	

NUMBER OF MISSING OBSERVATIONS = 0

Table 15

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

SERVICE BY ACTIVITY PERFORMED

SERVICE	ACT COUNT ROW PCT COL PCT	-1 INDIRECT CARE	0 PERSONAL	1 OFF UNIT ACTV	2 COMMUNICATIVE	3 MEDS SUPPLIES EQ	4 CHARTING CLERICAL	5 CONFERENCES	6 TRAVEL TRANSPORT	7 ADMINISTRATION	8 ENVIRONMENTAL	9 WAIT TIME	ROW TOTAL
MED SURG	2	1070 17.5 100.0	779 12.8 100.0	315 5.2 100.0	474 7.8 100.0	366 6.0 100.0	815 13.3 100.0	310 5.1 100.0	746 12.2 100.0	405 6.6 100.0	202 3.3 100.0	626 10.2 100.0	6108 100.0
	COLUMN TOTAL	1070 17.5	779 12.8	315 5.2	474 7.8	366 6.0	815 13.3	310 5.1	746 12.2	405 6.6	202 3.3	626 10.2	6108 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 16
Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: MED SURG (2)	ROW TOTAL
UNAVAILABLE	1	1094 100.0 17.9	1094 17.9
INDIRECT CARE	2	3944 100.0 64.6	3944 64.6
DIRECT CARE	3	1070 100.0 17.5	1070 17.5
	COLUMN TOTAL	6108 100.0	6108 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 17

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

DAY SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: IMED SURG (2)	ROW TOTAL
UNAVAILABLE	1	1003 100.0 22.2	1003 22.2
INDIRECT CARE	2	2853 100.0 63.1	2853 63.1
DIRECT CARE	3	662 100.0 14.7	662 14.7
	COLUMN TOTAL	4518 100.0	4518 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 18

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

EVENING SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: IMED SURG 21	ROW TOTAL
UNAVAILABLE	1	69 100.0 6.8	69 6.8
INDIRECT CARE	2	637 100.0 62.8	637 62.8
DIRECT CARE	3	308 100.0 30.4	308 30.4
	COLUMN TOTAL	1014 100.0	1014 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 19

Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

NIGHT SHIFT - MAJOR NURSING ACTIVITY CATEGORIES BY SERVICE

PERTOT	COUNT / ROW PCT / COL PCT	SERVICE: IMED SURG (21)	ROW TOTAL
UNAVAILABLE	1	22 100.0 3.8	22 3.8
INDIRECT CARE	2	454 100.0 78.8	454 78.8
DIRECT CARE	3	100 100.0 17.4	100 17.4
	COLUMN TOTAL	576 100.0	576 100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 20
Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

PERCENTAGES OF TIME SPENT IN INDIRECT NURSING

VALUE LABEL	VALUE	FREQUENCY	PERCENT
COMMUNICATIVE	2	474	12.0
MEDS SUPPLIES EQUIP	3	365	9.3
CHARTING CLERICAL	4	815	20.7
CONFERENCES	5	310	7.9
TRAVEL TRANSPORT	6	746	18.9
ADMINISTRATION	7	405	10.3
ENVIRONMENTAL	8	202	5.1
WAIT TIME	9	626	15.9
	TOTAL	3944	100.0

VALID CASES 3944 MISSING CASES 0

Table 22
Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY CARE PROVIDER

ACT	PROV COUNT / ROW PCT / COL PCT	HEAD NURSE 1	NUR ER 11	WARDMAST 21	RN 31	91C 41	LPN 51	91B 91F 91G 61	AIDE 71	WARD CLERK 81	ROW TOTAL
COMMUNICATIVE	2	45	26	183	29	75	51	24	41		474
		9.5	5.5	38.6	6.1	15.8	10.8	5.1	8.6		12.0
		21.0	11.9	15.5	9.6	14.3	5.6	8.5	13.3		
MEDS SUPPLIES EQ	3	15	7	190	34	50	44	24	2		366
		4.1	1.9	51.9	9.3	13.7	12.0	6.6	.5		9.3
		7.0	3.2	16.1	11.3	9.5	4.8	8.5	.6		
CHARTING CLERICA	4	29	2	294	49	94	97	56	204		815
		3.6	.2	34.8	6.0	11.5	11.9	6.9	25.0		20.7
		13.6	.9	24.1	16.2	17.9	10.6	19.9	66.2		
CONFERENCES	5	27	31	102	30	31	64	24	1		310
		8.7	10.0	32.9	9.7	10.0	20.6	7.7	.3		7.9
		12.6	14.2	8.7	9.9	5.9	7.0	8.5	.3		
TRAVEL TRANSPORT	6	21	20	136	77	125	276	63	28		746
		2.8	2.7	18.2	10.3	16.8	37.0	8.4	3.8		18.9
		9.8	9.1	11.5	25.5	23.8	30.2	22.3	9.1		
ADMINISTRATION	7	64	113	106	22	10	50	16	24		405
		15.8	27.9	26.2	5.4	2.5	12.3	4.0	5.9		10.3
		29.9	51.6	9.0	7.3	1.9	5.5	5.7	7.8		
ENVIRONMENTAL	8		2	18	11	36	93	42			202
			1.0	8.9	5.4	17.8	45.0	20.8			5.1
			.9	1.5	3.6	6.8	10.2	14.9			
WAIT TIME	9	13	18	160	50	105	239	33	8		626
		2.1	2.9	25.6	8.0	16.8	38.2	5.3	1.3		15.9
		6.1	8.2	13.6	16.6	20.0	25.1	11.7	2.6		
	COLUMN TOTAL	214	219	1179	302	526	914	282	308		3944
		5.4	5.6	29.9	7.7	13.3	23.2	7.2	7.8		100.0

NUMBER OF MISSING OBSERVATIONS = 0

Table 23
Ft Lee

TIME SPENT IN INDIRECT NURSING CARE STUDY

INDIRECT CARE BY SERVICE

ACT	COUNT / ROW PCT / COL PCT	SERVICE: MED SURG	ROW TOTAL
COMMUNICATIVE	2	474 100.0 12.0	474 12.0
MEDS SUPPLIES EQ	3	366 100.0 9.3	366 9.3
CHARTING CLERICA	4	815 100.0 20.7	815 20.7
CONFERENCES	5	310 100.0 7.9	310 7.9
TRAVEL TRANSPORT	6	746 100.0 18.9	746 18.9
ADMINISTRATION	7	405 100.0 10.3	405 10.3
ENVIRONMENTAL	8	202 100.0 5.1	202 5.1
WAIT TIME	9	626 100.0 15.9	626 15.9
	COLUMN TOTAL	3944 100.0	3944 100.0

NUMBER OF MISSING OBSERVATIONS = 0

10. DISTRIBUTION.

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