Staffing and Scheduling
Definitions

1. **Staffing is**: human resources planning to fill positions in an organisation with qualified personnel.

2. **Scheduling is**: implementation of staffing pattern by assigning personnel to work specific hours and days in a specific unit or area (Barnum and Mallard 1989).

3. **Staffing mix is**: The skill level of individuals delivering the required care. In nursing it includes registered nurses RNs, licensed practical nurses LPNs, nursing assistants and unlicensed assistive personnel.
4. **Workload is**: the volume of work for a unit or program (Finkler 1994)

5. **Nursing workload is**: the nursing care needs of clients.
   - It’s a measurement of the nursing work activities and the dependence of clients on nursing care.
   - The basis of nursing workload measurement is time

6. **Acuity is**: The severity of illness or client condition.
   - It can translate into volume (census, visits or encounters) or severity or intensity

7. **Nursing intensity is**: the amount of care and the complexity of care needed by patients in hospitals.
Four Major Dimensions of Nursing Intensity (Prescott 1991)

1. Severity of client illness (the medical condition and how ill the person is abnormality and instability of physiological condition)
2. Client dependency (need for assistance with ADLs activities of daily living)
3. Complexity of nursing care
4. Time (the hours of direct and indirect care received by a client)
Definitions

- Staffing is the process of ascertaining that adequate numbers and an appropriate mix of personnel are available to meet daily unit needs and organizational goals.

OR

- It is the process of determining and assigning the right personnel with the right qualifications to the job in a right time to accomplish the purposes of the organization.
Patient Classification Systems

A *patient classification system* (PCS) is a measurement tool used to determine the nursing workload for a specific patient or group of patients over a specific period of time.

*Patient acuity* is the measure of nursing workload that is generated for each patient.
Four elements essential to a staffing program

1. A **statement of philosophy** for the unit, department, and institution that defines values and beliefs

2. **Objectives** general for the department and specific for each unit

3. **Job descriptions** for each type and level of personnel

4. A determination of the **frequency with which nursing care is to be provided** and who will provide it
Methods of Nurse Staffing (Benett 1981)

1. **Fixed staffing**: builds around a fixed projected maximum workload requirement

2. **Variable staffing**: staff unit below maximum workload conditions and then supplements as needed

3. **Semiflexible system** (Kirk 1988) 10-15% of staff are fixed and the rest are flexible and the volume is adjusted to match the need. Resources are matched to the workload following an accurate measurement.
Steps in Developing a Staffing Pattern

1. Select criteria to classify clients into severity-of-illness category
2. Record all direct and indirect activities, the number of times performed, total time needed for performance
3. Collect data on a representative number of clients to determine valid averages by classification
4. Average number of minutes needed for each nursing activity to = average performance time
• Determine average performance time for new functions
• Note the skill level personnel required to perform each nursing activity.
• Calculate average amount of time required by each client in each category by percentage of time from both professional and non-professional nurses by shift
• Calculate the total number of nursing hours needed for the unit

• From the average nursing time and total number of hours needed conclude number of persons required on each shift
Factors affecting staffing

1-Patient factors

- Patient type (age, sex, diagnosis).
- Fluctuation in admission.
- Length of stay.
- Complexity of care.
2. **Staff factors**

- Personnel policies (job, overtime, part time, work).
- Educational levels of staff.
- Job description.
- Market competition.
3. **Environmental factors**
   - Number of patients' beds.
   - Availability of supplies and equipments.
   - Organizational structure.
   - Supportive services.
Magnetism - 14 characteristics of magnetism

Quality of leadership
Organizational structure
Management style
Personnel policies and programs
Professional methods of care
Quality of care
Quality improvement
Consultation
Autonomy
Community and hospital
Nurse as teacher
Image of nursing
Interdisciplinary relationships
Professional development
Purposes of staffing

- Appropriate numbers and mix of nursing staff.
- Delivery of effective and efficient nursing care.
- Increase productivity.
- Avoid role confusion, communication problems and time waste.
- Maintain stability in team work.
Staffing process

- Identify the type and amount of nursing care to be given.
- Determining which categories of nursing personnel should be used to deliver needed care.
- Predicting the number of each category of personnel that will be needed to deliver care.
- Selecting and appointing personnel from available applicants.
- Recruit personnel to fill available positions.
- Arranging available nursing personnel into desired configurations by shift and unit.
- Assigning responsibilities for patient care.
- Performance appraisal for various staff categories.
- Continues staff development.
Centralized scheduling:
The schedule done by the upper manager for all nurses in all departments manually or by computer.

The advantages:
Fairness to employees through consistent, objective, and impartial application of policies and opportunities for cost containment through better use of resources.

Relieves nurse managers from time-consuming duties, freeing them for other activities.
Computer can be used for centralized scheduling. The advantage of this include cost-effectiveness through the reduction of clerical staff and better use of professional nurses by decreasing the time spent in non-patient care activities; unbiased, consistent scheduling; equitable application of agency policy; developed in advance so employees know what their schedule are and can plan their personal live accordingly. **Disadvantages:**

1. Lack of individualized treatment of employees is a chief complaint.
Decentralized scheduling

When managers are given authority and assume responsibility, they can staff their own units through decentralized scheduling.

Advantages:

- Personnel feel that they get more personalized attention with decentralized scheduling.
- Staffing is easier and less complicated when done for a small area instead of for the whole agency.
- Managers can work together to solve chronic staffing problems.
Disadvantages:

- Some staff members may receive individualized treatment at the expense of others.
- Work schedules can be used as a punish-reward system.
Because it is consuming time, takes managers away from other duties or forces them to do the scheduling while off duty.

It may use resources less efficiently and consequently make cost containment more difficult.
Self scheduling

Self scheduling is a system that is coordinated by staff nurses. Staff may negotiate before and after work and during break and lunchtime. They may also write notes to each other and wait for responses.
Advantages:

1. Help create a climate where professional nursing can be practiced.
2. Saves the manager considerable scheduling time and changes the role of the manager from supervisor to coach.
 Increases staff members ability to negotiate with each others.
 Increased perception of autonomy, increased job satisfaction, increased cooperative atmosphere, improved team spirit, improved morale, decreased absenteeism, reduced turnover.
Alternating or rotating work shifts
- Some nurses may work all three shifts within 7 days.
- Create stress for staff nurses.
- Body rhythms need time to adjust to the discrepancy between the persons activity cycle and the new demands of the environment. The ability of the body functions to adjust varies considerably among individuals. It may take 2-3 days to 2 weeks for a person to adjust to a different sleep-wake cycle.
it effect the health of nurses and the quality of their work. Anorexia, digestive disturbances, disruption in bowel habits, fatigue, and error proneness.
Permanent shift

Advantages:

1. Permanent shift relieve nurses from stress and health related problems associated with alternating and rotating shifts.

2. provide social, educational, and psychological advantages.

3. staff can participate in social activities.
4. they can continue their education by planning courses around their work schedules.

5. child care arrangement can be stable.

6. fewer health problems and less tardiness, absenteeism, and turnover.
Disadvantages:

- Managers may have difficulty in evaluating the evening and night shifts.
- The staff of permanent shift not develop an appreciation for the workload or problems of other shifts.
Block, cyclical, scheduling

Block, or cyclical, scheduling uses the same schedule repeatedly. The schedule repeats itself every 6 weeks.

**Advantages:**

- Personnel know their schedules in advance and consequently can plan their social lives.
- Absenteeism will be less.
- Establish stable work groups and decrease floating, thus promoting team spirit and continuity of care.
Variable staffing
  Method in which the number and mix of staff are determined by patient needs.

Eight hour shift in a five day workweek

5-day, 40-hours workweek

The shift usually 7am to 3:30pm, 3pm to 11:30pm, and 11pm to 7:30 am and a half hour overlap time between shifts to provide continuity of care.
Ten hour shift in Four day workweek

The main problem was fatigue. The long weekends and off were attractions. There is time to finish work, peak work loads can be covered, and there is decreased overtime and decreased costs.
Twelve-hour shift in seven day workweek

The better use of personnel lower staffing requirements; this consequently lowers the cost per patient day. Fewer communication gaps and better continuity of care. Improved nurse-patient relations, job satisfaction, and morale. Working relations are improved. Team development is possible. No blames for problems. Total time off is increased, with an increased usefulness for other duties. Travel time is reduced. Overtime pay has been of some concern.
- Staffing to meet fluctuation needs/
  adjustment to workload
- Transfer staff from a less busy area to the overloaded area.
  - Economical to the agency, but disrupts the unity of work groups, causes transferred nurse to feel insecure, and contributes to job dissatisfaction and turnover. Some units require specialized knowledge and skill that not every nurse has (cross training is helpful).
- Companion floor system, two units relieve each others.
Float nurse; full time staff nurses who are oriented to many areas and like the challenge of different types of patients and settings. But all of nurse prefer stability.

fulltime staff work a double shift.

Over time.
• part time staff.
• temporary help for the summer to give relief from vacations.
• External temporary help agencies are available in some areas.
• Mandatory overtime is requiring staff to stay on duty after their scheduled shift ends. Some managers are believe on that using a tired nurse is better than no nurse at all.
Declining inpatient activity and changing patient care patterns have caused some to right size or down size.
Methods of calculating staffing

1- Patient classification system

It is system developed to objectively determine workload requirements and staffing needs.

- There are two types of patient classification system:
  a- Descriptive to all patient needs and nursing requirements.
  b- Prototype evaluation method: