Models of Care Delivery

“Nursing Assignment Systems”

Matching health care providers with qualified, caring and professional Registered Nurses is our priority.
Models of Care Delivery

- The goals of successful patient care delivery include high-quality and low-cost care and the achievement of patient outcomes and satisfaction level.
- The ability to reach these objectives depends on the organization's approach to the matching of human and material resources with patient characteristics and health care needs.
- The identification of patient care processes that are necessary to achieve care goals must be done in order to determine health care provider roles most appropriate to the specific process.

The assignment of nursing care staff to clients needing care is a basic activity of health care systems in order to achieve these goals.
- Assignment is defined as the "downward or lateral transfer of both the responsibility and accountability of an activity from one individual to another".
The assignment must be within that individual's scope of practice. An element of assignment is delegation, which can be defined as the "transfer of responsibility for the performance of the activity from one individual to another while retaining accountability for the outcome".

Both assignment and delegation are methods used by managers to deliver patient care within the structure of the health care system. The determination of the structure and method by which assignments are made is a managerial responsibility. While this is part of a process of developing a model of nursing care delivery, it reflects a unidimensional framework that does not consider the structural and contextual factors that make up a model for professional group practice in a complex of health care environment.
The determination of a nursing care model or system of care delivery is dependent on organizational structure and processes related to patient care. Examples of structure and process criteria are: (Box 16.1.)

- Examples of organizational structure:
  - Technology level
  - Nurse-to-patient ratio
  - Use of temporary staff members
  - Workload
  - Nursing education/experience
  - Support for professional development
  - Continuing education
Examples Organizational Processes:
- Care delivery model
- Documentation
- Policies/procedures
- Supplies
- Patient education
- Implementation of physician orders
- Patient/family communication
- Staff communication
- Medication administration

Trends in the health care environment strongly influence organizational structure.
Examples of these trends are found in the "Current Issues and Trends" section of this chapter.
A number of social, technological, environmental, economic, and political trends have shaped and influenced the type of nursing care delivery systems in use in U.S. hospitals. From 1900 to 1950, the following trends were influential (examples):
- Advances in health care scientific knowledge
- Transfer of equipment-based technologies from physicians to nurses
- Unsatisfactory working conditions in hospitals and inadequate salaries for nurses
- Hospital control of nursing education

A nursing care model or the system of nursing care delivery is often called a care modality.

A care modality is defined as "a method of organizing and delivering nursing care in order to achieve desired patient outcomes".
Manthey (1990) identified the basic / fundamental elements of nursing care delivery systems as:
- clinical decision making,
- work allocation.
- communication.
- Management
- coordination

Nursing care delivery models must address both direct patient care functions and indirect patient care functions (Box 16.3).
The direct patient care functions are facilitated by and dependent on the management.

Direct Patient Care Functions:
- Assessment
- Monitoring
- Prioritizing goals
- Care coordination
- Therapeutic interventions
- Evaluation
- Communication
- Patient education
Indirect patient care functions:

For example, the client care assignment system is an aspect of operations included in indirect patient care functions. It is how the work is distributed.

Using human resource decisions such as staffing and skill mix, a framework for the deployment of nursing staff and their assignment to client care can be determined.

Indirect Patient Care Functions:

- Clinical practice
- Education/research
- Leadership
- Operations
- Personnel management
- Quality improvement
- System coordination
Although the nurse manager is ultimately accountable for the achievement of direct and indirect patient care functions, the scope of responsibility necessitates appropriate delegation and assignment to competent unit staff.

Delegation and assignment of management functions are vital to developing and maintaining professional nursing practice.

The development of new models is characterized by changes in the health care climate, including costs, consumer expectations, patient characteristics, and new medical information and technology. Although all models have their advantages and disadvantages, there is no one right way to structure nursing care. The appropriate care delivery model is the one that maximizes existing resources while meeting the objectives of direct and indirect patient care functions.
MAJOR TYPES OF DELIVERY SYSTEMS

1. Private duty
2. Functional
3. Team
4. Primary
5. Case management
6. Current evolving types

PRIVATE DUTY NURSING MODEL:

- Sometimes called *case nursing*, is the oldest care model in the United States.
- Private duty nursing is defined as one nurse caring for one client.
- *Complete and total care* is provided by one nurse, but the nurse carries only one client assignment.
- Originally, when the nurse went into the home, the nurse did the cooking, cleaning, bathing of wounds, and organizing of the household functions, basically functioning as a home manager.
- *Total patient care* was a hospital care model characterized by 8-hour shift accountability.
The advantage of private duty nursing was that:
- The nurse’s focus was entirely on one client’s needs.
- This fostered closeness in the nurse-client relationship and increased RN and client satisfaction with care delivery.

The disadvantage was that:
- Private duty is a costly model because of its low efficiency.
- Furthermore job security was tenuous and irregular.
- Other disadvantages were that nurses had little job mobility and were relatively isolated from colleagues.
Two main variations to the basic pattern of private duty nursing developed: **group nursing and total patient care.**

- **Total Patient Care:** has been defined as a case method for organizing nursing care in which nurses are responsible for total care of a client but only for the hours in which that specific nurse is present.

  - The distinguishing feature of total patient care is the shift-only (usually 8-12 hours) accountability for care.
  - Examples initially occurred in intensive care, hospice care, and home health care.
  - The term total patient care has come to mean the assignment of each client to a nurse who plans and delivers care during a work shift.
  - The term has become confused with team or primary nursing care delivery systems.
  - Total patient care has been described as a “form of primary nursing”
However, the accountability for patient care coordination throughout the acute episode does not happen.

The advantages are the intensity of focus with shift-only responsibility.

Significant disadvantages are lack of communication and continuity of care for the client over time.

Models of total patient care have contributed to task- and shift-based care that diverts attention from achievement of future patient goals (Bower, 2004).

FUNCTIONAL NURSING:

Functional nursing is a care model that uses the division of labor according to specific tasks and technical aspects of the job.

It has been defined as work assignment by functions or tasks, such as passing medicine, doing dressing changes, giving baths, or taking vital signs.

The nurse identifies the tasks to be done for a shift. The work is divided and assigned to personnel, who focus on completing the assigned task.

Functional nursing has the advantage of being efficient for taking care of the tasks related to handling a large number of clients.
Business and industry concepts of "scientific management" emphasized efficiency.

The efficiency was gained by breaking down a work process into its component task steps and then analyzing and timing the steps, establishing standards, and determining the best way to perform each task.

Thus managerial control over the planning and execution of work could be established.

Assembly lines in factories were one result.

Functional nursing was developed as a result of this concern for task analysis and proper division of the nursing workload.

Under this model, there might be a "temperature nurse; a "medication nurse:' a nurse for the right side of the ward, and a nurse for the left side of the ward
One **advantage** was that there was little confusion about roles and duties.

**Disadvantages:**
- Functional nursing was less oriented to individualized and holistic client care and more oriented to task accomplishment.
- When applied to nursing, this method was efficient and cheap, but nurses and clients hated it.
- Client satisfaction dropped under this kind of care delivery system.
- Clients felt that they could not identify who was their nurse caretaker.
Nurse Manager

LPN/LVN
PO Meds
Treatments

RN
Assessments
Care Plans

Nurse Aide
Vital signs
Hygiene

Nurse Aide
Hygiene
Stocking

Assigned Patient Group

Functional Nursing Care Delivery Model

TEAM NURSING MODEL:
TEAM NURSING:

- Team nursing is a care model that uses a group of people led by a knowledgeable nurse.
- It is a delivery approach that provides care to a group of clients by coordinating a team of RNs, licensed practical nurses (LPNs), and aides under the supervision of one nurse, called the team leader.
- Team nursing has been defined as the assignment of a group of clients to a small group of workers under the direction of a team leader.
Each team member provides most of the care to his or her assigned clients, although some tasks (e.g., medications) may be assigned separately.

Team nursing is designed to make use of each member's capabilities to meet the nursing needs of his or her group of clients.

It is a delegation of care to a designated team of staff members.
The staff members have various levels of expertise, but they are formed into a team. The nurse leader takes into account the level of expertise, and then divides the assignments accordingly so that the clients who are assigned to a team of caregivers have their needs appropriately met.

Team nursing developed in the early 1950s in response to a shortage of RNs and in reaction to the dissatisfaction with functional nursing.

The advantages of team nursing are:
- Each member's particular capabilities can be used to the maximum.
- This model supports group productivity and the growth of team members.
- Communication is vital.
- A sense of contribution via the team can be fostered.
- Oversight for novice nurses and temporary personnel can be facilitated.
Disadvantages of Team Nursing:

- It takes a skilled RN to be a team leader.
- Furthermore, an RN team member may not be functioning up to his or her full potential because of being assigned an ancillary role, which creates some underutilization of the RN personnel.
MODULAR NURSING:

- Modular nursing is based on the existence of specific facilities and on actual structural and spatial changes to enable hospital nurses to stay near the bedside.
- Structural modules based on client acuity are clustered in larger districts based on geography.
- Nurses are stationed near their clients, and a wider range of responsibility is delegated to them.
- Open design and convenient access architecture provide for decentralization of care delivery based on the spatial arrangement of the unit and enhanced communication.
The essential features of modular nursing are as follows:
- A module consists of a group of nurses and a group of clients.
- Clients are grouped by spatial or floor-plan clustering.
- Nurse/client assignment is standardized.
- Modular care planning rounds occur regularly.
- A unit-based modular committee is established.
Modular nursing is a combination of functional nursing and team nursing, and both models emphasized efficiency and care delivery with limited RNs. However team nursing corrected some deficiencies in care fragmentation and regimentation that were a problem with functional nursing.

PRIMARY NURSING:

- Primary nursing is an approach in which a nurse has responsibility and accountability for the continuous guidance of specific clients from hospital admission through discharge.
- Thus the primary nurse provides for the total nursing process for the client during a period of hospitalization.
- Primary nursing has been defined as the assignment in a hospital of each client to a primary nurse who plans, delivers, and monitors care under a 24-hour responsibility from admission to discharge.
Primary Nurse:
24-hour responsibility for planning, directing & evaluating patient care

Associate Nurses:
Provide care when primary nurse is off duty

Patient

Primary Nursing Model
The hallmark of the primary nursing concept is the 24-hour accountability element, autonomy, authority, and accountability in the primary nurse's role are basic to primary nursing. When the nurse is not actually taking care of clients, an associate delivers the care. However, the primary nurse makes the care and treatment coordination decisions, supervising the entire stay, 24 hours per day, for the length of the hospital stay. This increases continuity of care and consistency in assignments. Primary nursing does not mean that the primary nurse takes care of clients 24 hours a day. Rather, the 24-hour accountability is for the supervision and delegation of client care. Primary nursing has been called the first formal professional model in hospital nursing.
The advantages of primary nursing include:
- A focus on the client’s needs,
- greater nurse autonomy,
- and greater continuity of care.

Disadvantages:
Problems in the implementation of primary nursing have include the:
- wide variation in its operationalization and implementation

Disadvantages (primary nursing cont.):
- Primary nurse autonomy. Under cost-containment pressure, an all-RN staff is difficult to justify.
- Total accountability may create burnout, and a poorly prepared RN may feel threatened by primary nursing.
CASE MANAGEMENT:

- Managed care is care coordination that is organized to achieve specific client outcomes, given fiscal and other resource constraints.

- **Managed care** has been defined as "*the systematic integration and coordination of the financing and delivery of health care*".
The Case Management Society of America (CMSA) is the professional organization for case managers in practice. It is a multidisciplinary organization.

Definition of *case management* is "a collaborative process of assessment, planning, facilitation and advocacy for options and services to meet an individual's health needs through communication and available resources to promote quality cost-effective outcomes" (CMSA. 2002. p. 5).
Case management in acute care hospital nursing has been defined as a system of client care delivery that focuses on the achievement of client outcomes within effective and appropriate time frames and resources. Case management has components of health services delivery, coordination, and monitoring through which multiple service needs of clients are met.

Hospital-based acute care nursing case management is focused on an entire episode of illness, crossing all settings in which the client receives care. Care is directed by a case manager who is not always a nurse and can be unit or population-focused.
Case management is associated with the use of critical paths.
Critical paths are one type of structured care methodology.
Structured care methodologies (SCMs) are streamlined interdisciplinary tools used to:
- identify best practices,
- facilitate standardization of care,
- and provide a mechanism for variance tracking,
- quality enhancement,
- outcomes measurement,
- And "outcomes research"

Other examples of SCMs are evidenced-based algorithms, protocols, standards of care, order sets, and clinical practice guidelines.

The use of best evidence is considered the gold standard to reduce practice variation in an environment focused on patient outcomes.
Critical paths outline time and the sequence of events for an episode-of-care delivery.

Resources appropriate in amount and sequence to a specific case type and individual client are managed for length of stay, critical events and timing, and anticipated outcomes.

A critical path is “a written plan that identifies key, critical, or predictable incidents that must occur at set times to achieve client outcomes within an appropriate length of stay in a hospital setting”. The critical path is a tracking system for health outcomes, complications, activity, and teaching/learning.
Case management was seen as a way to incorporate and build on the strengths of earlier care models yet provide a professional practice model for nurses.

The risk with case management models is that integration into unit care delivery may not occur.

Care goals for the patient, as determined by the case manager, may not be communicated to the bedside nurse.

The case manager becomes the care coordinator and decision maker for care planning, and the unit nursing staff may become more focused on technical tasks.

Fundamentally, a nursing care delivery system is the way clients' needs are matched to nursing resources.

Through some complex relationships, the nursing care delivery system influences the quality of nursing care provided and its cost.

A number of nursing care models have been developed, and there is evidence of evolutionary changes and repeating cycles.
Choosing a Nursing Care Delivery Model:

- What staff mix is required?
- Who should make work assignments?
- Work assigned by task? By patient?
- How will communication be handled?
- Who will make decisions?
- Who will be responsible and accountable?
- Fit with unit/facility/organization management?

Evaluation of Nursing Care Delivery Models:

- Timely, cost-effective outcomes achieved?
- Patient and families happy with care?
- Team members satisfied with care?
- Good communication among all team members?
- RNs utilized and challenged appropriately?