The Service Line Model - A Novel Model for Delivering Medical-Surgical Nursing Services

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BACKGROUND

Hospital-based nursing has become extremely complex since the emergence of the modern hospital in the early 1900s.

The organizing principle of hospital industry development was the physician.

The organizational design for delivery of nursing services has been based on the nursing unit.

Traditional Organizational Designs:

- Functional Nursing - focused on accountability for task completion
- Team Nursing - sought to achieve efficiencies by extending the scope of RNs through task delegation
- Primary Nursing - evolved as a mechanism to integrate nursing theory and practice.
- Research has generated little evidence of support for any particular model's efficiency and effectiveness.[1]

Missed nursing care, care that should have been delivered but wasn't, particularly; ambulation, mouth care, care conference participation, medications on time, patient positioning, focused reassessments, and discharge teaching/planning is widespread.[2]

Hospitalization is the third leading cause of death in the U.S.[3]

Just as physician services evolved into the subspecialties recognized today, nursing services can be organized by subspecialties (service lines).

Given the profound changes underway throughout the healthcare industry (a shift from rewarding volume to rewarding value) the nursing unit may not optimize the delivery of nursing services on medical/surgical units.

THE MODEL

Disruptive Innovation Characteristics

- Nurses carry permanent caseloads – not given daily assignments
- Nurses are specialists – not generalists
- Nurses are organized horizontally (service lines) – not vertically (nursing units)
- Nursing Service is defined by 9 domains of care **(Figure 1)**.

Figure 1: Domains of Nursing Care

Care Coordination and Transition Planning - See Attending Nurse			
Mobility/ Sensory	**Mental Health/ Mind-body**	**IV Access/ Fluid Balance**	**Wound/ Skin**
Activities of daily living optimization. Sensory optimization.	Orientation optimization. Self-generated healing.	Intravascular access. Intake and output optimization.	Prevention and treatment of skin and tissue deficits. Healthy skin promotion.
Nutrition/ Elimination	**Medication Management**	**Quality/ Safety**	**Heart/ Lung/Data**
Food intake. Bowel and bladder optimization.	Medication distribution & med. reconciliation	Staff and systems competency. Learning organization optimization.	Cardiopulmonary optimization. Management of clinical data streams to other service lines.

Roles

Attending Nurses

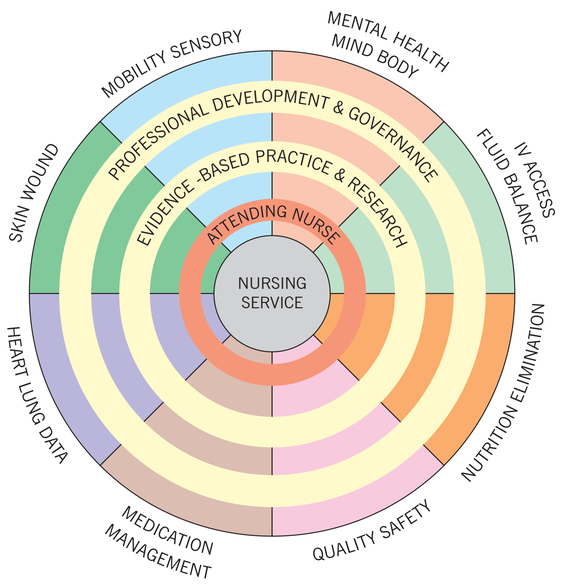
- Seasoned practitioners knowledgeable of patient care needs.
- They ensure the patient's nursing needs are identified appropriately and care is delivered in accordance with hospital policy and national standards.
- The AN rounds on his/her caseload of patients several times a day and collaborates with colleagues in the service lines and members of other disciplines to establish and implement the plan of care.
- More often than not the AN will complete the patient's admission assessment.
- The AN's work is tightly focused on care coordination and transition planning.
- Caseload size = 15 patients.*

Service Line Nurses and Technicians

- Nurses working within a service line are accountable for the assessment, planning, implementation, and evaluation of their patients' care needs, as they relate to the *domain* of care delivered by their service line.
- Rather than belonging to a nursing unit and being a generalist, nurses belong to a service line and become specialists.
- Nurses are not assigned to a group of patients located on one unit; they carry a caseload of patients across several geographic locations.
- Service lines will frequently be comprised of RN/technician dyads.
- Technicians work under the direct supervision of the RN and may be either licensed or unlicensed staff.
- Caseload size = 20-25 patients.*

*Caseload size projections are based on 12 hour shifts.

Service Line Model



Supporting Roles - *Two additional roles support the SLM*

- ***Admission Nurses*** serve as backup to the AN when the AN is unavailable to perform the initial nursing assessment. When not admitting patients Admission Nurses are helping out in the emergency department to facilitate identification, decision-making, and patient flow related to potential admissions.
- ***Patient care nursing assistants***, unaligned with a service line and geographically based, work closely with the AN to assure technical and routine tasks are performed efficiently and effectively.

How Patients are Cared for:

- The Attending Nurse is the "patient's nurse"
- All service lines will be initially involved with each patient. The amount of their ongoing contribution to care will be determined by the patient's needs.
- The "rounding model" of care delivery works effectively providing physician services and could work effectively delivering nursing services. Each service line will round on their patient caseloads at least once per shift, more often as need indicates.
- Caseloads are shared by several nurses to ensue continuous coverage. After an absence the nurse will return to his/her caseload. When a patient is readmitted to the hospital the caseload concept maximizes the opportunity that they will be cared for by the same staff.

Governance

- A shared governance structure within each service line will be responsible for most required management activities.
- A shared governance coordinating council of service line representatives report to nursing administration.
- Peer review committees within each service line will be responsible for evaluating ongoing and annual competency of staff.

Potential Benefits

Reduces clinical variation: Rather than being a series of tasks, "care" becomes the business of the service line. Nurses will "own" care and work to establish the evidence-base for care provided by their service lines. The SLM gives nursing control over its practice and may virtually eliminate missed care.

Identifies nursing's contribution: The SLM provides clarity to identify and measure nurses' contribution to the care of the hospitalized patient. Encounters will be coded in relative value units. Ultimately, such knowledge will lead to formulas for determining the true costs of providing nursing services.

Next Steps

Determine model's strengths and weaknesses: Focus groups can determine the robustness of SLM domains for capturing all potential patient needs and the strengths and weaknesses of the model.

Development of productivity standards: The basic unit of nursing service delivery is the "encounter". Caseload size will be determined by the number of patients a service line nurse could round-on during 8 and 12 hour shifts.

Determine the clinical divisions differentiating caseloads: Caseloads would be derived first by medical/ surgical patients, then in larger hospitals, by specialty areas. The acuity of patient needs predictably present in the population will determine the number of caseloads.

CONCLUSION

The healthcare industry is perfectly designed to achieve the outcomes it produces. In years past the nursing unit was pragmatic and effective; however, hospital and medical technological growth, and the emergence of professional nursing practice have surpassed the nursing unit's capacity to serve as an effective organizing platform. To eliminate the task orientation in nursing it may be time to rethink the nursing unit. The SLM is an organizational design capable of consistently meeting the range of patient care needs while creating a unified mental model of nursing service delivery.

REFERENCES

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