Nursing Workload Measurement: The Other Side of the Looking Glass

Nursing Leadership Network Conference

March 29, 2007

Sue Matthews, RN, DPH
Vice President, VON Canada

Julia Scott, RN, MBA, CMC
Clarendon Enterprises

Agenda

- Background & context to the Ontario project
- Findings: Phase 1
- Current initiative
- Concluding Thoughts

Background & Context

- Ministry embarked on a journey to review all data collected by the MOH
- Data were reviewed for the following:
  - What is the purpose of the data collection?
  - Who uses it?
  - What is it used for?
  - How intensive is the collection of the data?
  - How does the data influence policy and program decision making?

Background and Context Cont'd

- When Provincial Chief Nursing Officer was asked what the data was used for….response was, "I don't use it".
- Rationale:
  - Data quality is poor at best in most cases
  - Data are inconsistent
  - Data makes little sense in many cases
  - It is impossible to make policy decisions at the macro level using the data as they are.

The Ontario Experience

- Many hospitals voluntarily implemented NWMS in the 80's and 90's
- Ministry of Health decision in mid 1990's to make systems mandatory, and to require quarterly reporting
- Workload data has historically been used by the Ontario Ministry of Health for performance management, accountability and funding.
  - Ontario Cost Distribution Methodology
  - Ontario Case Costing Initiative

2005 Project for the Ontario Ministry of Health

- In response to concerns raised regarding the utility and reliability of existing NWMS
- Purpose:
  - To assess the cost and value of nursing workload data collection and to identify options and recommendations for future collection and reporting of workload measurement information to increase quality, efficiency and return.
- This project occurred under the auspices of the Information Management Strategy, Ministry of Health and Long-term Care and was co-sponsored by the Nursing Secretariat.

Phase 1 Findings

- The Origins of Nursing Workload Measurement
  - Arose from the industrial and management engineering approaches that became popular in the middle 1900's.
  - Were designed to support the day to day allocation of nursing staff
- Uses evolved over time
  - Funding
  - Longer term decision support
  - Quality tool: analysis of nursing interventions

Phase 1 Findings, con't

- Concerns with existing tools
  - Underlying validity and reliability
  - Focus on tasks
  - Did not recognize the complexity of factors involved in decisions about the appropriateness of nurse staffing.

Phase 1 Findings, con't

- Internal use varied significantly across hospitals.
  - Few hospitals used for day to day staffing
  - Some used for longer term staffing decisions and for decision support regarding budgeting, staffing and nursing interventions.
  - Many hospitals admitted that they only had systems because "the Ministry says we have to"

Phase 1 Findings, con't

- Academics, professional associations, unions and policy makers acknowledged an inability to rely on workload information due to concerns with quality.
- Serious concerns with the quality of data submitted to the Ministry of Health.
  - Reporting of workload was not transparent or consistently accurate.
  - Some Financial Managers and CFOs admitted to adjusting the workload units prior to submission to the Ministry "because it just didn't make sense".

Phase 1 Findings, con't

- Systems expensive to implement and maintain. They require front line nursing staff to complete patient specific classification on a daily basis. Common concerns raised by nurses include:
  - Completion takes time away from patient care
  - Staffing is not adjusted to workload
- Many hospitals admitted they had not invested the necessary resources to support and maintain systems.

Phase 1 Findings, con't

- A few hospitals had or were in the process of moving workload data collection to an automated process as a by-product of electronic documentation – but this was not a quick fix, nor was it inexpensive.

Anecdotal Comments

- " The systems may not be perfect but they are all we have ….. nursing will become invisible if we eliminate them without replacing with something better."
- "In this climate we all need to justify what we do…. Nurses should do a better job classifying."
- "System provides me valuable information that I use for clinical decision making and staffing."
- "Nursing workload measurement is an extremely important indicator, and abandoning it would be a step backward."

Anecdotal Comments

- " A myth – we originally thought WMS would solve all our staffing problems."
- "The emperor has no clothes."
- "The old 1,2,3 method of assigning patients works better."
- " The continued requirement to justify every minute of care we provide has done nursing irreparable harm."
- "We sold nurses a bill of goods – that staffing would actually be adjusted if they completed WMS – instead we have across the board cuts."
- "Measurement at what cost? What are we not measuring?"

Ontario Ministry Decision

- Collection and reporting of nursing workload data no longer mandated effective April 1, 2006
- Alternative methods/solutions will be developed for costing
- The Ontario Healthcare Financial System will continue to accept all workload data in the MIS trial balance submission for those facilities that wish to continue to submit

Ministry Letter, March 15, 2006

- “These changes do not preclude any hospital from using workload measurement methodologies within their organization”
- “The Ministry is communicated to the pursuit of new measures of workload and approaches to data collection that will reduce the burden on nurses while providing accurate and reliable data”
- “Collection of nursing workload data as a by-product of electronic documentation is a long-term strategic goal of the Ministry, as is the development of new measures of nursing work”
- “The Health Outcomes for Better Information and Care Project (HOBIC) is another initiative that offers an opportunity to link staffing and quality of work life information to health outcomes”
- “Hospitals that have successfully implemented accurate and reliable nursing workload measurement systems with minimal nursing impact are encouraged to continue to do so”

Lessons Learned

- We (Nursing) did ourselves a disservice
  - by not understanding how workload was used by the Ministry for funding
  - for not managing data quality
  - for not “Challenging the Process” *
    - Why do we need to collect information on every patient every day?
    - Why did we require front line nurses to spend time collecting information which in many organizations was not accurate nor was it used, because the Ministry “said we have to”!

Kouzes & Posner, The Leadership Challenge

The Current Initiative

The Current Initiative

- Sponsored by the Nursing Secretariat, Ministry of Health
- Co-led by Sue Matthews and Julia Scott
- *Purpose: to create a comprehensive approach to support nursing human resource decision making.*

- “While solid empirical evidence shows nursing staff mix has an impact on patient outcomes in acute care settings, this evidence has rarely been applied in practice settings” McGillis Hall 2006.

The HOBIC Initiative

- The HOBIC (Health Outcomes for Better Information and Care) Initiative has created an opportunity to allow organizations to demonstrate the link between nurse staffing and patient outcomes.

Background to HOBIC

- Recommendations for an improved method for funding nursing services that is:
  - responsive to the needs of the healthcare consumer
  - based on performance standards that provide high quality outcomes
  - based on health information systems that include data on nursing workload and productivity
- HOBIC (then called the Nursing and Health Outcomes Project) was established in September 1999 in response to these recommendations

HOBIC Achievements

- Set of evidenced-based health outcomes (Functional Status, Therapeutic Self-Care, Symptoms, Safety Outcomes, Patient Satisfaction) reflective of nursing care and can be collected across the acute care, complex continuing care, long-term care and home care sectors.

The Goal

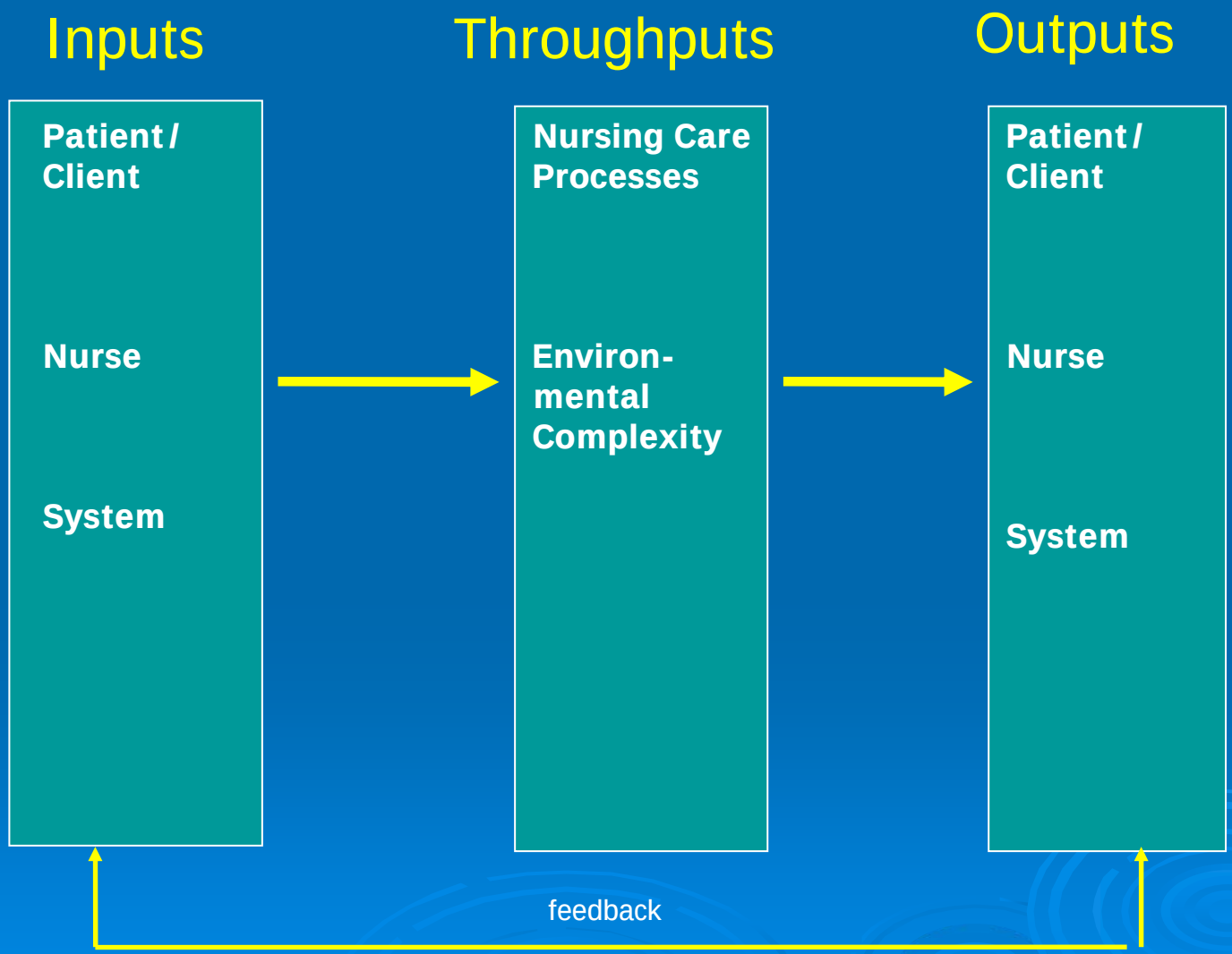
- The goal is *not to develop a new workload measurement system*, but rather a decision support framework that will allow nurse leaders at all levels and across all sectors to understand, manage and influence the impact of nurse staffing and organization on patient, nurse and system outcomes.

Approach To Date

- Created a Advisory Task Group
- Developed guiding principles and framework
- In process of selecting indicators and measures

Framework

Source: O'Brien Pallas et al, 2004



- With these inputs (patient, nurse and system factors), and these throughputs (nursing care and environmental complexity), what are the impacts on patient, nurse, organization and system outcomes?

Guiding Principles

- The system/approach must recognize the complex and inter-related factors that impact patient requirements for nursing care.
- The system/approach must apply to all sectors.
- The system/approach must enable nurse leaders to demonstrate the link between nursing work and outcomes in their departments/organizations and at a provincial level.
- We will use existing measures or tools wherever possible, identifying gaps and making recommendations if and when further development is required.
- Systems and processes must demonstrate utility and be value added to front line nurses – benefits should be balanced with the effort required to collect the information.
- System/measures must integrate with existing or proposed electronic systems.
- Selected measures/indicators will be consistent with criteria used in Hospital Accountability Agreements (i.e. explanatory, performance, monitoring, or developmental indicators)

Inputs:
Potential Indicators or Measures

- Patient Characteristics
  - HOBIC Indicators
  - Nursing Complexity/Severity
  - Medical Severity
  - Demographics
- Nurse Characteristics
  - Experience, education, job status, etc.
- System Characteristics
  - Unit, Program, Organization factors such type, size, geography, span of control, etc.

Throughputs:
Potential Indicators or Measures

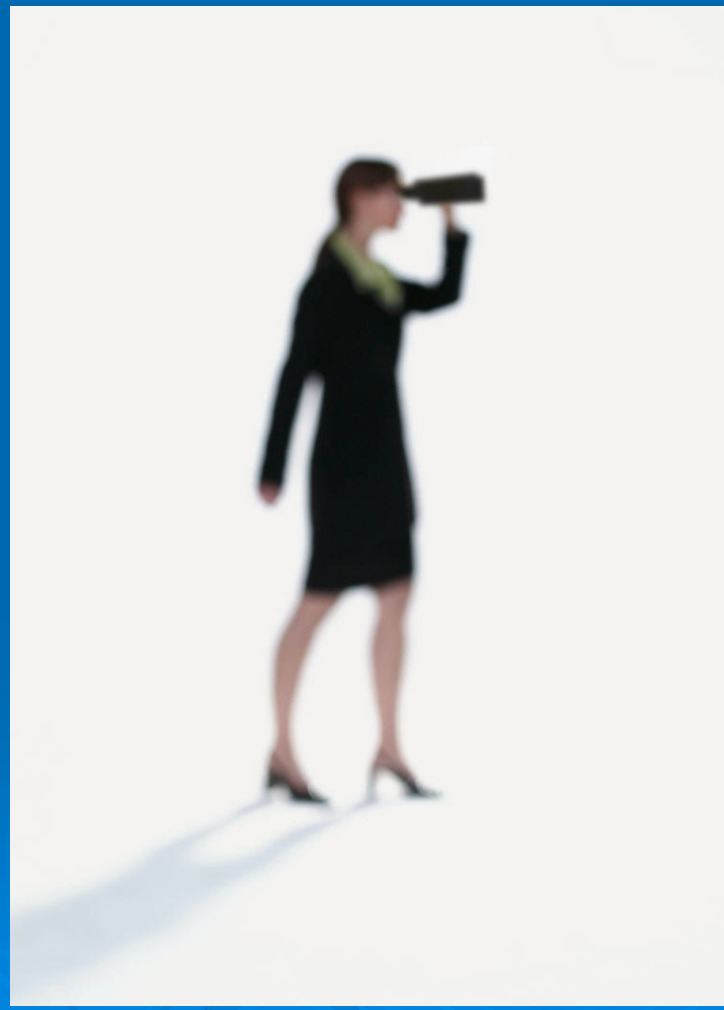
- Nursing Care Processes
  - Nursing Interventions
  - Model of Care (primary, team, etc)
  - Leadership (style, span of control)
- Environmental Complexity
  - Environmental Complexity Scale

Outputs:
Potential Indicators or Measures

- Patient Outcomes
  - HOBIC Indicators
  - Adverse occurrences
  - Patient satisfaction
- Nurse Outcomes
  - Health & Safety
  - Absenteeism
  - Retention/Turnover
  - Satisfaction
- System Outcomes
  - Quality (adverse events, readmissions, etc.)
  - Cost
  - Access (wait times, etc.)

Next Steps

- Select desired indicators & measures
- Small pilot projects and evaluation studies to test data linkages and framework



Concluding Thoughts

- Increasing body of knowledge regarding the negative consequences of heavy nursing workloads on patients, nurses and the health care system
- Increasing pressure to demonstrate accountability and transparency in resource utilization (e.g. staffing plans)
- It is critical that we develop systems and processes to equip nurse leaders with the information and evidence they need to advocate for the appropriate combinations of nursing and system inputs to create the best possible outcomes!

Concluding Thoughts, con't

- We need to be careful what we make mandatory - Implementing nursing workload measurement systems did not solve our staffing issues!
- Likewise, the implementation of minimum nurse patient ratios should be taken with caution.

Concluding Thoughts, con't

- There are risks in developing systems in isolation from those in control of the resources (funders), and without consideration of how those outside nursing assess appropriateness of nurse staffing (e.g. peer benchmarking).
- Nurses need to understand the funding models and financial systems!