LEADERSHIP, IMPROVEMENT AND HEALTH CARE SYSTEMS: IMPLICATIONS FOR PROFESSIONAL EDUCATION IN THE 21st CENTURY

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HEALTHCARE’S PERFECT STORM

• Growing prevalence of chronic disease
• New technology improves outcomes but increases costs
• Rising public expectations
• Professional autonomy trumps system change
• Aging workforce
• Limited integration across services and organizations
• Little appetite for increased taxation
A NEW ERA IN HEALTHCARE QUALITY

- *Crossing the Quality Chasm* created a broader view of healthcare quality and an expectation that quality would be measured in the processes and outcomes of care – not just the characteristics of healthcare providers and organizations.

- This perspective has been captured in the new requirements for healthcare organizations and health professions:
  - The QSEN competencies, like those of ACGME, healthcare management (and others), provide a platform for professional education and practice that will enable nurses to deliver high quality care.
  - But these competencies need to be re-examined and perhaps broadened in light of the current challenges and the growing need for systems based practice and leadership.

IMPROVING TRANSITIONS

Mrs B. is an 83 year old woman with early stage Alzheimer’s who lives with her husband and two children. She had a LACE score of 13 when she was discharged from hospital for a pulmonary edema/CHF episode. Prior to this episode she had not had an acute care hospitalization in the prior 6 months.

When the NP visited Mrs B in her home, she carried out medication reconciliation of 12 identified medications and she identified 4 discrepancies including a blood pressure (BP) medication in a newly prepared blister pack from pharmacy that had been discontinued in hospital (she was discharged with 10 medications). If Mrs B had continued to take BP medications it would likely have lead to a hypotensive episode and an emergency visit and/or readmission.
“People with chronic conditions must navigate a care system that is ill equipped to meet their needs. The human and economic toll is devastating. Findings from our team’s work and that of others offer promising solutions to address the care needs of chronically ill people in this country and internationally. We need the political will to change clinical practices and policies in order to implement evidence-based transitional care.”

Mary Naylor

**WHY ARE CARE TRANSITIONS DIFFICULT?**

- Growing acuity of patients and shorter lengths of stays means that patients are discharged “quicker and sicker”
- Expanding numbers and types of community-based services means that patient experiences are increasingly complex
- Different providers are responsible for care in different settings, but no one “owns” the transition
- Many different problems can emerge for patients post discharge
Improving Care Transitions Requires a Bundle of Interventions Across Care Providers

Growing evidence base provides a foundation for action to improve the continuity of care

Interventions must start pre-discharge and ensure effective communications across the care transition

- Effective communication between sending and receiving clinicians (e.g. discharge summaries)
- Preparation of patient and caregiver (e.g. patient education ‘teach back’)
- Follow-up plan for visits and additional tests (i.e. prompt primary care follow-up)
- Medication reconciliation (provided to the patient/family member and sent to family physician at discharge)

= Improved transitions in care, reduced hospital readmissions

Enhancing the Continuum of Care, MOHLTC, Nov 2011

Improving Transitions in An Ontario Community

What we are doing?
GOOD IDEAS AND INTENTIONS CAN BE INSUFFICIENT

- Our project tested a care transitions strategy for older adults with chronic conditions at risk of readmission using Nurse Practitioners to visit patients in hospital and then in their homes within 24-72 hours
- Senior leaders in the hospital, home care and regional health authority supported the project, but …
  - Nurses in one hospital did not view patient teaching and preparation for discharge as a high priority
  - Home care nurses did not have the knowledge to carry out medication reconciliation
  - Home care managers did not want to use scarce NP resources for care transitions
  - Community services were not fully aligned with patients’ needs

A BIGGER PICTURE

- We need new care models, innovative practices and approaches that move beyond “sectors” and local teams
- Technology is an important enabler but not a prerequisite
- Beyond clinical skills, health professionals need to develop an understanding of systems based practice and the methods needed to identify, test and implement new practices across systems
Figure 1-2. Quality improvement work is understood to be the combined and unceasing efforts of everyone to make the changes that will lead to better patient outcomes, system performance, and professional development.

Nelson, Batalden, Lazar and Brin

What Can We Learn from High Performing Health Care Systems?

The graph shows the relationship between better patient outcomes, system performance, and professional development. Plus, data from transformation efforts in other sites in US and Canada.
HIGH PERFORMING HEALTHCARE SYSTEMS
SELECTED THROUGH A STRUCTURED NOMINATION PROCESS

GOAL
Identify health systems that have:
• Invested in quality improvement
• Demonstrated measurable improvements in quality following the investment
• Qualities relevant to regional health system system (applicable to potentially to LHINs)

METHOD
21 experts approached to nominate
15 experts provided 40 nominations across 21 systems
7 health systems with > 1 nomination
5 systems selected for site visits/interviews

RESULTS
Included: Steven Shortell, Don Berwick, Charles Shaw, Helen Bevan, Michael Bergstrom...
13 US
5 EUR/UK
1 AFR
2 AUS
VHA, NHS, Virginia Mason, Intermountain Healthcare, Jönköping County Council, Henry Ford Health System, Mayo Clinic
- Henry Ford Health System, Detroit
- Jönköping County Council, Sweden
- NHS (Heart of England Foundation Trust in Birmingham and East Birmingham PCT)
- Veterans Health Administration, New England
- Intermountain Healthcare, Salt Lake City

QUALITY BY DESIGN: HIGH PERFORMING HEALTH CARE SYSTEMS
### TEN CRITICAL THEMES IN TRANSFORMATION

<table>
<thead>
<tr>
<th>Leadership and Strategy</th>
<th>Organizational Design</th>
<th>Improvement Capabilities</th>
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<tbody>
<tr>
<td>Quality and system improvement as a core strategy</td>
<td>Robust primary care teams at the centre of the delivery system</td>
<td>Organizational capacities and skills to support performance improvement</td>
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<td>Leadership activities that embrace common goals and align activities throughout the organization</td>
<td>More effective integration of care that promotes seamless care transitions</td>
<td>Information as a platform for guiding improvement</td>
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<td>Promoting professional cultures that support teamwork, continuous improvement and patient engagement</td>
<td>Effective learning strategies and methods to test and scale up</td>
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<tr>
<td>Providing an enabling environment buffering short-term factors that undermine success</td>
<td>Engaging patients in their care and in the design of care.</td>
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### FOCUS IN ON THREE ELEMENTS FOR HEALTH SYSTEM TRANSFORMATION

- **Innovation in care delivery processes**
  - Good ideas – from evidence and experience elsewhere
  - Methods to identify, test and scale up
- **Greater attention to quality improvement capability** – knowledge, skills, attitudes and values necessary for improving care
- **Leadership of improvement**
KEY ELEMENTS OF SERVICE DELIVERY INNOVATION

- Redesigning care processes
- Engaging patients in their care, and in the design of care
- Focusing on high need/high use patients
- Using technology to accelerate change

IMPROVING CARE MEANS REDESIGNING WORK, ROLES AND RELATIONSHIPS

NHS Institute for Innovation and Improvement. The Productive Ward: Releasing Time to Care
IMPROVING SAFETY AND RELIABILITY OF CARE – PRINCE ALBERT PARKLAND HEALTH REGION

- 4B has been tracking the number of incidences of both chemical and mechanical restraint use.
- For the last six months, the unit has had two or less incidences of restraint use.
- The team is now looking to revise and lower their goal of seven incidences per month. As the unit is small, they will also be looking at the number of incidences versus number of admissions.
IMPROVING SAFETY AND RELIABILITY OF CARE – OUTLOOK HEALTH CENTRE, ACUTE CARE, HEARTLAND

Daily unit med error reporting and tracking --with feedback on the Seven Rights of Medication Administration.

ENGAGING PATIENTS IN THEIR CARE

- Esther is 88 and lives alone in a small apartment with severe edema in her legs and respiratory problems...she has home care and a primary care physician. When Esther needs to see a specialist she is admitted to hospital through the ED because waiting times are too long in the community. Esther often finds herself repeating the same information about her medication and her living situation to multiple individuals...
- How can the health system best serve her?

Begin by identifying the needs of patients in order to resolve conflicts between providers.
EXPANDING ESTHER’S IMPACT

Patient run dialysis services

Esther coaches work with staff to help engage patients, learn from others and improve care

WHAT INNOVATIONS WILL HELP IMPROVE CARE AND MANAGE POPULATION HEALTH AT A SYSTEM LEVEL?
“HOT SPOTTERS”

Atul Gawande identified the link between frequent users and medical costs:

- Jeffrey Brenner, a physician in Camden, New Jersey, used data mining and statistical analysis to map health-care use and expenses. His calculations revealed that just one per cent of the hundred thousand people who made use of Camden’s medical facilities accounted for thirty per cent of its costs. That’s only a thousand people—about half the size of a typical family physician’s panel of patients.
- In his experience the people with the highest medical costs—the people cycling in and out of the hospital—were usually the people receiving the worst care. If he could find the people whose use of medical care was highest, he figured, he could do something to help them. If he helped them, he would also be lowering their health-care costs.

HOT SPOTTERS EXIST IN MOST SYSTEMS

- Top 1% of Ontarians use 34% of health care resources ($57K per individual)
- Top 5% use 66% of resources
- 46% of top 1% goes to acute care; 65% for those 18 to 64

Wodchis, et al. ICES, 2011
BIRMINGHAM OWNHEALTH

- Partnership between healthcare providers and private industry
  - Primary Care Trusts, NHS Direct (i.e., Telehealth), UK Pfizer Health Solutions

- Use of dedicated telephone-based, self-care support to complement current care and services
  - Nurses are trained as “care managers” to help patients understand their condition, acquire self-care and prevention skills, correctly follow treatment programs and understand how to use local services

- Incorporation of local environment and needs into the design of services – service in English and Punjabi

- Disease management software
  - Decision support tool to create targeted, customized care plans

- Ongoing measurement and evaluation
  - Focus on Diabetes, Cardiovascular Disease, Congestive Heart Failure (2000 patients)
  - Measures include patient and clinician engagement and satisfaction, improved disease control, use of health services (ED visits, hospital) and costs
A PATIENT STORY...

A 56 year old male of South Asian decent aged 56 with diabetes, was enrolled in OwnHealth and discovered to have stopped his medication after watching a TV program on alternative therapies. He had stopped his medication 3 months ago and had not been back to the doctor. The Care Manager spent some time talking to him about his concerns, educating him about the prescribed medication, blood glucose and potential complications. Over 5 calls, he became motivated to return to his GP and was tested at “sky high” levels. Working with his GP, the care manager supported him to go back on and stay on his medication. The motivation to change was built on being well enough to take an upcoming trip to Bangladesh...linking medication to well-being and his personal goals made a dramatic difference to his prognosis.

SOME US EXAMPLES

- CareMore Medical Group
  - 40 person multisite practice in LA basin
  - Physicians divide their time between hospitalist practice and specialist ambulatory care team
  - Focus on the frail elderly in a Medicare HMO
  - Offer comprehensive primary care services plus many additional services aimed at avoiding ED visits and unscheduled hospital admissions
  - Focus on “exceptional care”
  - Despite intensity of the primary care services their total costs are 15% below regional averages
US Examples Continued,

- South Central Foundation (Anchorage AK)
- Group Health Puget Sound patient centered medical home
- Leon Medical Center, Miami FL

Is Technology the Key to Better Results?

- Although information technology and the electronic health record will accelerate the capabilities of practices and organizations, they are not the key element for improvement
- Success depends on
  - Aligned leadership aims
  - Improvement capability
  - Focus on care
  - Seeing the needs of patients are central
- Still... simple tools provide the means to link disconnected system elements
My Medications are:

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<th>Medication</th>
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Allergies: _____________________

Reason               Side Effects

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<th>Reason</th>
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Remember to take this Record with you to all of your doctor visits.

The Personal Health Record of:
Josephine Patient

Personal Information:
Address:
Home Phone:
Birth Date:
Patient ID:
PCP Name:
Advanced Directives:
Hospitalization Information:
Admitted: __/__/__  Discharged: __/__/__
Reason for Hospitalization:
___________________________________________

Caregiver Information:
Name:
Phone #:
Relation to Patient:

Personal History
Please check any illnesses or health problems listed below that you have ever experienced.

Arthritis  Abnormal Heart Rhythm
Cancer     Diabetes
Hardening of the Arteries  Heart Disease
Heart Failure  High Blood Pressure
Hip Fracture  Lung Disease
Medical/Surgical Back conditions  Pneumonia
Stroke  ____________________

Source: E. Coleman

Technology Enhances Patient Feedback

- Smart technology enables patients to monitor and report outcomes alerting staff to pain, infection and other post surgical events.

QoC Health is a patient focused healthcare technology company specializing in mobile Quality of Care and Quality of Recovery solutions for patients post-discharge from hospital.
INNOVATION AND LEARNING

- Innovative programs to improve communication, coordination and teamwork across healthcare systems are key to improving care
- Learning from others accelerates improvement
- So....who’s your Chief of Learning and Innovation?
- Do you have a focus on innovation linked to improvement in strategic programs?

Goren Henriks, Jönköping

IMPROVEMENT CAPACITY AND CAPABILITY

- How can we accelerate improvement, support clinical staff to identify and test new ideas and learn from other systems?
BUILDING IMPROVEMENT CAPACITY

- The greatest obstacle to success is the low levels of improvement capacity in most healthcare organizations.
- Most senior executives do not understand the science of reliability, flow management, and the Model for Improvement.
- Few staff are available to support tests of change in front line teams.
- The growing interest in patient safety, quality improvement, lean thinking, accelerated access and related skills has fully engaged current resources.
- What can leaders do to build capacity to help improve care?

CREATING THE CAPABILITY TO REDESIGN AND IMPROVE CARE AT JÖNKÖPING

- Qulturum “a meeting place for quality and culture” provides support for system-wide and unit-based projects to ensure ongoing learning and support to staff and leaders as they make changes to processes of care.
- Have made over 800 measurable improvements spanning all of the County Council’s seven strategic aims.
- 4000 of the 9000 staff members and leaders across the system have received action-based quality improvement training at Qulturum.
- Despite the participation of physicians in education at Qulturum, Jönköping’s leaders realized that they needed a parallel approach of introducing improvement to the next generation of clinicians. Jönköping initiated a partnership with a medical school and other health professions programs in Sweden.
LEADERS’ ROLES IN SYSTEM IMPROVEMENT

○ “The currency of leadership is attention”
○ Priority:
  • Do current agendas and priorities include review of current efforts to improve quality and safety?
○ Attention:
  • Are senior leaders engaged in project review?
○ Accountability:
  • What are the expectations for team leaders and members?
○ Reward and recognition:
  • How will success be rewarded?

A STRATEGY FOR EXECUTION

Nolan, Executing for System-level Results, IHI 2007
PROJECT REVIEW

- Budget time for reviews
- Learn whether projects are on track or likely to fail
- Diagnose problems due to
  - Lack of organizational will
  - Absence of strong enough ideas for execution
  - Failure to execute changes
- Provide guidance and support
- Decide if project should continue

Executive Review of Projects, IHI, 2005

Channel leadership attention to system-level improvement.

- Senior executives personally do executive reviews with key project teams and regular organizational walkabouts
- Entire senior team – no more silos, entire team accountable because it is the core strategy (including Leverage Point 4: making the CFO a Quality Champion)
KEY BEHAVIORS FOR LEADERS

- Create a strategic focus on access, quality and patient safety
- Identify “Big Dots” that reflect that strategy, e.g., HSMR, adverse event rates, flow metrics
- Create accountability for current performance across the organization
- Raise expectations for senior team and middle management to manage improved performance
- Provide linkages between senior leadership and front line concerns
  - Review projects
  - Identify responsibilities for system improvements that emanate from incident reviews and root cause analyses
- Create a system for improvement aligned with strategic goals and reviewed on an ongoing basis

CRUCIAL QUESTIONS

- What skills and knowledge might nurses require to be more effective in systems-based practice?
  - Front line staff as well as coordinators and care managers at clinic and hospital settings
- What are realistic expectations at pre-licensure, graduate and residency levels?
- How do we integrate knowledge and understanding of system organization and flow into an already bulging curriculum?
CRUCIAL QUESTIONS

- How can we ensure that nurses and other health professionals -- not just doctors -- help design and implement care delivery innovations?
- How can we advance nursing scholarship in quality and safety leadership – with an emphasis on system issues?

CONCLUSIONS

- Healthcare sits in the eye of a “perfect storm” of increasing demand, sclerotic performance and financial pressures
- Creating more effective learning and improvement systems requires knowledgeable leadership across the organization
- Effective microsystems are building blocks to effective systems; these require clear goals and distributed leadership
- Patients experience care across microsystems, so we need to think about the innovations and linkages that can facilitate effective systems practices
- Nursing has an important role in building more effective systems and contributing to the leadership of innovation