From thesis to bedside: Bridging research and clinical practice in the hospital setting

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Research possibilities in the hospital setting

- New technology
- New evidence
- New treatment options
- New concerns
- New policies
- New budgetary directions
- New staffing models

Patients and their families
From thesis to bedside: Changing PCI care

People undergoing percutaneous coronary interventions (PCI)
PCI: Coronary angioplasty and stenting
PCI: Pre and Post
People undergoing PCI

New evidence: Same-day discharge¹

New technology: Coronary stent

New treatment option: Rapid vascular access removal

New budgetary directions: Same-day procedures

New staffing models: Critical care nurses

New concerns: How are our patients coping?

New policies/standard: Same-day discharge for all elective patients

Same-day discharge PCI

• Research questions:
  - What are the self-care recovery behaviours in the 2 to 5 days following same-day discharge (SDD) PCI?
  - What are the relationships between patient and procedural characteristics and self-care agency (SCA) and cardiac self-efficacy (CSE)?

• Research team:
  - MSN committee: Drs. Joy Johnson and Pam Ratner, Martha Mackay
  - Cardiac short stay unit nurses and clerical staff
  - Regular updates to cath lab care team
Same-day discharge PCI: Findings

• Health care behaviour:
  - High degree of adherence to discharge guidelines

• Chronic disease management:
  - 50% did not know what lifestyle changes were required to alter the course of their heart disease
  - 43% stated that their did not understand the causes of their heart disease at all or very well
  - Low levels of referral to cardiac rehabilitation programs

• Predictors of self-care agency and cardiac self-efficacy:
  - Marital status: no partner
  - Perceived lack of social support
  - Psycho-emotional distress

Lauck et al. (2009) Eur J Cardiovasc Nurs
Same-day discharge PCI: Knowledge exchange

• Presentation at staff meeting and care team

• Publication of findings

• Nursing committee:
  - Examine implications for practice
  - Develop recommendations
  - Implement change
Same-day discharge PCI: Changes in practice

Screening for social support¹:
- Do you live alone?
- When you need help, can you count on anyone to help with daily tasks like grocery shopping, cooking, giving you a ride?
- Do you have regular contact with friends or relatives?
- Have you lost your life partner within the last few years?
- Can you count on anyone to provide you with emotional support?

Screening for psychoemotional distress²:
Over the past 2 weeks, how much have you been bothered by:
- Feeling sad, down or uninterested in life?
- Feeling anxious or nervous?
- Feeling stressed?
- Feeling angry?

¹Linden W. et al. Health Qual Life Outcomes, 2005;3:54
²Young QR et al. Can J Cardiovasc Nurs, 2007; 22:525-34
Interventions

- Development of draft nursing protocol
- Education initiatives to improve capacity to intervene in collaboration with social worker and psychologist
- Development of a telephone intervention for people at high risk for low level of SCA and CSE
- Referral system
Need for rapid KE

Survivors of sudden cardiac death

Development of clinical practice guidelines

What are the experiences of patients and their family in accessing and utilizing hospital and community resources following survival from sudden cardiac death?

Research team: Carol Galte MSN, NP(F) and Paul Galdas PhD, RN
Need for rapid KE

Frail elderly undergoing innovative approach to aortic valve replacement

Development of transcatheter valve replacement program

What are the changes in neurocognition and activities of daily living following transcatheter aortic valve replacement?

Research team: Carol Galte MSN, NP(F), John Webb MD and Rob Boone MD
Need for rapid KE

People with implantable cardioverter-defibrillators

Development of decision-making tool and ICD coping group

What are the changes in quality of life and other patient-reported outcomes following ICD implantation?

Research team: Pam Ratner PhD, RN, Joy Johnson PhD, RN and Rick Sawatzky PhD, RN
Hospital-based research and rapid KE: What works?

- **Proximity:**
  - To the questions
  - To the patients
  - To the clinical stakeholders

- **“Inside” knowledge:**
  - Of the programs and systems
  - Of the registries and documentation
  - Of existing protocols

- **Clinical leadership:**
  - Able to “sell” the idea
  - Able to justify change
  - Able to implement change

- **Program support:**
  - Support from administration
  - Collaboration with physicians
  - Critical mass of APNs
Hospital-based research and rapid KE: What we need

- Research capacity:
  - CNS PhD?
  - Clinical nurse scientist?
  - Collaboration with non-hospital based researchers

- Peer-review scrutiny:
  - Quality improvement vs. research
  - Choice of publications
  - Access to transdisciplinary research groups

- Capacity to attract funding and hold research grants