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# Integrated Model of Knowledge Building and Utilization for Clinical Nurses

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## Our time together:

- Background
- Review projects & findings
- Discuss implications
- Next steps....where to from here

- Nurses as Knowledge Workers
  - one who works primarily with information
  - one who develops and uses knowledge in the workplace.
- Explicit Knowledge
  - is in the heads of organizational members
  - Hard to get out
- Tacit knowledge
  - knowledge that can be explained by people
  - Useful knowledge can be articulated and made explicit

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## Questions

1. What knowledge needs do you have?
2. How do you see this working in your context?
3. What would it take to convince you that this works?

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# Design, implementation, evaluation and lessons learned for three action learning projects:

- College of Nurses of Ontario (CNO) Knowledge Translation Project (2006)
- Nursing Research Advancing Practice Program (2007 & 2009)
- CNO Interprofessional Transfer of Accountability (2008)

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Goal: to help nurses create and work with  
practice knowledge

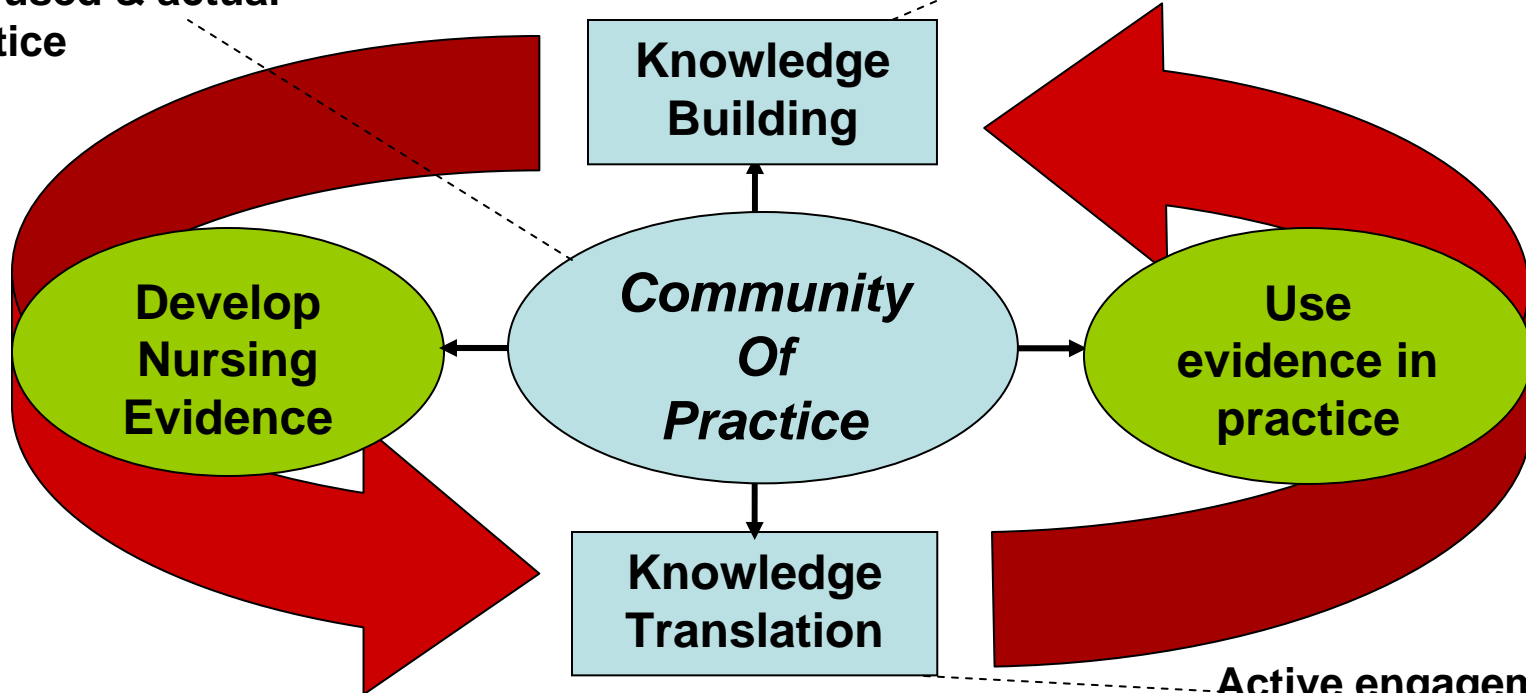
## Background

- Traditionally, nursing education has adopted a behaviorist approach that values the technical aspects of work.
- Emphasis on the mastery of tasks through application of skills and procedures

# Theoretical Framework

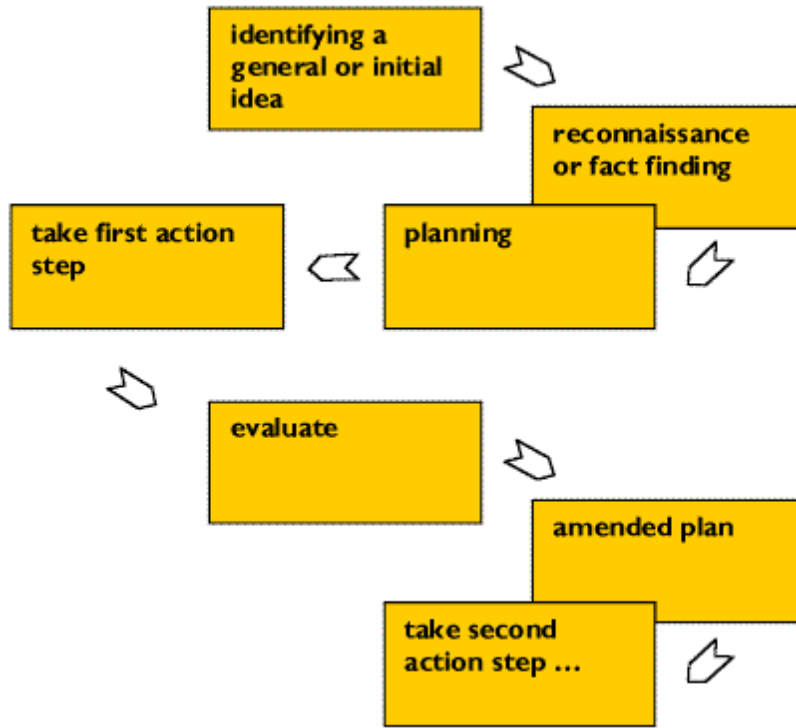
Activity that is  
situated in social  
contexts to reconcile  
divergence between  
espoused & actual  
practice

Deepen individual &  
collective understanding  
of the issues under review



Active engagement of  
both the researcher &  
users of research

## Lewin had it right!



Action research is a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of those practices and the situations in which the practices are carried out... The approach is only action research when it is collaborative, though it is important to realize that action research of the group is achieved through the critically examined action of individual group members. (Kemmis and McTaggart 1988: 5-6)



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# Common Design Elements

- Sponsor endorsement
- Focus on real-time/authentic practice problems
- Targeted curriculum & competencies
- Mentoring
- Key messages
- Evaluation

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## Pedagogical approach

- Scaffolding
- Mentoring
- Modeling
- Supports
- Case based/Action learning

# CNO Knowledge Translation Project

- Goal: To strengthen capacity for the translation of CNO practice and policy knowledge into health care settings to improve the quality of nursing services to the public - driven by practice setting needs
- Participants: 6 teams (CNO practice consultant and practice partners)
- Outcomes:
- In-depth understanding of complex practice issues
  - New ways to leverage regulatory requirements to achieve improvement
  - Restructured approach to consulting
  - Ongoing work by community partners

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## **Who were the players & what was their project?**

1. Providence Health Care - dehydration
2. Saint Elizabeth Health Care – working with UCP providers
3. Workplace Safety and Insurance Bureau – confidentiality
4. Cancer Care Ontario - documentation
5. Centre for Addiction and Mental Health – client centered care
6. North York Community Care Access Centre – delegation to UCPs

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# Capacity Building & Sustainability

- Tactical approaches



## Feature Article: Translating Knowledge into Practice

The Standard March 2006 (pages )  
Featuring Marcie Flynn-Post, RN, a nurse manager with Cancer Care Ontario, explored ways to improve documentation by participating in the Knowledge Translation Fellowship.

# Nursing Research Advancing Practice Program

Goal: To enhance research capacity (i.e. develop, implement and evaluate a research project) for front line clinical nurses

Participants: 11 teams

Outcomes:

- Clinically relevant knowledge that advances practice
- Confidence to bridge research-practice gap
- Increased questioning and challenging of practice
- Participants act as role models
- Integrated curriculum and mentorship
- Successful external funding:

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## ADVOCACY

Advancing patient safety

### JUNE DAVINE-REARY & KAREN OLEWYK

#### Avoiding distractions on the emergency department

The Canadian Adverse Events Study identified medication errors as a significant cause of adverse events among hospitalized patients. In the Emergency Department (ED), medication errors are often associated with distractions, which are present within the environment. Currently, there is a lack of data on the occurrence of distractions during medication preparation. This study sought to quantify the type and number of distractions encountered by ED nurses during medical preparation. The study results demonstrate that distractions during the medication preparation process are common in our ED. The frequency of distraction, and the known potential for error, warrants consideration of a "no interruption" policy during medication preparation to ensure patient safety. In addition, interprofessional education on safe medication practices could be reinforced with an emphasis on the risks of distractions.

### VICTORIA WEN AND JILLIE MAUCKERL

#### Physical restraints in critical care

Hospital intensive care units use a number of devices, such as arterial lines and central lines, to treat and monitor patients. These life support systems can be uncomfortable for patients who are often ill and in total consciousness. Delusional or restless patients may inadvertently or purposefully dislodge these devices. Physical restraints are sometimes used to prevent patients from causing themselves harm in this manner. To better understand nursing practice related to physical restraints, a descriptive observational study was conducted to measure the prevalence of physical restraint use in three critical care areas (cardiovascular, medical/surgical and neuro-intensive care units). The data collected will inform the development of a minimal restraint policy for the intensive care units at St. Michael's Hospital.



## EMPATHY

Enhancing quality of life through understanding

### BRENDA STADE

#### How do we ensure that infants get a healthy start in life?

According to the Health Agency of Canada, 10% of Canadians, 1.5 million, are living with fetal Alcohol Spectrum Disorder (FASD), a term used to describe the effects of drinking during pregnancy. Dr. Brenda Stade, a Clinical Investigator – Nursing at St. Michael's Hospital, has developed a funded program of research around FASD, prenatal substance abuse and neonatal care. Her research includes examining the neuro-development of infants and children exposed to alcohol and cocaine, sleep disturbances in children with FASD, and the presence of autism among children with FASD. Brenda has also conducted studies evaluating the needs to Canada of parental exposure to alcohol. A deeper understanding of FASD can lead to better prevention, diagnosis and intervention, and enable us to provide optimal care to both the women and children who experience this disorder. Brenda is an Adjunct Scientist on the Nurses Research Centre, Li Ka Shing Knowledge Institute of St. Michael's Hospital and a lecturer on the Lawrence S. Bloomberg Faculty of Nursing, University of Toronto.



### JUDY SAVIN AND MARTINA SCHRÖDER

#### Teaching heart patients about the risks of high blood sugar

Abnormal blood sugar levels are a major risk factor for heart disease. In the Coronary Care Unit, all myocardial infarction patients undergo glucose tolerance testing to measure their blood sugar levels and identify those at risk for developing diabetes (pre-diabetes). Oftentimes, these patients are symptomatic and unaware of their abnormal sugar level. The purpose of Martha and Judy's study is to examine the effectiveness of a structured teaching intervention on patients' knowledge of risks and complications associated with abnormal blood sugar levels as well as preventative strategies. Increasing patient understanding of the risks associated with abnormal blood sugar levels may lead patients to make positive lifestyle changes and thus decrease their risk of another heart attack or worsening diabetes.



## INSIGHT

Improving care through knowledge

### LEAHNE JONES

#### Advancing knowledge in patient and organizational safety

As one of the chief architects of the Nursing RNP program and Director of Nursing/Clinical Research, Leahne Jeffs believes in a health care system in which nurses have opportunities to advance their knowledge and excellence in patient care through research. Leahne is a scientist with the Nurses Research Centre, Li Ka Shing Knowledge Institute at St. Michael's Hospital with an ongoing program of funded research on patient safety and professional nursing practice. Specifically, her work is focused on exploring how organizations learn from "near miss" occurrences and evaluation of educational interventions including benchmark disclosure and nursing engagement with labor/health care initiatives. Funding sources for her research include: Canadian Institutes of Health Research (CIHR), Ministry of Health and Long Term Care, Canadian Council on Learning, Canadian Patient Safety Institute, Canadian Nurses Foundation, and the Canadian Health Services Research Foundation. Leahne recently received the Regional Nurses Association of Ontario (RNAO) Leadership Award in Nursing Research in April 2008.



### GLOEBA CARDINAL

#### Improving nursing assessment and treatment of Alcohol Withdrawal Syndrome

The Clinical Institute Withdrawal Assessment for Alcohol Revised (CIWA-Ar) is a tool used to assess patients for symptoms of alcohol withdrawal syndrome (AWS) and to provide direction to RNs for the administration of pharmacological treatments to manage these symptoms. The CIWA-Ar tool was recently introduced in our Central Intensive Medicine Unit and all RNs received structured education on alcohol withdrawal and use of the tool. Clinical study was undertaken to evaluate the effectiveness of the formalized education program for the CIWA-Ar protocol to identify barriers to using the tool for at-risk patients, and to identify recommendations to enhance the utilization of the CIWA-Ar protocol.

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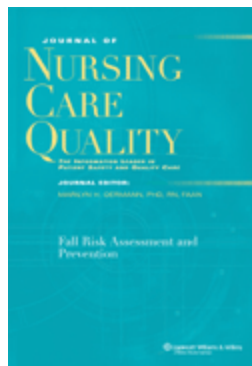


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## Feature Article: Research and Reflection for RAP Artists

The Standard Spring 2009 Edition (pages 18 – 19)  
Featuring June Tavenor-Brake, Karen Olivero, Patrick Blute,  
Karey Logghe, Amy Brown, Heather Rawnsley & Lianne Jeffs



## Building Knowledge for Safer Care Nursing Research Advancing Practice in the Journal of Nursing Care Quality 2009 24 (3): 257 – 262

Lianne Jeffs, Orla Smith, Gail Wilson, Melanie Kohn,  
Heather Campbell, Maria Maione, Deborah Tregunno, Ella Ferris



# Nursing Research Advancing Practice – Career Development Program

Goal: To enhance research capacity and career development strategy for front line clinical nurses.

Participants: 10 teams

Outcomes:

- Clinically relevant knowledge that advanced practice
- Confidence to bridge research-practice gap
- Increased questioning and challenging of practice
- Participants act as role models
- Integrated curriculum (career resilience) & mentorship
- Successful external funding - funded by:

## Success Factors & Lessons Learned

- 1) Executive endorsement & funds to cover RN release time.
- 2) Effective collaboration with stakeholders to support the recruitment of nurses to participate in the Nursing RAP.
- 3) Evidence informed approaches to the development of the Nursing RAP - internal environmental scan on research needs and priority areas with a literature review and organizational benchmarking.
- 4) Engaged Nursing RAP participants who embraced the opportunity to conduct a research project aimed at safer healthcare.
- 5) Keeping the momentum going after the program ended to ensure that the RAP projects' findings inform practice & policy changes that achieve positive patient outcomes is challenging.

# CNO Interprofessional Transfer of Accountability

- Goal: To improve patient safety outcomes by gaining greater understanding of regulatory requirements associated with the transfer of accountability across multiple boundaries of care.
- Participants: 8 Interdisciplinary teams conducted 85 interviews
- Outcomes:
- Demonstrated effective use of interprofessional approach and Appreciative Inquiry
  - The knowledge and skills required for successful of transfer of accountability are consistent across all sectors and health care providers.
  - Consultants continuing work with local teams

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# Transfer of Accountability



**Feature Article: Know your Client, Know Your Team**

**The Standard Winter 34(4)**

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## Lessons Learned Across 3 projects

- Developing deeper understanding of issues promoted greater ownership of process and results
- Confidence building
- Required structured support and content specific curriculum
- Resource intensive
- Changes practice
- Demonstrated positive synergies among practice settings, regulators and academic partners

- Action research approach made tacit knowledge more explicit:
  - Helped share/build knowledge
  - Safe place for participants to articulate their knowledge
  - Made knowledge more visible
  - Updated knowledge
  - Knowledge more effectively leveraged
  - Knowledge can be discussed, debated, tested, improved

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## Future Direction....we will remember...

- Partnerships are imperative. e.g.. a regulatory body can be a strategic partner!
- Interprofessional collaboration is more than “value added”
- Consultation and knowledge building for practitioners in health care requires an appreciation for “practice setting realities”
- Deliberate focus on demonstration projects yields organizational satisfaction, pride of ownership and shared understanding
- Corporate sponsorship is key

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## Questions / Comments

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Thank you

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