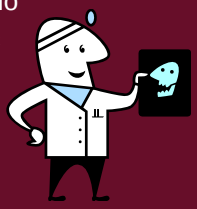
My Perspective

- Researcher
- Medical Regulation
- Canadian from Ontario
- Member of the Public



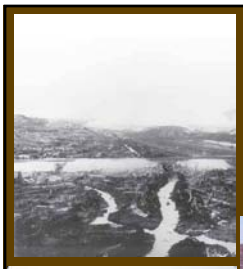
Research ??

- Research is not part of a regulatory mandate
- Regulation is "ground level" and research is "in the clouds"
- Our information is very confidential so research is too risky to share
- We don't have the resources to do it even if we wanted to
- It is just not a priority

Objectives

- To demonstrate that research in regulation…
  i. Improves regulatory accountability and system level information
  ii. Improves decision making processes and regulatory programs/initiatives
  iii. Can be conducted ethically, confidentially and securely through partnerships
  iv. Will lead to improved education and continuing competence of professionals from entry to practice through retirement

Sudbury, Ontario, Canada



Analysis vs. Advocacy

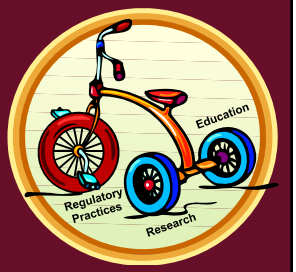
- Analysis
  - balanced, objective
  - assesses multiple positions and interests
  - may recommend a policy option
  - fact based rather than value or idea based
  - defensible
- Advocacy
  - starts from a particular position
  - may use facts to justify

Policy & Evidence = Oil & Water?

- Is "Evidence-based policy making" an oxymoron?
- Evidence can help us clarify the facts and the trade-offs
- Evidence can help protect us from the "politics of wishful thinking"
- Evidence can help us know whether particular policies are likely to achieve particular objectives
- BUT – evidence CANNOT tell us which objectives we should want to achieve

Why Ask Questions?

- To solve problems – especially our problems
- To develop people and grow
- To pursue the leading edge – continual improvement



It's a matter of accountability

- Professional accountability and credibility
- Public responsibility
- Need to ask tough those questions

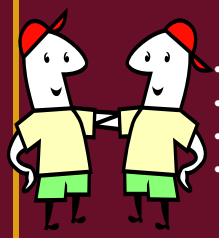
Benefits of Research in Regulation

- Resource targets – needs/gaps based
- Firm rationale and evidence to meet legal challenge
- Overall contribution to systems
  - Individual and aggregate level value
  - Valuable and complete data

Why are regulatory data so valuable?

- Verified
- Complete
- Broad
- Longitudinal

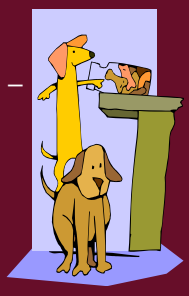
Partnerships



- Decision and policy makers
- Researchers
- Applicable knowledge
- Effective knowledge transfer

Partnerships enable…

- Data linkages across data sets
- Arms length evaluation – no conflict
- Capacity where none existed



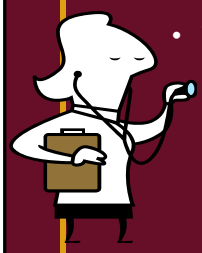
Value of sharing findings

- Need to learn from one another to improve regulatory activities
- Value added to educational process and curriculum development
  - Undergraduate education
  - Continuing professional development

Example 1

Regulatory Data as an "Outcome" of Education

Objective of the Research



- To examine if a predictive relationship exists between scores on medical qualifying examinations (QE's) and performance in subsequent practice?

Partners

- Medical Council of Canada (MCC)
- Regulators
  - College of Physicians and Surgeons of Ontario (CPSO)
  - Collège des médecins du Québec (CMQ)
- Researchers:
  - Laurentian University/NOSM
  - McGill University

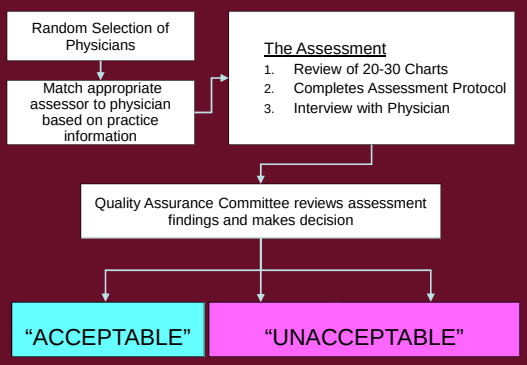
Medical Council of Canada (MCC) QEs

- MCC QE1: Medical Knowledge and Clinical Decision Making.
  - Knowledge: Multiple choice questions.
  - Clinical Decisions: Key feature problems.
- MCC QE2: Clinical Skills Examination.
  - 20-case objective structured clinical examination.

Indicators of Performance

- Practice (Peer) Assessment Outcomes
- Patient Complaints
  - All complaints vs. "retained" complaints
  - Communication, Care, Professionalism, Health, Office, Other
- Covariates: age, international medical graduate status, sex, specialty

CPSO Peer Assessment Process



Who was studied?

ASSESSMENTS:

- 2,420 ON physicians who wrote the QE1 and QE2 between 1993-1996.
- 208 (8.6%) of those physicians above were also randomly selected for CPSO peer assessment between 1994 and 2005

COMPLAINTS:

- 3,424 Physicians (ON & QC) taking the QE1 and QE2 between 1993-1996 → 1116 complaints; 696 retained
- Participants were followed up until 2005, including the first 2 to 12 years of practice.

What did we learn

- QE Scores and COMPLAINTS
  - Lower MCC QE1 Clinical Decision-making Scores → increased risk of communications and quality-of-care complaints in future practice.
  - Lower MCC QE2 Communications Scores → increased risk of communications and quality-of-care complaints in future practice.
- QE Scores and ASSESSMENT
  - Lower QE1 and QE2 Scores → increased odds of poor peer assessments.
- Relationship significant even after adjusting for age, sex, specialty and IMG status.

Implications

- Screening Tool
  - Early on in training and entry to practice
  - Throughout career
- Common coding between regulators
  - Data continuity
  - Potential for national application

Example 2

Understanding Performance in Practice using Regulatory Data

Research Questions

- What factors affect physician performance?
  - Physician
  - Practice organization
  - Broader environment/system
- Are different dimensions of performance affected by different factors?

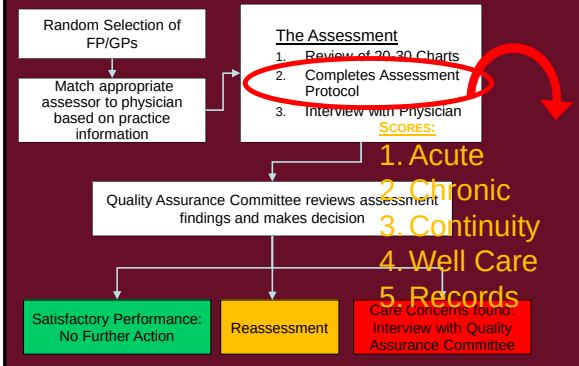
Factors Affecting Performance

Physician	Organization	System
1) Age 2) Gender 3) Med School (North America vs. other) 4) Certified FP (y/n) 5) Previous Asmt (y/n) 6) Yrs in Current Practice Setting	1) Solo Practice (y/n) 2) Walk-in Clinic (WIC) (y/n) 3) Total Staff 4) Patients/week 5) Hosp appointment (y/n) 6) Teach (y/n) 7) Focused (y/n)	1) EMS Distance (minutes) 2) Availability of 911 (y/n) 3) Diagnostic Tests Available (scale 0-1) 4) MD/1000 Population 5) Northern Practice

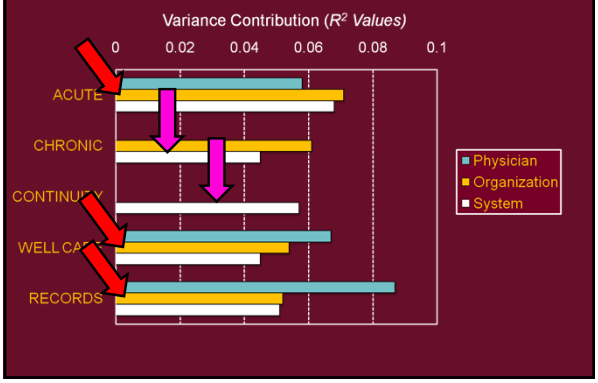
What data did we use?

- CPSO Peer Assessment Data
- 539 Family/General Practitioners (FP/GP) randomly selected & peer assessed.
- Self reported practice data
- Peer assessment protocol data
- Registry data
- Statistics Canada Census data**

CPSO Peer Assessment Process



Differences in Factors Impacting Performance



		ACUTE	CHRONIC	CONTINUITY	WELL	RECORDS
Physician	Males				👎	👎
	More Years in Current Practice	👎				
	Holds CFPC Certification				👎	👎
Organization	In a WIC Practice		👎			
	More Patient Visits per Week	👎	👎	👎	👎	👎
	Has an Active Hospital Appointment					👍
System	More Basis Diagnostic Tests Available		👍	👍	👍	
	Better Physician to Population Ratio	👍	👍	👍		
	In a Northern Practice Location	👎			👎	👎

Returning to the Research Questions...

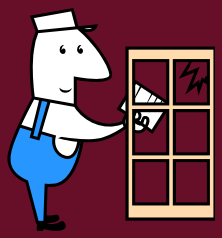
- What factors affect physician performance?
  - Physician, organization and system → looking at physician factors alone is inadequate.
- Are different dimensions of performance affected by different factors?
  - Factors vary by dimension.
  - Each dimension has unique needs and barriers.

The "64 Thousand Dollar Question"

So what?

Implications for Practice Improvement

- Right solution for the problem
- "Contextual competence"



Work in Progress

Impact of Continuing Professional Development on Performance – Informing a Policy Direction

New Policy Developments for CPD

- CPD required to maintain certification - Royal College of Physicians and Surgeons of Canada (RCPSC) and the College of Family Physicians of Canada (CFPC)
- 2004 – Canadian Medical Association's *Physician Code of Ethics*
- 2007- Federation of Medical Licensing Authorities of Canada's *Position Paper on Physician Revalidation*
- 2009 – CPSO updates to Quality Assurance Regulations

Research Question

- What is the relationship between participation in different types of CME/CPD and physician performance in practice?

Partners and Data Sources

- CME/CPD Data – Certification bodies of Canada
  - College of Family Physicians of Canada (CFPC)
  - Royal College of Physicians and Surgeons of Canada (RCPSC)
- Performance Data – CPSO
  - Random Peer Assessments and Public Complaints
- Researchers – Laurentian University and Northern Ontario School of Medicine

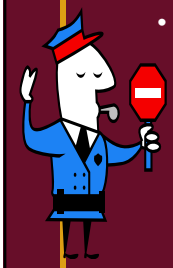
Covariate Factors

- Physician factors
  - Example: age, sex, certification, location of training
- Practice environment factors
  - Practice set up, practice volume, hours worked, geographic location

Risk? What if we find...

- something bad?
- something good?
- nothing at all?

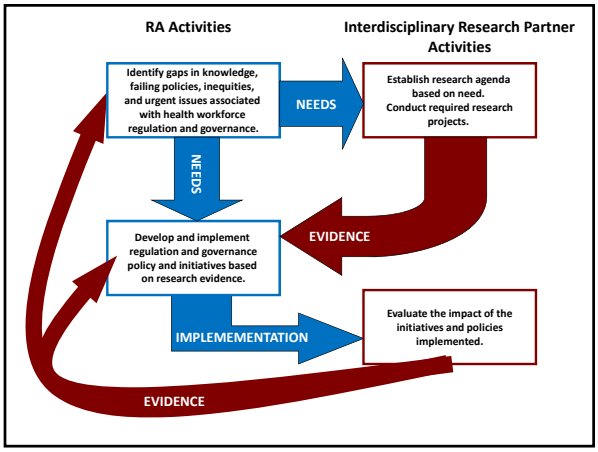
Confidentiality and Security



- Organizations don't always want to share data with regulators
  - 3rd party essential
  - Encrypted data stripped of identifiers
  - Secure data storage
  - Ethics board reviews
  - Confidentiality agreements
  - Collaborators must all approve materials prior to dissemination

Other "Medical Regulatory" Researcher in Canada

- Robyn Tamblyn, PhD
  - McGill University, Montreal QC
- Jocelyn Lockyer, PhD
  - University of Calgary, Calgary AB
- Joan Sargeant, PhD
  - Dalhousie University, Halifax NS



Final Thoughts on "Doing Research"

- Not a "one person" job
- Share
- Keep it relevant
- Research benefits the public, the profession and regulators

Contact Information

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References from Examples

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