

"Measuring Up"



Improving Health Systems Performance in OECD Countries



Health Information for Performance Measurement in Canada -- Towards Coherence and Integration



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Canada's Health System

- 
- **Management and delivery of health services responsibility of provinces/territories**
 - hospital inpatient and outpatient services
 - physician services
 - some coverage of pharmaceutical products and public health services
 - **National principles set at federal level**

The Canadian Experience Outline

- The Past
- The Present
- The Future



Past

- **Health Care**
 - **Motivations - affordability, accreditation**
 - **Measurements**
 - **single measures, usually focused on efficiency**
 - **based on inputs and some outputs**
- **Population Health**
 - **Motivations -- tracking trends, targeted programs**
 - **Measurements -- mostly mortality- or hospital disease-based, some disability and a few lifestyle factors**
- **Information audience substantially technical**
- **Early leaders offer glimmers of future**

Weaknesses

- **Input-oriented, not outputs or outcomes**
- **Health determinant data not comprehensive**
- **Snapshots of services at a point in time**
 - **stovepipe health information systems for stovepipe health systems**
- **Weak information collection/dissemination system**
- **Many players - not co-ordinated**

The Transition

Health Commissions

- **“System not under-funded; it is under-managed”**
- **Regionalization of health services**
- **Recognition of importance of population health perspective**
 - **Intellectual milieu: Lalonde report, Canadian Institute for Advanced Research**
- **“You can’t manage what you can’t measure”**
 - **Calls for better health information**

Roadmap Information Needs

- Regional/community information
- Costs, effectiveness - interventions
- Outcomes
- “Validated” public information
- “Report card” on organizations
- Standards
- Linkages
- Comparative data and analysis
- Health human resources
- Framework for privacy/confidentiality

The background of the slide is a close-up, low-angle photograph of a road. The road is paved with a brick-like pattern, and the perspective is from a low angle, looking down the road as it recedes into the distance. The road is illuminated from the side, creating strong shadows and highlights that emphasize the texture of the bricks. The sky above is dark, and the overall mood is dramatic and forward-looking.

Health Information Roadmap: Responding to Needs

The Present

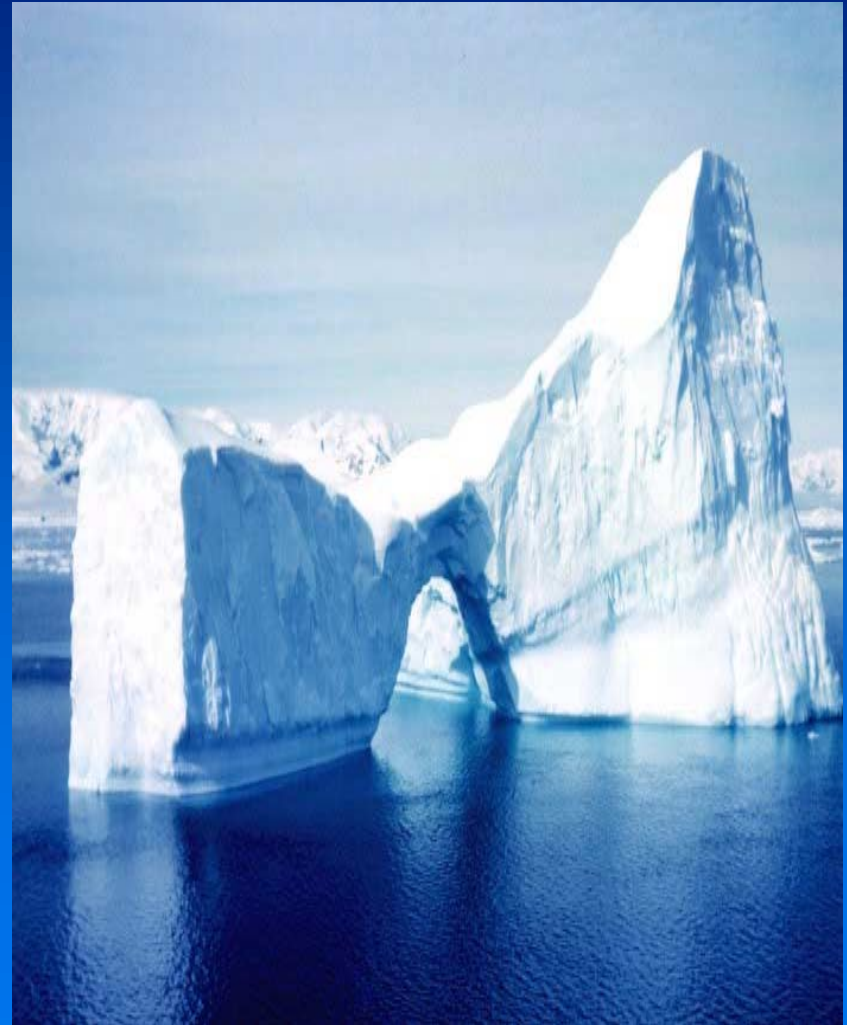
Our Frame of Reference

Equity

Health Status			
Health Conditions	Human Function	Well-Being	Deaths
Determinants of Health			
Health Behaviours	Living & Working Conditions	Personal Resources	Environmental Factors
Health System Performance			
Acceptability	Accessibility	Appropriateness	Competence
Continuity	Effectiveness	Efficiency	Safety
Community and Health System Characteristics			

Indicators: The Tip of the Iceberg

- **Below the water**
 - standards
 - range of data systems
 - sophisticated methodologies
 - etc.
- **Populating the framework over time, starting with what we have**



How healthy are Canadians?

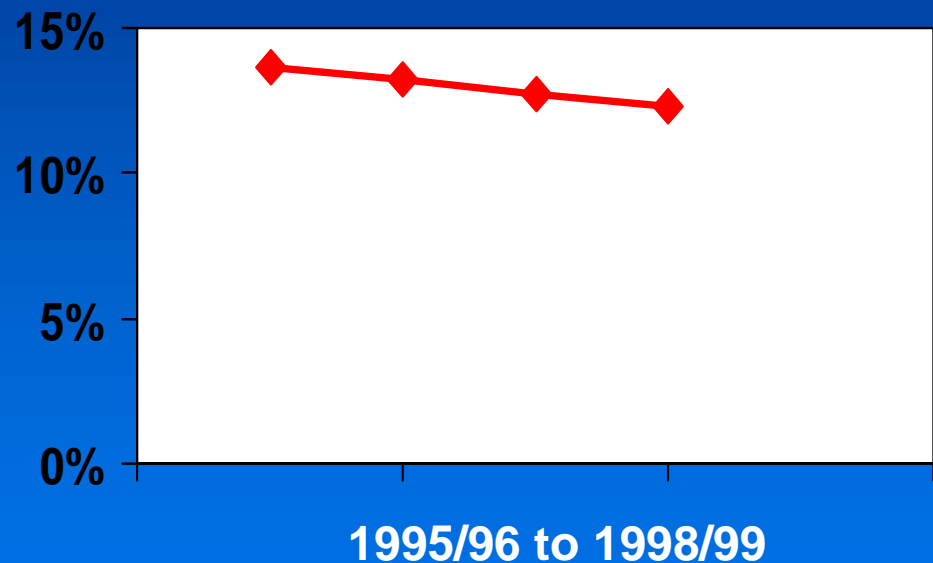
How healthy is our health care system?

- **Analysis and Results**
- **Selected Illustrations**

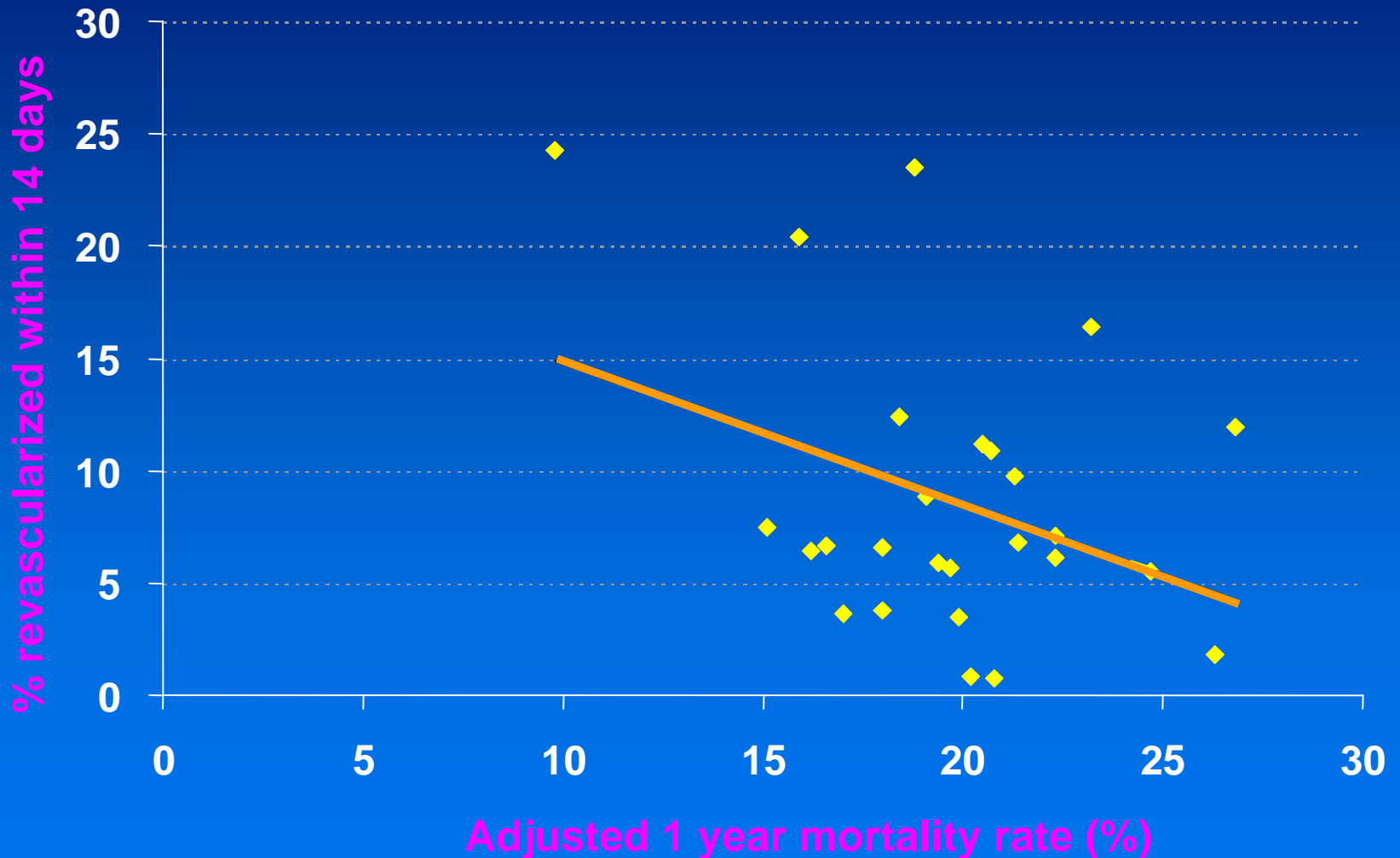
Outcomes of Care ~ Surviving a Heart Attack

- about 7 in 8 patients survive at least a month
- steady improvement since 1995/96
- rates in (large) health regions vary
- underlying risk adjustment methods

Risk of Dying in Hospital within a Month of a Heart Attack



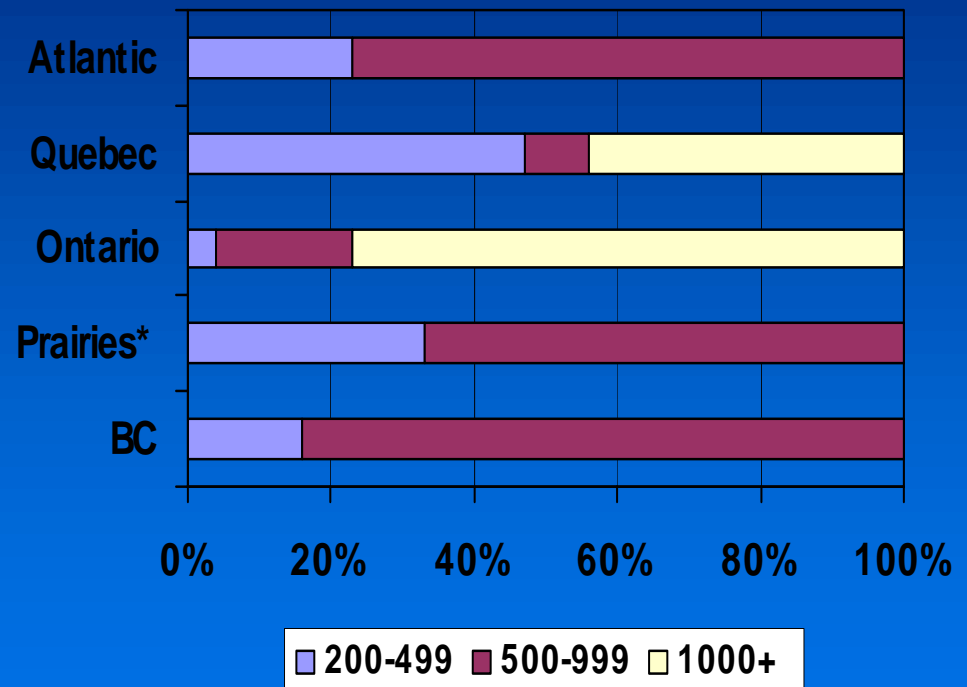
One year mortality rate vs. % revascularized within 14 days, AMI patients in health regions with populations over 100,000, 4 provinces, 1995/96



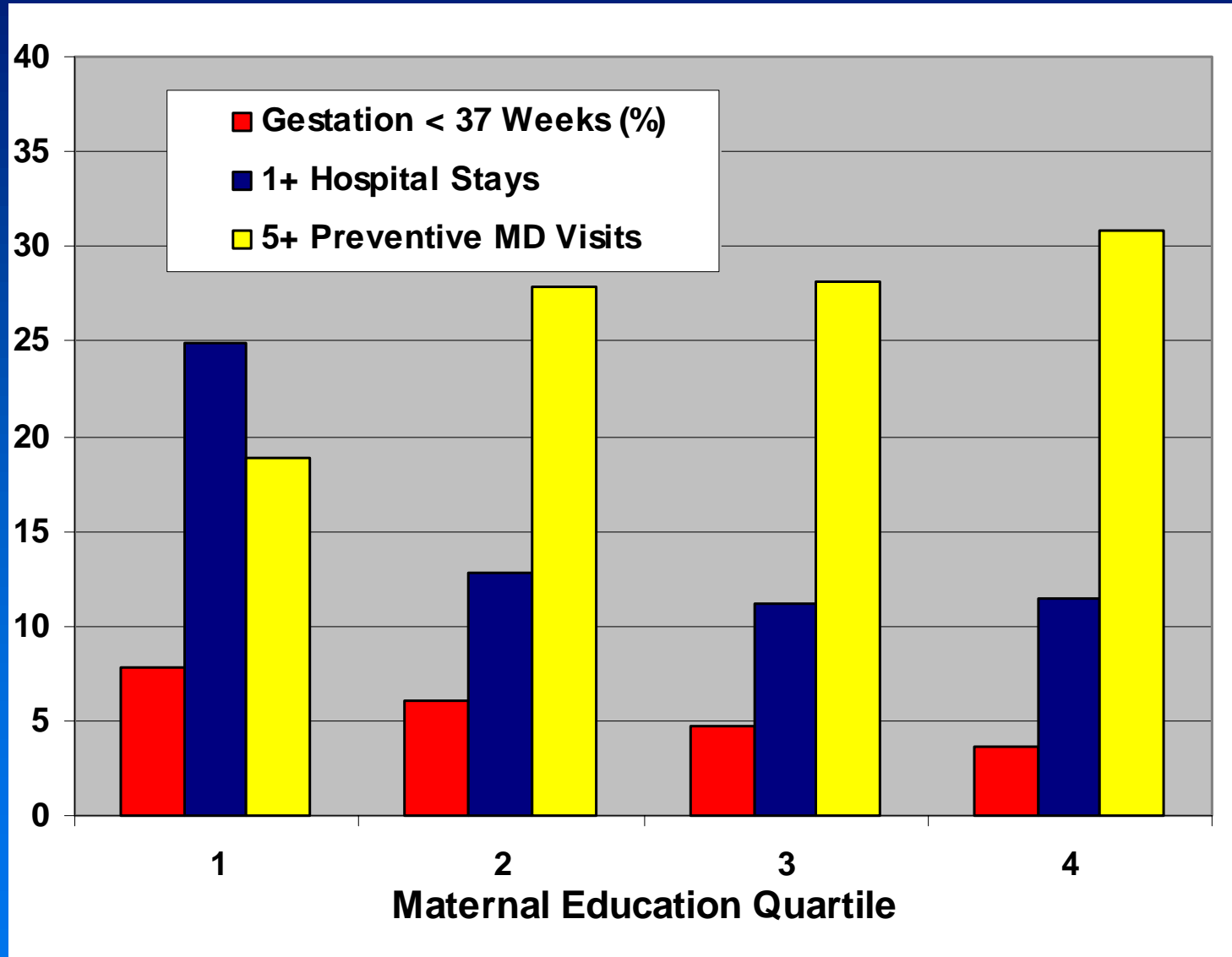
When Volume Counts

- Researchers often find better outcomes at hospitals with higher volumes
- Bypass surgery
 - range from 200 to over 2000 surgeries in 98/99
- Links between volumes and outcomes have not been regularly monitored

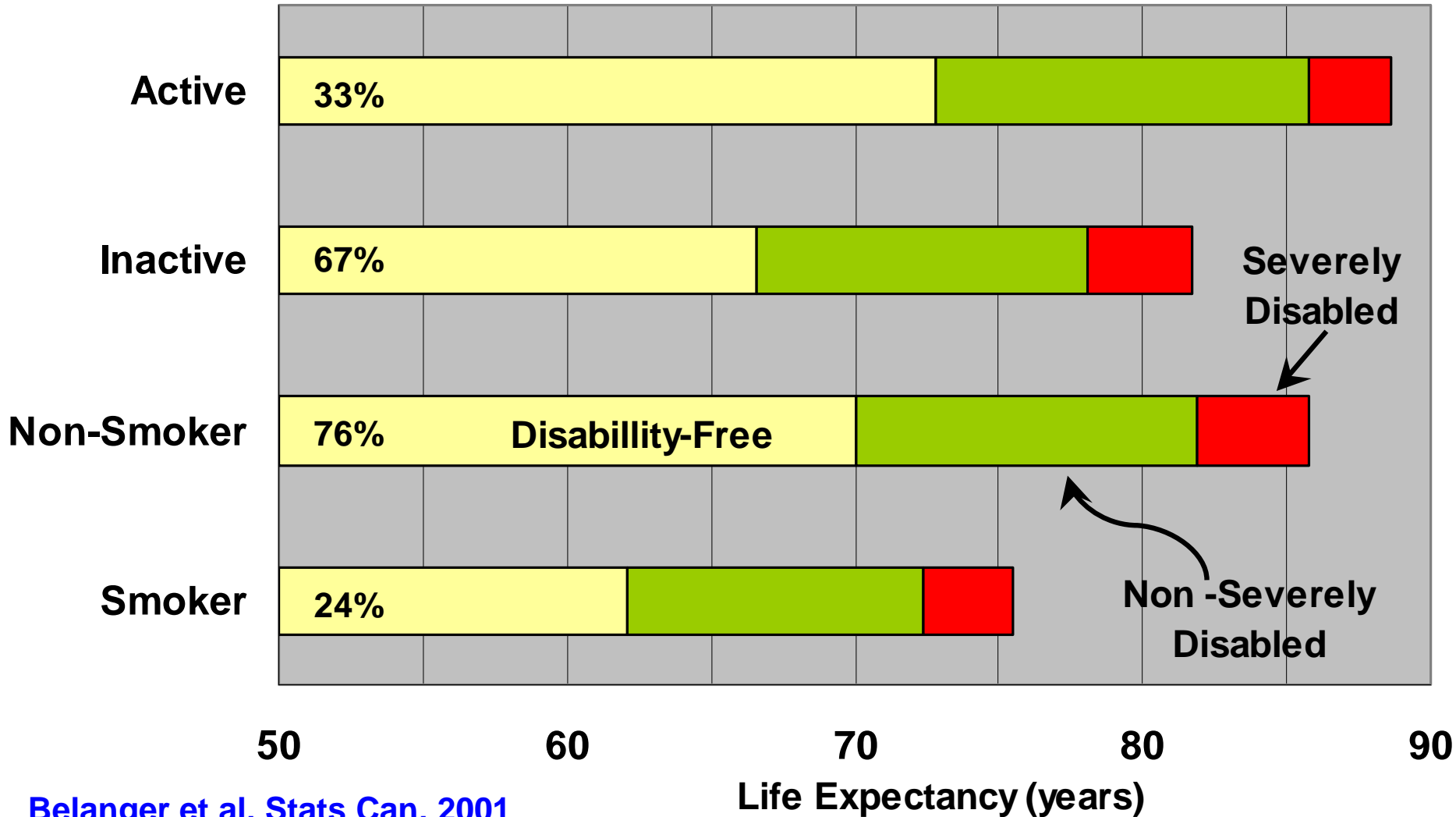
% Surgery by Hospital Volume



Health of Manitoba Infants by Maternal Education

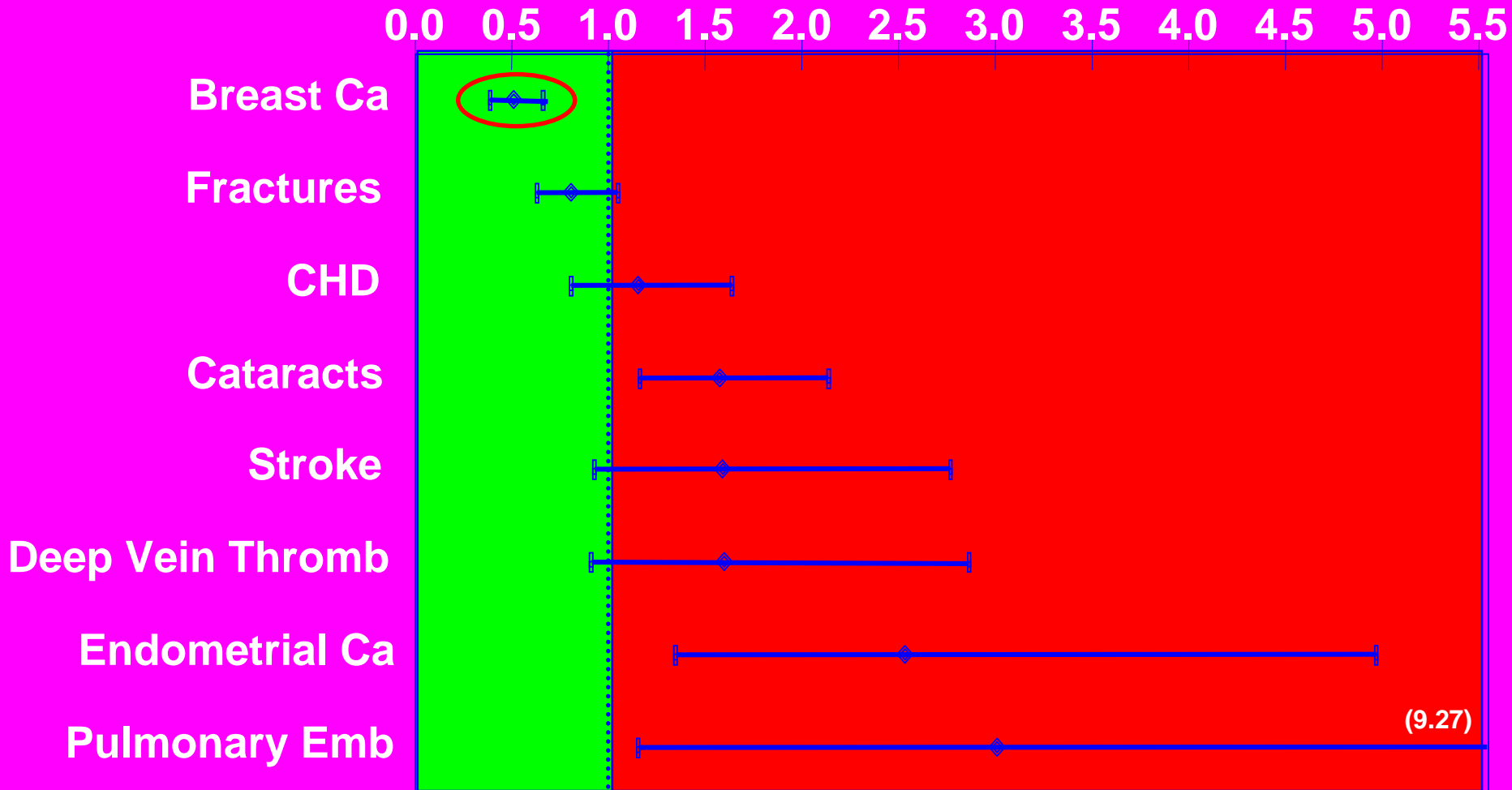


Female Life Expectancy at Age 45 by “Lifestyle” and Disability



Complex Intervention:

Relative Risks of “Preventive” Tamoxifen



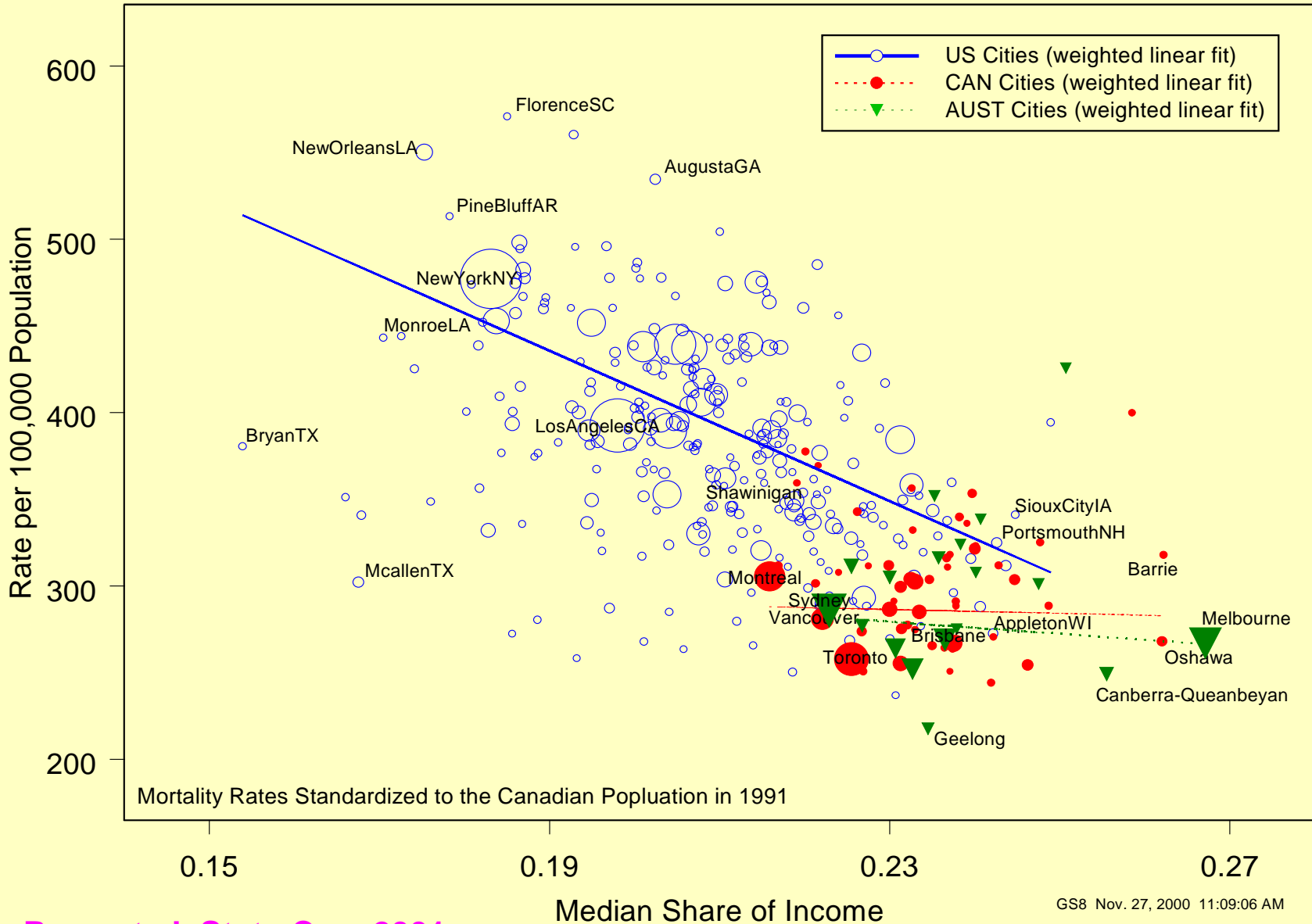
Complex Interventions -- Analytic Challenges

- **sometimes large proportion of population affected**
- **may have both positive and negative effects**
- **clinical trial populations not always fully representative of target populations**
- **clinical trial results always have statistical confidence intervals**

Complex Interventions -- Information System Implications

- need statistical descriptions of “natural history” of disease onset, progression, and fatality
- need data on multiple risk factor prevalences and impacts on disease onset
 - proximal -- e.g. smoking, hypertension
 - distal -- e.g. socio-economic status
- need data on impacts of diseases on health care utilization / benefits of typical treatments
- need realistic population health simulation model to answer “what if” under relevant scenarios

Working Age (25-64) Mortality by Median Share U.S., Canadian, and Australian Metropolitan Areas



Health information for what?

Public Awareness

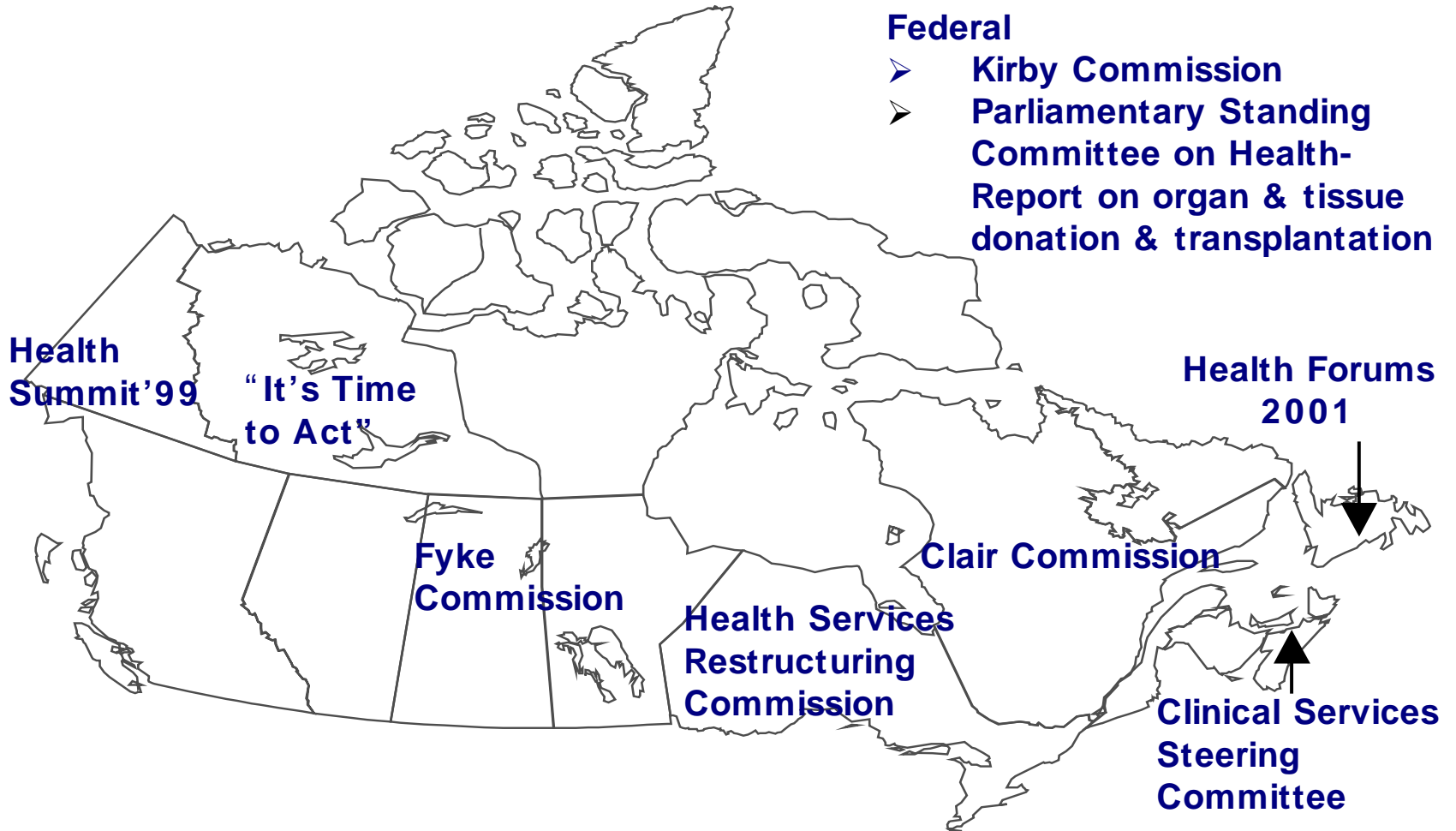
- Better health information for better health, e.g.:
 - Maclean's cover stories
 - Extensive media coverage of fact-based reports ~ part of the public debate
 - Beyond today's crisis: regions use indicators as springboard for communicating with public
 - Annual report now a university textbook
 - Data are essential for expanded research capacity



Sound Health Policy

Federal

- Kirby Commission
- Parliamentary Standing Committee on Health- Report on organ & tissue donation & transplantation



Effective Management

- **Information as a management tool, e.g.:**
 - Triggered reviews of care or supported new policies in Cape Breton, Newfoundland, etc.
 - Basis of several hospital funding formulae
 - Used in fee-for-service negotiations (by both sides!)
 - Helps health organizations to set budgets, plans, priorities
 - Ontario hospitals use balanced scorecard reports for quality improvement and public accountability

More to Do: Continuing the Journey



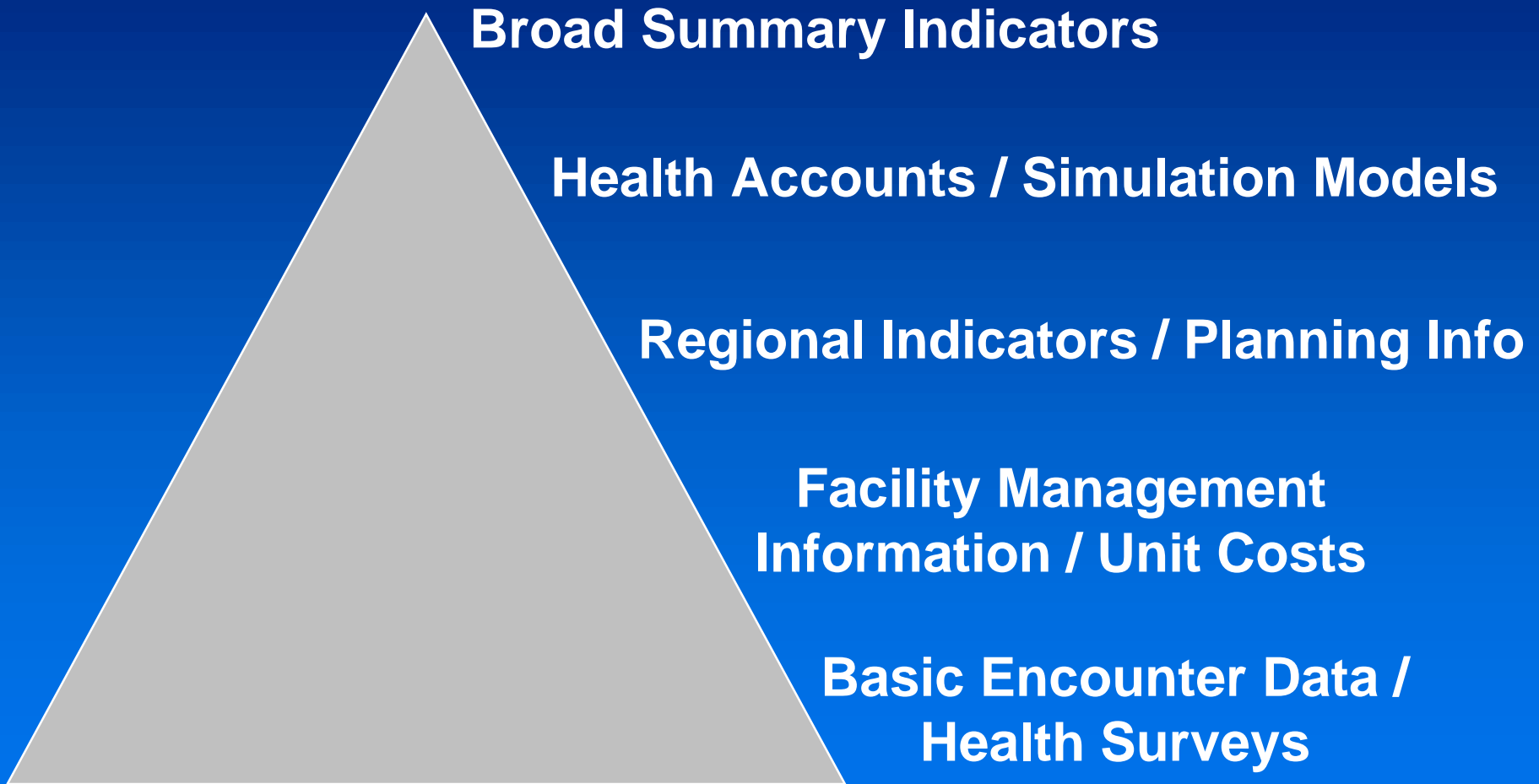
Where Are We Going?

- **Goals**
 - **Quality improvement**
 - **Accountability**
 - **Integrate population health perspective**
 - **Sustainability**
- **New types of indicators in a new context**
- **Better understand how indicators relate to each other**
- **Enhanced reporting & dissemination**

Two Challenges

- **international comparisons**
 - growing sense of shared challenges
 - longstanding interests, moving beyond mortality-based indicators and health care spending, to health status and “what works”
 - need for international data standards
- **the “Holy Grail” of Summary Indicators**
 - popular with journalists, public, politicians (sometimes!)
 - often completely lacking in empirical / logical foundations
 - and often viewed as useless by decision-makers -- cannot connect to available policy levers

Vision -- Coherent, Integrated Statistical System



Coherent and Integrated Statistical System -- Main Strategies

- building up administrative data systems
- focusing on electronic health records, patient registries, provider registries, drugs and labs
- strengthened and harmonized privacy legislation -- recognizing health research and health system management needs
- facilitating “appropriate” data flows / data linkage / data analysis / public reporting for accountability
- building up population health surveys
- building up and re-focusing research capacity

A Journey in Progress

