

Towards Measuring and using Quality Indicators The Canadian Experience

R. C. Alvarez
 ISQUA, November 2002
 Paris

Who We Are

- National, independent non-profit agency
- Provide information for:
 - sound health policy
 - effective management
 - public awareness about health determinants

National Health
 Information Road

Health Indicators Framework

<i>Health Status</i>			
Well-Being	Health Conditions	Human Function	Deaths
<i>Non-Medical Determinants of Health</i>			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
<i>Health System Performance</i>			
Acceptability	Accessibility	Appropriateness	Competence
Continuity	Effectiveness	Efficiency	Safety
<i>Community and Health System Characteristics</i>			
Resources	Population	Health System	

Questions

- Are differences in access to preventive services, as evidenced by disparities in use, attributable to health care system factors or differences in awareness that may be linked to education?
- Are differences in the prescribing of generic drugs due to differences in providers, underlying morbidity, or differences in insurance coverage?
- Are differences in outcome following AMI due to variations in treatment or other factors?

Health Indicators Framework

<i>Health Status</i>			
Well-Being	Health Conditions	Human Function	Deaths
<i>Non-Medical Determinants of Health</i>			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
<i>Health System Performance</i>			
Acceptability	Accessibility	Appropriateness	Competence
Continuity	Effectiveness	Efficiency	Safety
<i>Community and Health System Characteristics</i>			
Resources	Population	Health System	

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?

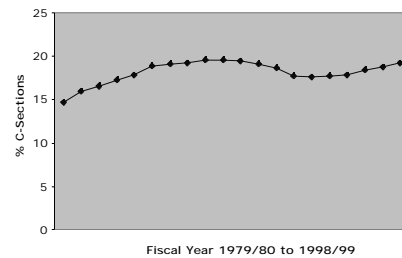
How healthy is our health care system?

- Analysis and Results
- Selected Illustrations



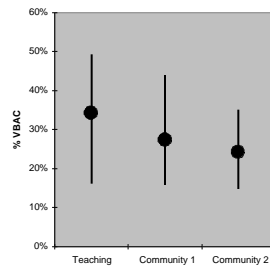
Health Care in Canada 2002
Les soins de santé au Canada

Trend in the Canadian C-Section Rate



C-Section and VBAC Rates: How Do You Compare?

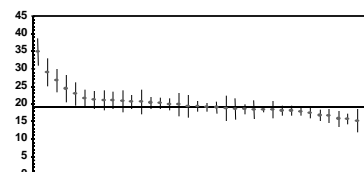
- C-section average similar for all peer groups (about 21.5%)
- > variation in VBAC rates
- Manitoba Guidelines suggest 75% possible



Regional Variations in Outcomes

Deaths in hospital within 30 days of being admitted with a new stroke

Risk-adjusted 30 Day In-Hospital Mortality Rate (%)



- Almost 7 in 8 patients survive at least a month
- Steady improvement since 1995/96
- Similar risk-adjusted rates in most large regions, some higher/lower

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

1995/96 to 1998/99

www.ohi.ca

For those receiving transplants between 1992 and 1998, the probability of surviving at least 5 years is...

- heart transplant: over 75%
- liver transplant: over 75%
- kidney transplant: over 85%

www.ohi.ca

- Chances of surviving affected by many factors, including type of cancer

5 Year Relative Survival Rate

Age Group	5 Year Relative Survival Rate (%)
15-39	~75
40-49	~80
50-59	~80
60-69	~80
70-79	~80
80-99	~75

Relative survival chances (compared to general population)

www.ohi.ca

Readmission Rate

Condition	Readmission Rate (%)
Hysterectomy	1.0%
Prostatectomy	2.5%
Asthma	7.3%
Heart attack	6.4%

www.ohi.ca

When Volume Counts

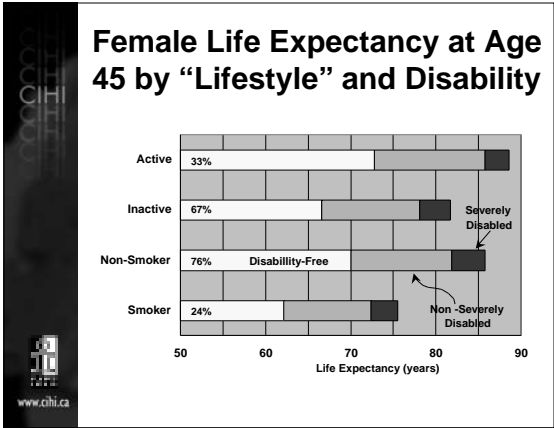
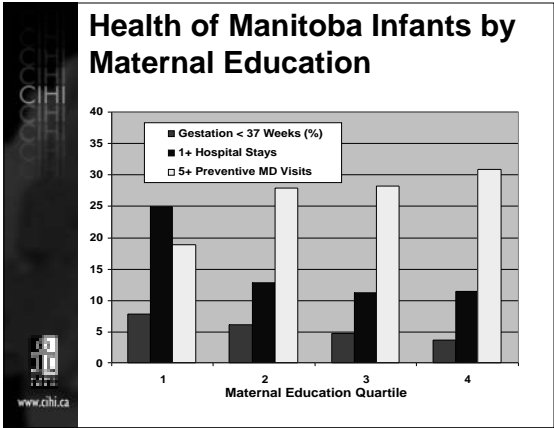
- Researchers often find better outcomes at hospitals with higher volumes
- Bypass surgery – range from 200 to over 2000 surgeries in 98/99
- Links between volumes and outcomes have not been regularly monitored

% Surgery by Hospital Volume

www.ohi.ca

Whipple Procedures

www.ohi.ca



Indicators: The Tip of the Iceberg

- Information infrastructure "below the water"
- Indicators are a starting point
 - like a screening test in medicine
 - dig deeper, trigger/plan change, check results

