

Improving Measurement for the Evaluation of Primary Care

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Funded by an MoHLTC of Ontario

Enhancing Quality in Primary Care Grant

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Background

- Strong interest in measuring performance of primary care systems
- CIHI Pan-Canadian PHC Indicator set developed – almost none with clearly identified data sources

Improving Measurement Project

- Practice Survey
- Provider Survey
- Patient Survey (pre-post visit)
- Admin Data Analysis
- All linked at the individual level
- Analysis focused on the tools (which is best for what)

Data Sources

Table 1: Measurement Tool Domains	Practice Survey	Provider Survey	Patient Survey	Chart Abstraction	ICES Administrative Database
Socio-Demographics		•	•	•	•
Economic Information	•	•	•		•
Patient Practice Relationship			•		•
Patient Access	•		•		
Continuity of Care			•		•
Health Status			•	•	•
Preventive Care			•	•	•
Chronic Disease Management			•	•	•
Acute Care Management			•	•	
Visit Specific Questions			•	•	•
Patient Centered Care			•		
Team Climate	•	•			
Information Technology	•	•			
Quality Assurance	•	•			
Practice Context	•	•			•
Comprehensiveness	•	•			•
Work Satisfaction		•			
Health Human Resources	•	•			

Participation and Acceptability

- Very few patients declined
- 81% return rate for patient surveys
- 85% return rate for provider surveys
- 100% linkage to admin data

Lessons Learned to Date

- EMR data inconsistently entered – for accuracy need manual review
- Most clinical outcomes need chart based data
- Other domains only well covered by patient survey
- Survey and chart data often do not agree
- Practices and providers want accurate information but this is time consuming and expensive - they do not have the resources required to do it well themselves

Example: Colorectal Screening

Result	CA- Yes	CA-No	Total
Survey- Yes	138	87	225(52.6%)
Survey- No	113	90	203(47.4%)
Total	251(58.6%)	177(41.4%)	428

Kappa=0.057

Example: Nutritional Advice

Result	CA - Yes	CA - No	Total
Survey - Yes	206	136	342(50.9%)
Survey - No	110	220	330(49.1%)
Total	316(47%)	356(53%)	672

Kappa=.269

Note that as not all advice is documented in the chart, neither method may be correct, as the “best case” result by combining methods would suggest up to 67.3% of pts received some nutritional advice.

Example: Use of Statins

Result	CA - Yes	CA - No	Total
Survey - Yes	104	11	115(54.2%)
Survey - No	12	85	97(45.8%)
Total	116(54.7%)	96(45.3%)	212

Kappa= 0.781

Conclusions

- How we choose to measure outcomes impacts on the results
- Need to be clear on why we are measuring the outcome and how we intend to use the results
- Need to be familiar with the type and magnitude of error expected with the methods we use
- No matter how we measure there is still room for improvement