ONTARIO DATA SUPPORT STARFIELD'S THEORY ON PRIMARY CARE QUALITY AND COST

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ON BEHALF OF AND WITH GRATITUDE TO THE MEMBERS OF

ASSOCIATION OF FAMILY HEALTH TEAMS OF ONTARIO

afhto

D2D: DATA TO DECISIONS ▶ 4.0

DISCLOSURE

- We have no actual or potential conflict of interest in relation to this educational program.
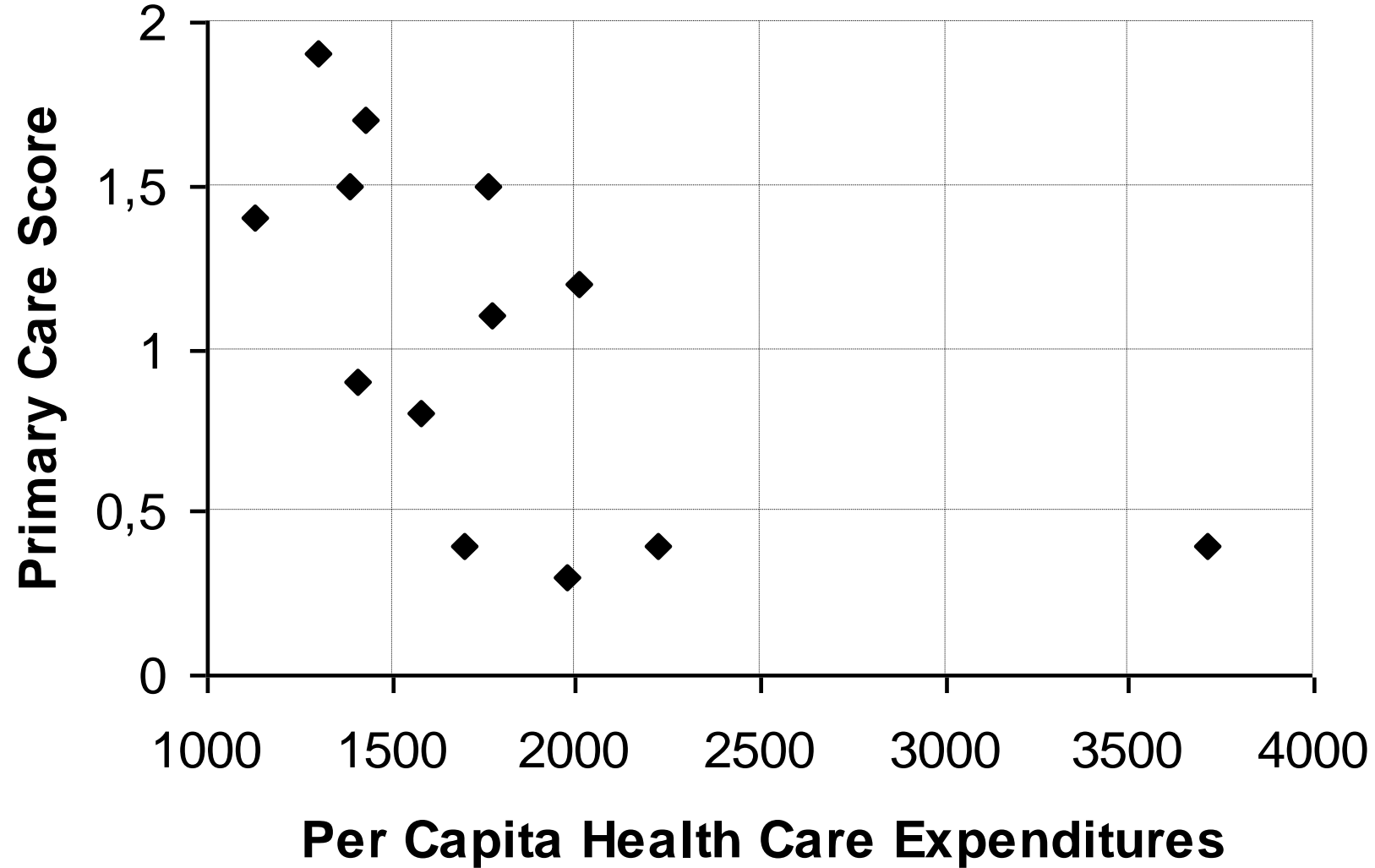
OVERVIEW

- Starfield's theory

- Ontario setting

- Methods

- Results: quality and cost

- Next steps with AFHTO members

STARFIELD'S THEORY

STARFIELD: IS PRIMARY CARE ESSENTIAL?

Starfield, B. (1994) "Is primary care essential?", Lancet, 344, p 1129-1133

PRIMARY CARE PARADOX*

- Primary care clinicians deliver *poorer* quality care than specialists
  - Based on disease-specific, evidence-based process-of-care guidelines.
- BUT…
  - it is primary care, not specialists, who manage diabetes, post-acute cancer survivors, mental health and other chronic diseases
- Why
  - *outcomes are similar* for specialists and generalists BUT generalists use *fewer resources*.
  - *More* generalists and a *fewer* specialists is associated with *greater* performance multiple disease-specific quality measures.

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*Stange, K.C and Ferrer, R.L. (2009) "The Paradox of Primary Care", Ann Fam Med, 7:293-299

"There is no use trying," said Alice; "one can't believe impossible things." "I dare say you haven't had much practice," said the Queen. "When I was your age, I always did it for half an hour a day. Why, sometimes I've believed as many as six impossible things before breakfast." –Lewis Carroll

AFHTO: CONTEXT

- 184 interdisciplinary primary care teams across Ontario, Canada

- Measurement is a strategic priority

  - to improve *and* demonstrate quality of team-based primary care

- Guided by Starfield principles

  - Relationship between patients and primary care providers is foundation of a sustainable healthcare system

- Data to Decisions (D2D)

  - Voluntary, membership-wide performance measurement initiative

  - D2D 1.0: Oct 2014, +/- 30% of members contributing

  - D2D 4.0: Sep 2016 +/- two thirds of members contributing

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METHODS

- Observational study of performance of primary care teams

- Compile patient experience survey, EMR and administrative data from primary care teams (via D2D)

- Generate composite quality measure

  - Weight performance of each component according to importance in the patient-doctor partnership

- Test relationship between quality and cost

  - Per capita cost generated by ICES: +/- 85% of all allocatable healthcare costs

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QUALITY ROLL-UP INDICATOR STRUCTURE

- Informed by Starfield Model (George Southey, Dorval Medical Family Health Team)

- 14 items from various data sources (patient survey, EMR, administrative data)

- Weighted according to patient input

| Quality Roll-up components (in descending patient priority)	Weight
% of patients involved in decisions about their care as much as they want	0.96
% of patients who had opportunity to ask questions	0.95
% of patients who felt providers spent enough time with them	0.95
% of patients who can book an appointment within a reasonable time	0.94
% of patients with readmission within 30 days after hospitalization	0.90
% of visits made to patients' regular primary care provider team	0.90
Emergency department visits per patient	0.87
Ambulatory care sensitive hospitalizations per 1000 patients	0.78
% of eligible patients screened for colorectal cancer	0.69
% of eligible patients screened for cervical cancer	0.69
% of eligible patients screened for Breast cancer	0.69
% of eligible patients with Diabetic management & assessment	0.69
% of eligible children immunized according to guidelines	0.52
% of patients able to get an appointment on the same or next day	0.38

RESULTS

SAMPLE

- 137 primary care teams caring for +/- 2 million patients

- Patient characteristics: Relative to Ontario as a whole, patients were

  - Less likely to be immigrants

  - Less likely to have many co-morbidities

  - More likely to be older

  - More likely to live in rural, higher-income settings.

QUALITY ROLL-UP SCORE DISTRIBUTION: AFHTO TEAMS
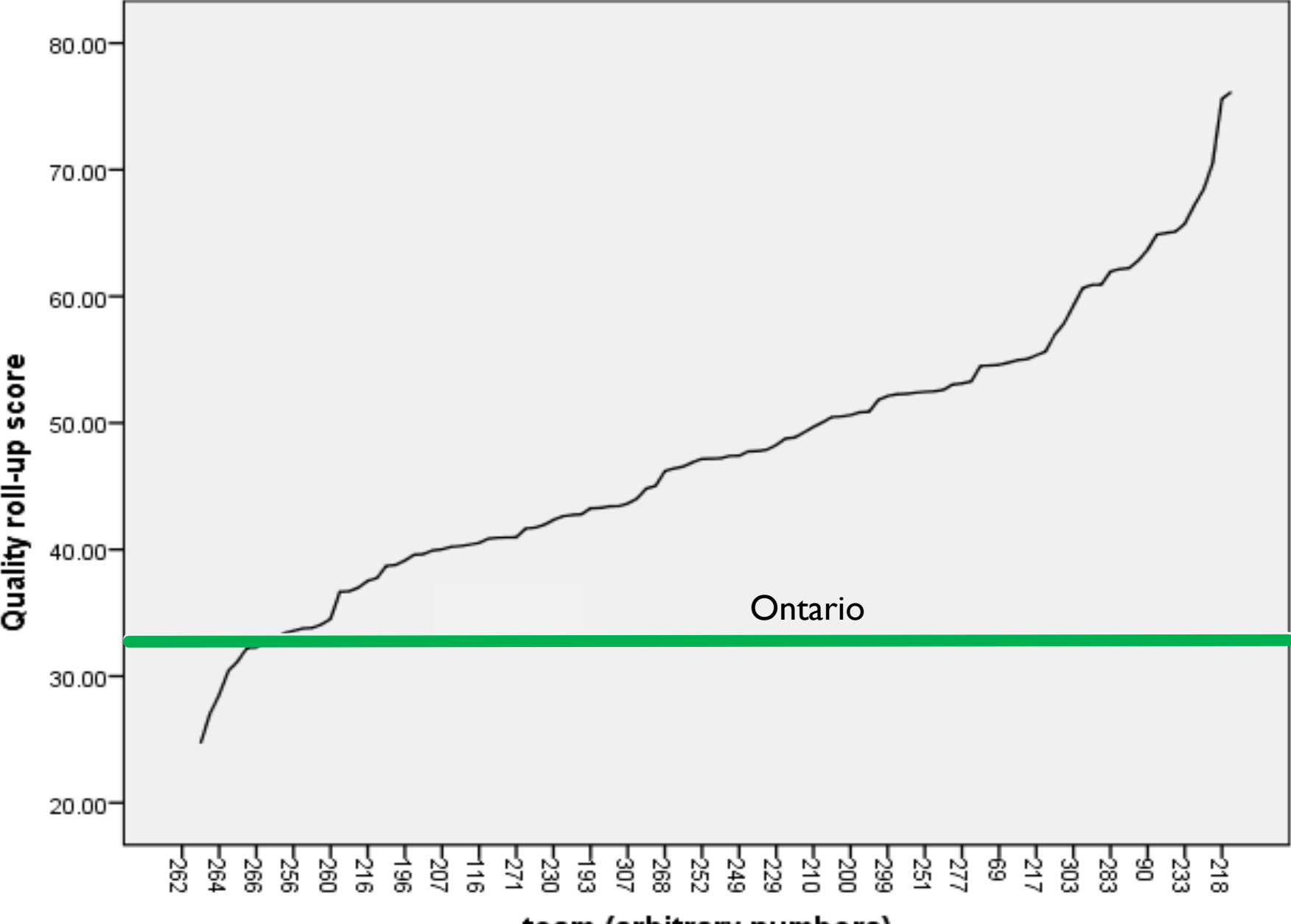
QUALITY AND COST

- Higher quality associated with lower per capita healthcare costs

- Explains approximately 50% of variation in costs

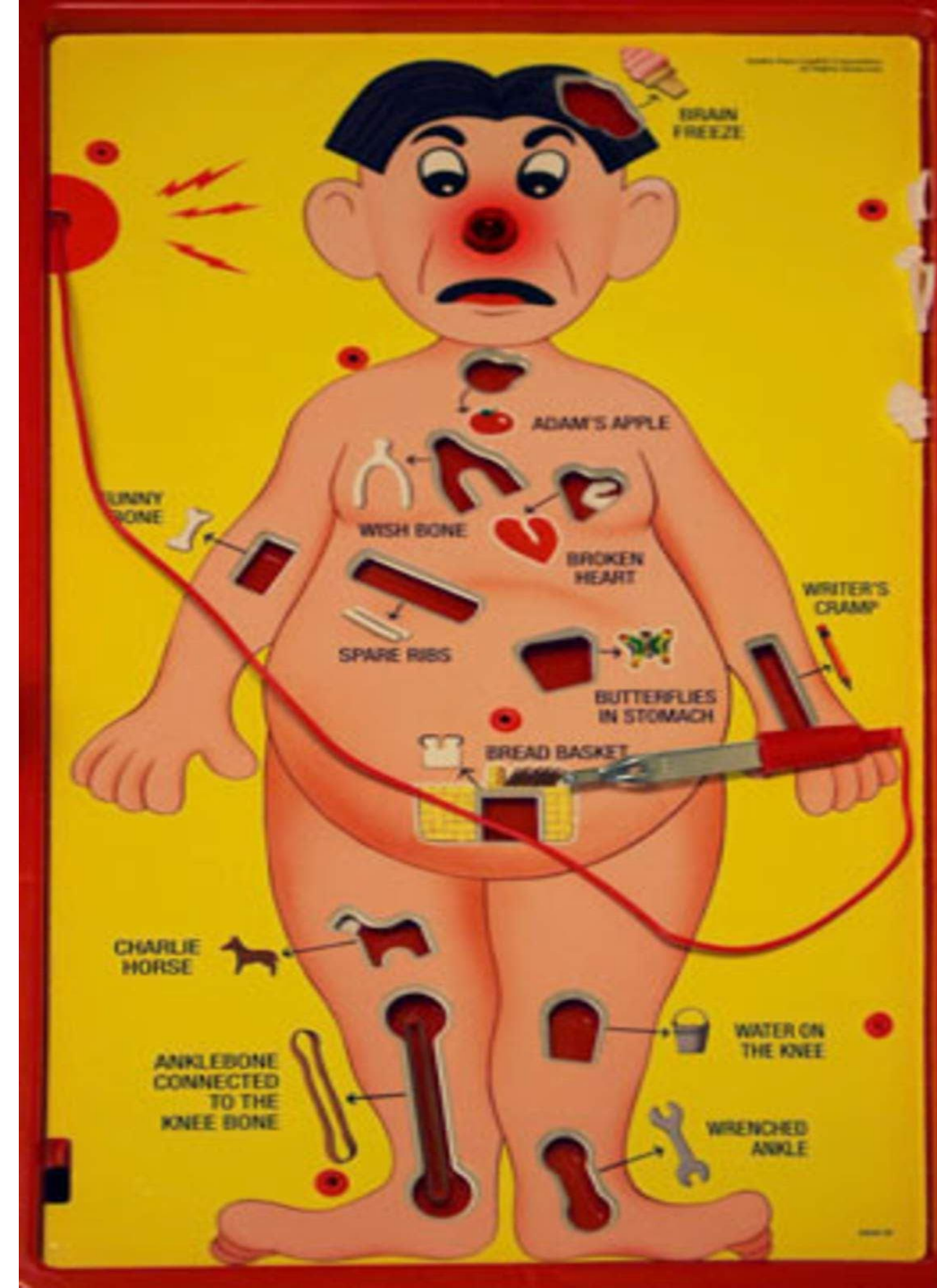- Takes patient complexity and rurality into account
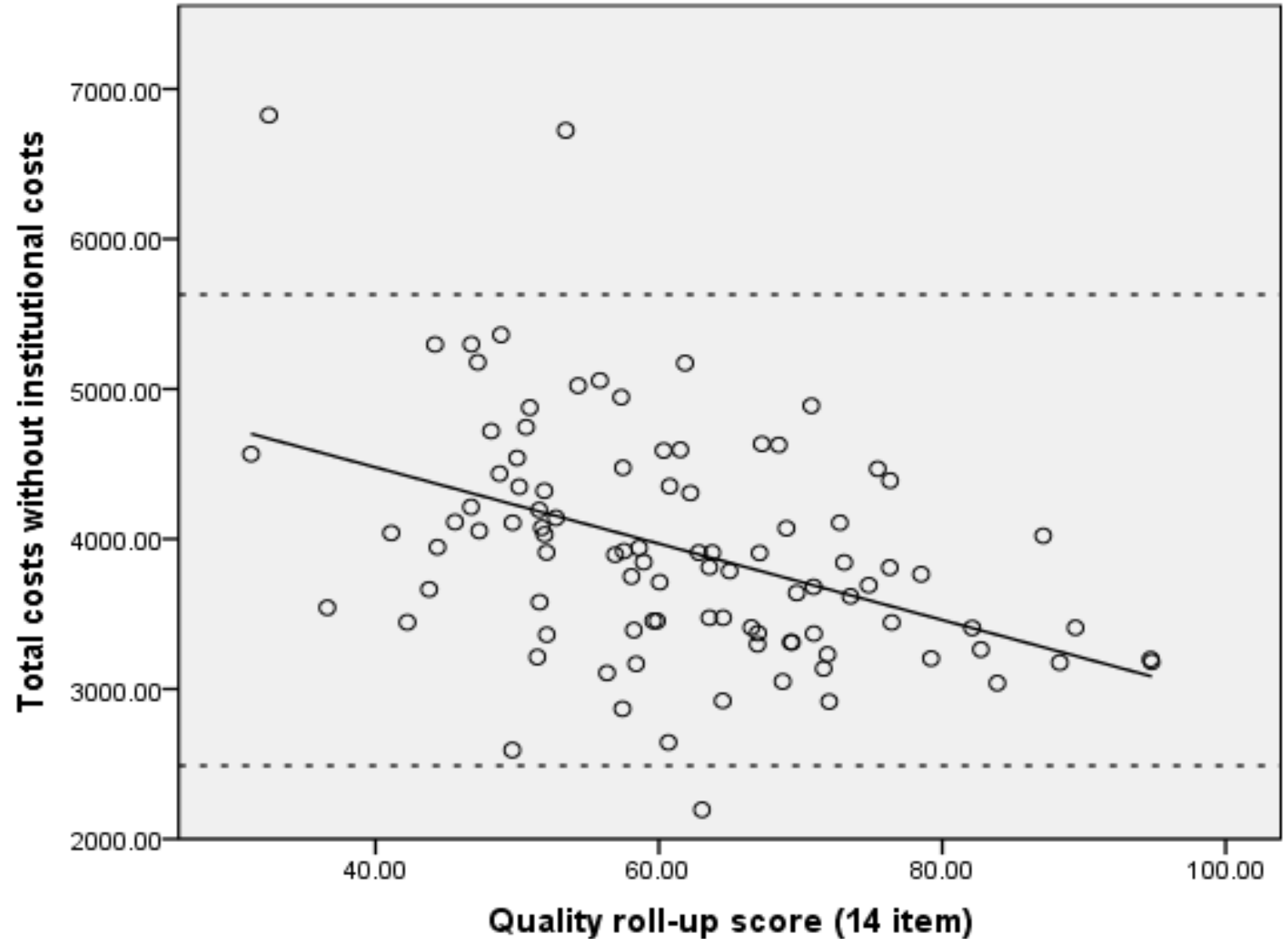
WHAT'S NEXT

- Refine the analysis

  - Update cost data, add courtesy of office staff to quality roll-up indicator

- Examine relationship with human resource capacity for primary care delivery

- Explore usefulness at front line

  - Drill down to component measures, find more current data

- Explore impact of patient complexity and social determinants

- Spread to other interested providers

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CONCLUSIONS

- **It is possible to measure quality in a way that**
  - reflects providers' priorities
  - what matters to patients regarding the patient-doctor relationship AND
  - contributes to healthcare system sustainability.
- **May be an alternative for "body part" measurement**
- **"You are more than your joints, your gastrointestinal system and your hormones"**

http://www.burnabynow.com/community/health/five-reasons-why-you-need-a-family-doctor-1.408917

QUESTIONS

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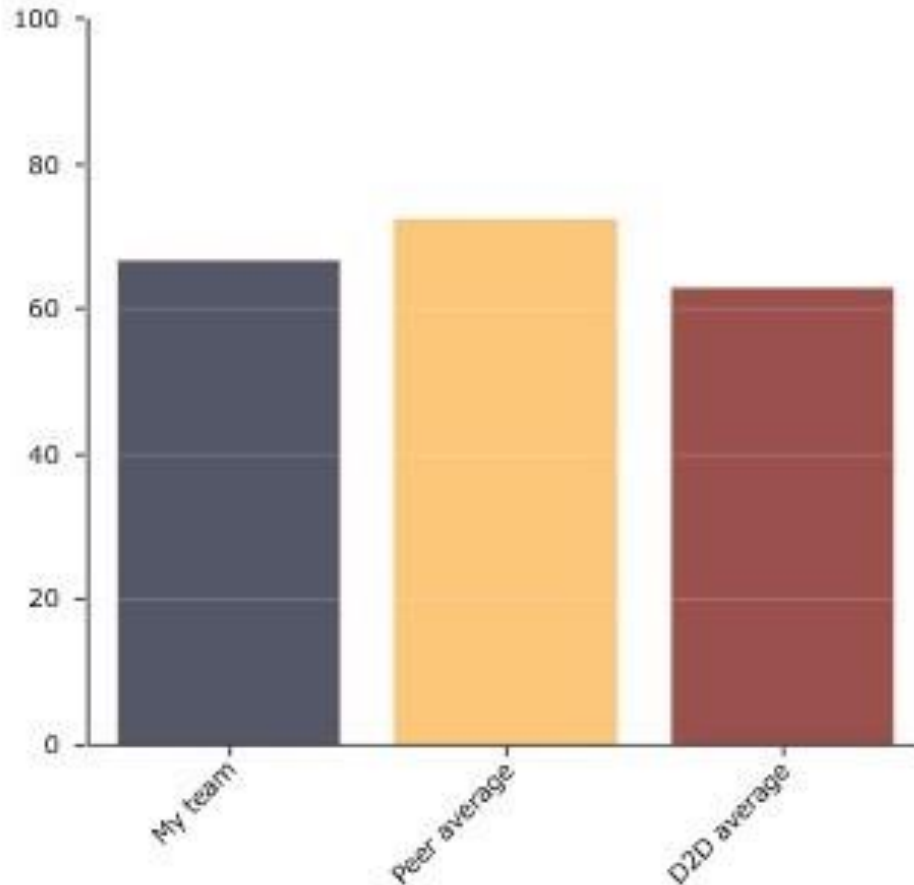D2D: DATA
TO DECISIONS ▶4.0

APPENDIX

QUALITY ROLL-UP SCORE

Click to drill down - Quality

Quality roll-up – See website before interpreting

	oct2006! Type team code and press **Enter**	Iteration: D2D 3.0		
		Team	Peer	D2D
Setting: Urban				
Teaching: Non-tchg				
Access to hosp. discharge data: --	SAMI	1.01	0.96	0.99
Rostered patients:	Data Quality	0.82	0.57	0.75
10,000 to 30,000				

My team score is 67.

My peers (urban, non-teaching teams of 10-30,000 rostered patients) have an average score of 72.
The database average (all teams contributing to D2D) is 63.

Patients served by my team need slightly more primary care services than those of my peers or all teams on average (see SAMI score)

EMR data quality for my team is higher than my peers and the database average.

Components of Quality roll-up indicator