



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
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Disclosure

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

Purpose

- Measure primary care quality in a way that reflects the patient-provider relationship and test relationship to per capita healthcare costs.

Background

- Relationship between patients and primary care providers is the foundation of a sustainable healthcare system.
- Quality measured in a way that reflects this relationship should be associated with lower costs.
- Measurement of cost is possible.
- Measurement of quality has been difficult:
 - Not enough measures
 - Too many measures
 - “Wrong” measures

Composite measures: potential solution

- Single measure
- Can be comprehensive by including a broad range of components
- Can allow balance, rather than competition, between multiple domains
- Facilitates prioritizing more important components (via weighting)
- Growing literature for disease or topic-specific composites

Addressing the challenges with composites

- Face validity is low -- actionable?
 - Focus initially on membership-level use
- Complex reporting process
 - Leverage AFHTO member engagement, research partnerships, strategic direction of AFHTO
- Consensus regarding prioritization (ie weights) of components
 - Prioritize components according to importance to patient-doctor partnership, in alignment with Starfield's principles for primary care quality
- Loss of information through aggregation – high scores cancel low
 - Intentional -- identify “all round” quality, not body-part specific performance

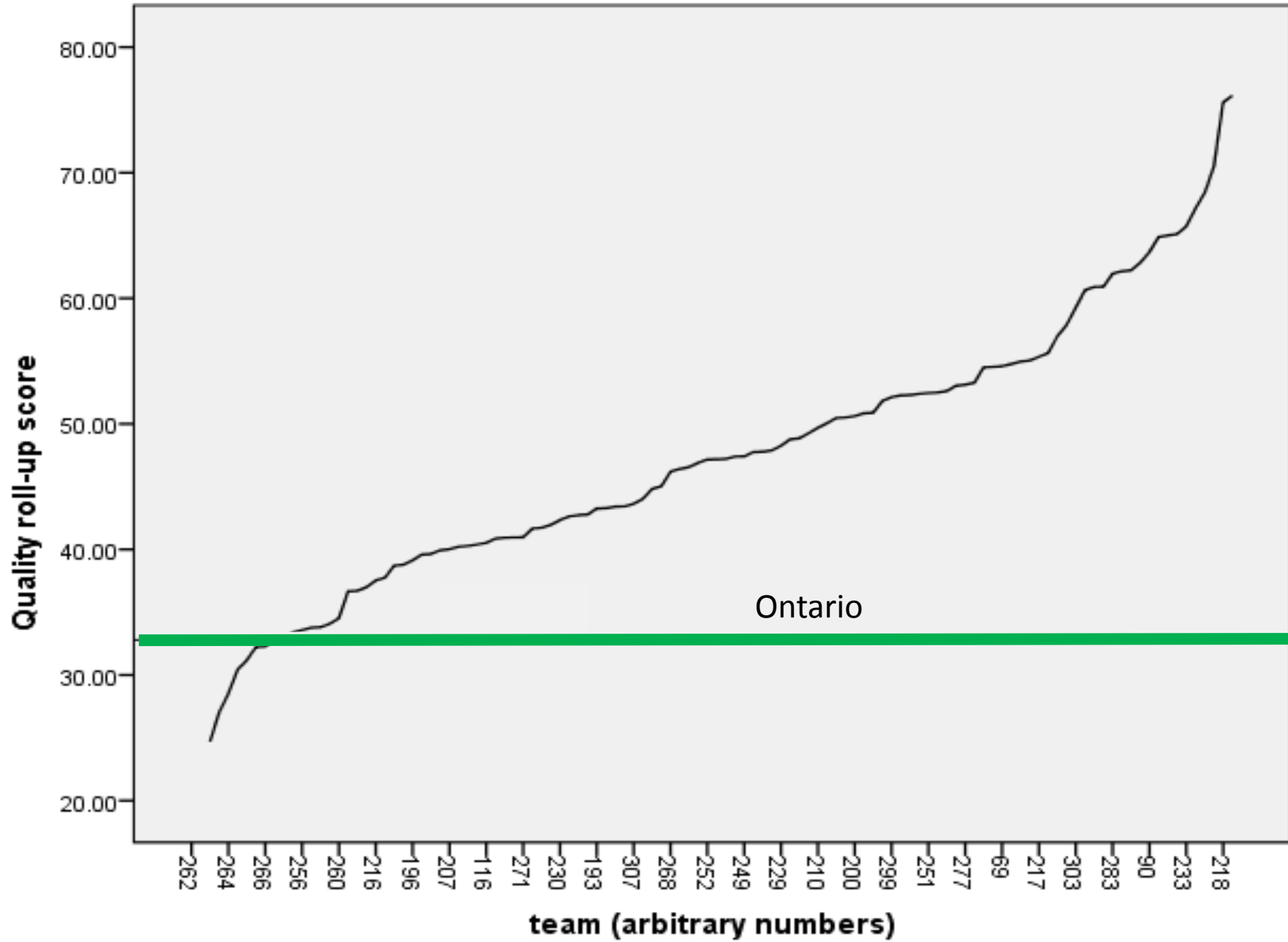
Methods

- 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
- Analyze reliability of composite quality measure
- Test relationship between quality and cost
 - Per capita cost generated by ICES: +/- 85% of all allocatable healthcare costs

Results

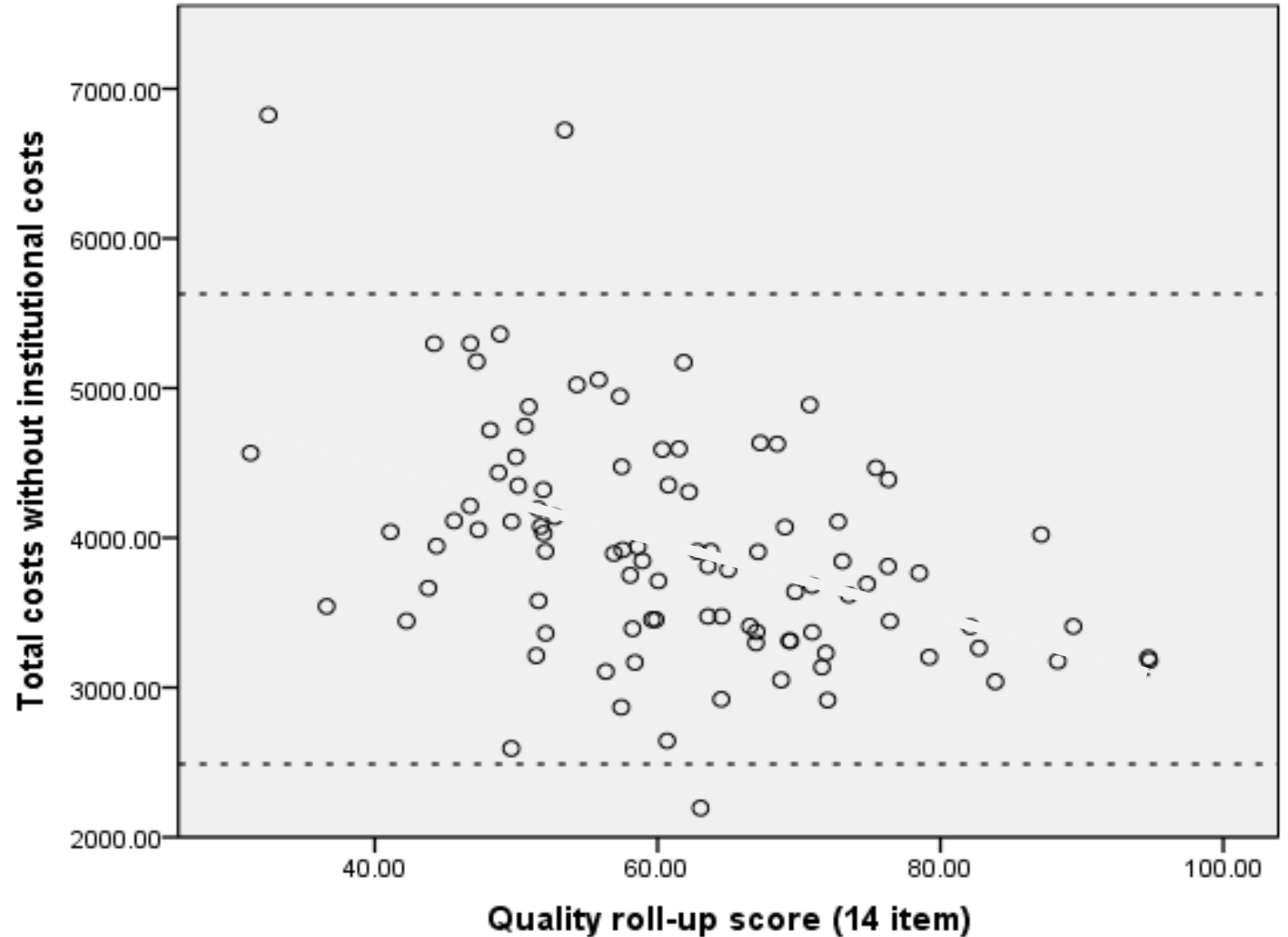
- Sample: 137 primary care teams caring for +/- 2 million patients
- Patient characteristics: Relative to Ontario as a whole, patients were
 - Less likely to be immigrants
 - Less likely to have many co-morbidities
 - More likely to be older
 - More likely to live in rural, higher-income settings.
- Composite measure:
 - Considered over 60 candidate components
 - Ended up with 14 indicators, balance of system and patient priorities

Performance indicators	Weight
% of patients involved in decisions about their care as much as they want	0.9578
% of patients who had opportunity to ask questions	0.9503
% of patients who felt providers spent enough time with them	0.9503
% of patients who can book an appointment within a reasonable time	0.9433
% of patients with readmission within 30 days after hospitalization	0.8978
% of visits made to patients' regular primary care provider team	0.8966
Emergency department visits per patient	0.8696
Ambulatory care sensitive hospitalizations per 1000 patients	0.7826
% of eligible patients screened for colorectal cancer	0.6934
% of eligible patients screened for cervical cancer	0.6934
% of eligible patients screened for Breast cancer	0.6934
% of eligible patients with Diabetic management & assessment	0.6934
% of eligible children immunized according to guidelines	0.5245
% of patients able to get an appointment on the same or next day	0.3813



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



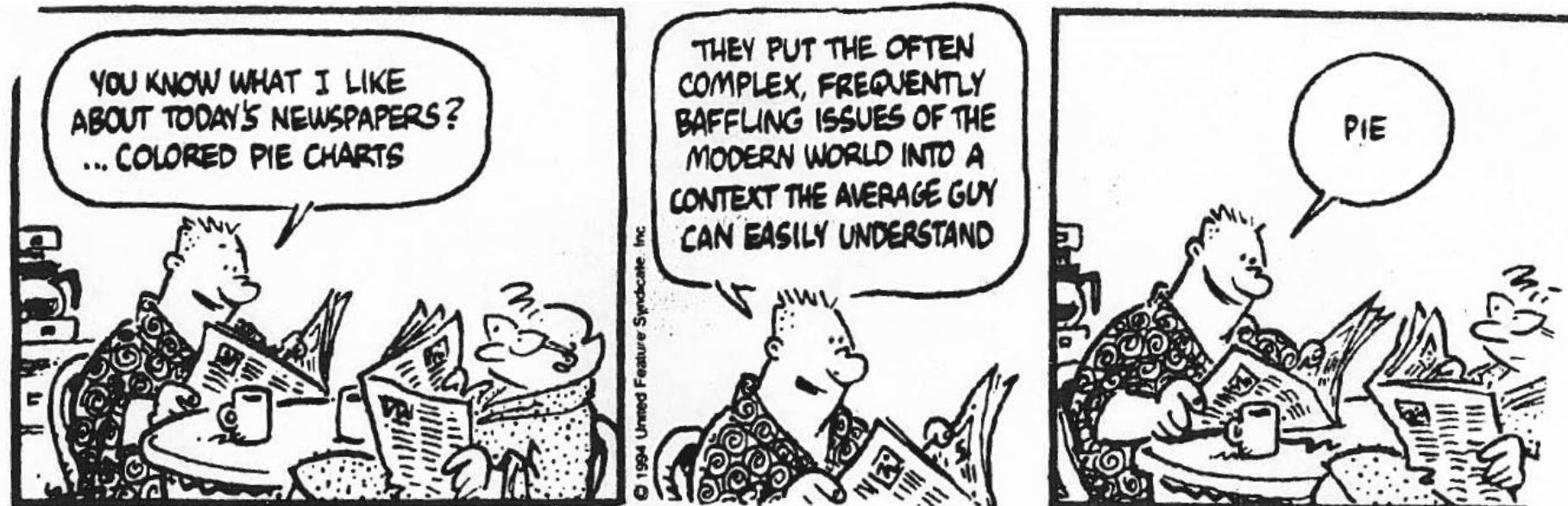
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What's next

- Make it easier to take action at the team level
- Refine the composite – are these the right components?
- Refine analysis of cost: Population segments?
- Address timeliness (or lack thereof) of data

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



Thank you!

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