



# 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**

# Disclosure

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

# Overview

- Purpose
- Background
- Methods
- Results
- Conclusions and Next steps

# 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

# Methods

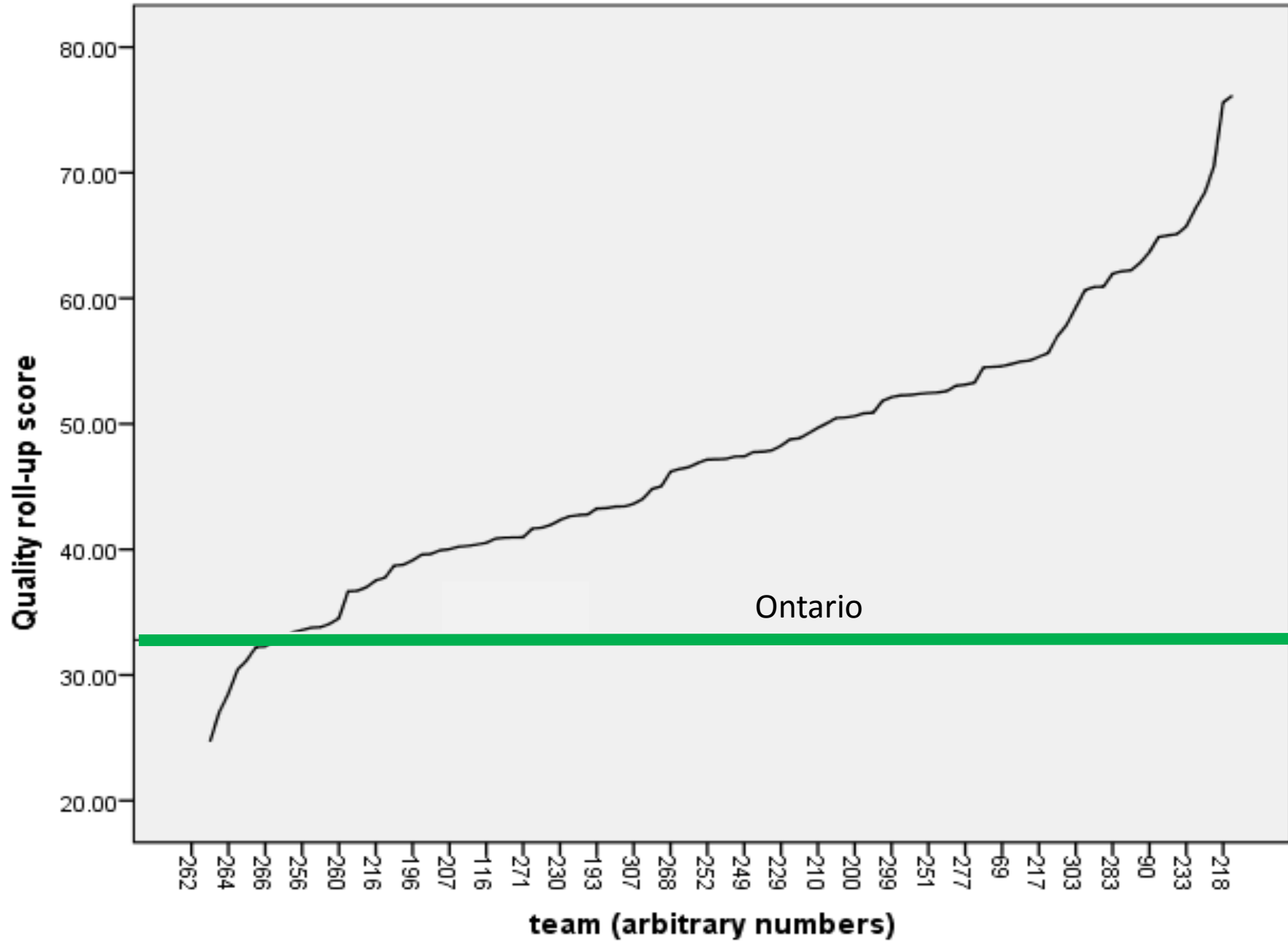
- Observational study of performance of primary care teams
  - AFHTO members
- Compile patient experience survey, EMR and administrative data from primary care teams (via D2D)
- Generate composite quality measure
  - Weight performance of each component according to importance in the patient-doctor partnership
- 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

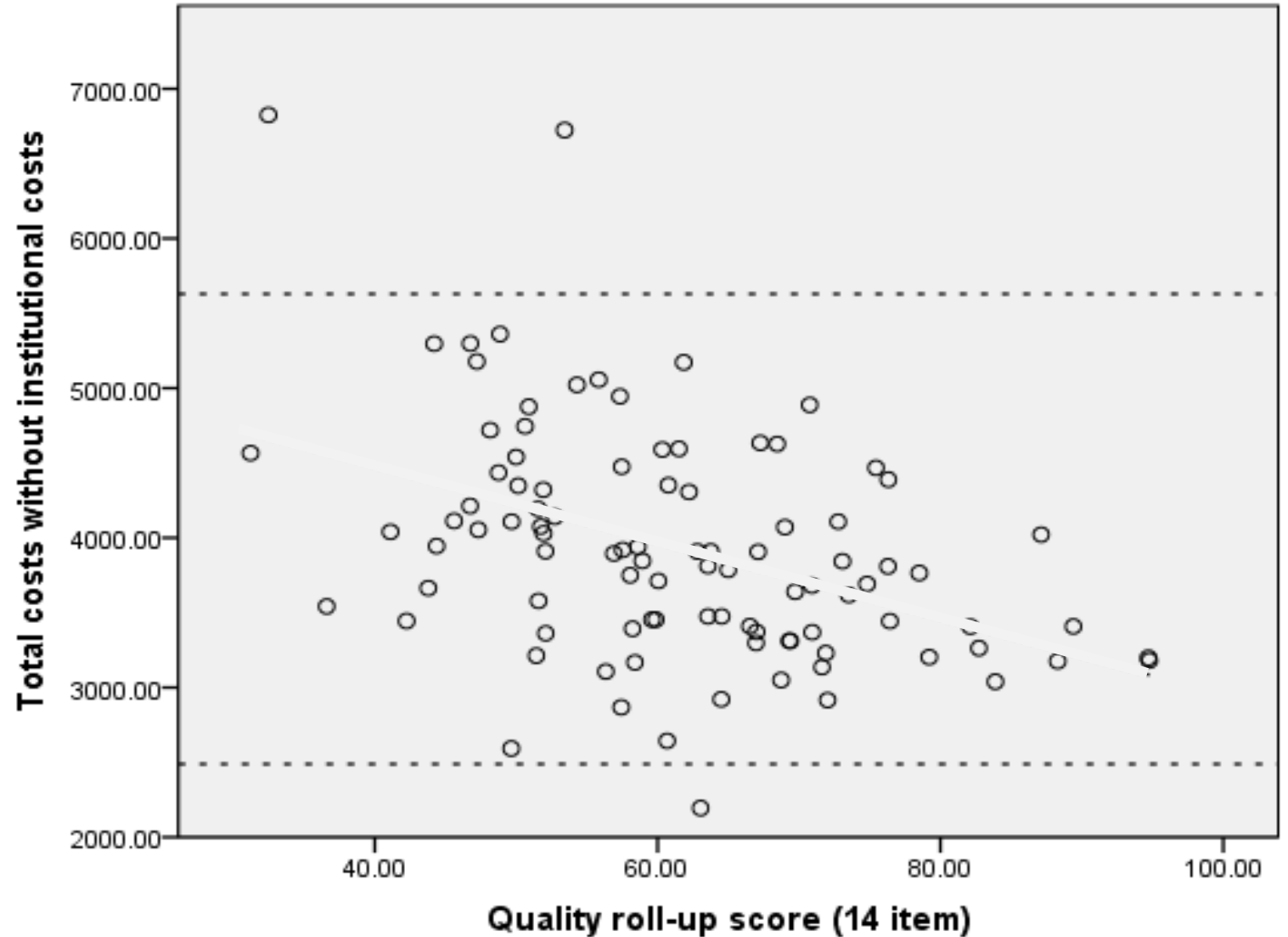
Performance indicators	Weight
% of patients involved in decisions about their care as much as they want	0.9578
% of patients who had opportunity to ask questions	0.9503
% of patients who felt providers spent enough time with them	0.9503
% of patients who can book an appointment within a reasonable time	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





# 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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