



# Making composite measures of primary care quality useful for front line providers

Carol Mulder and Rick Glazier, on behalf of and with thanks to the members of the  
Association of Family Health Teams of Ontario

# Disclosure

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

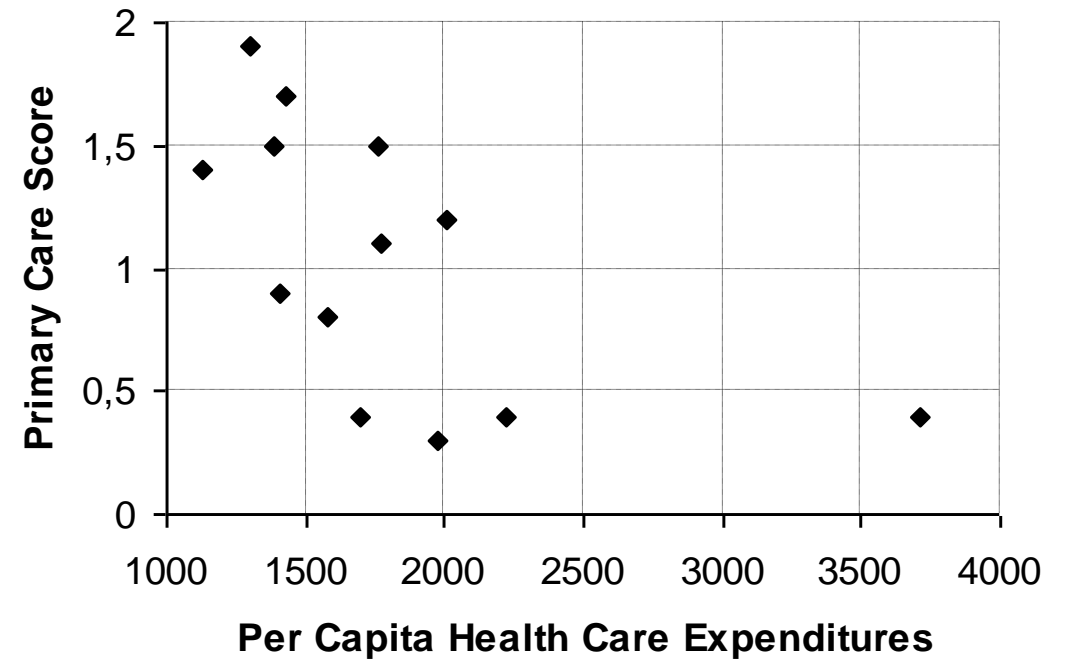
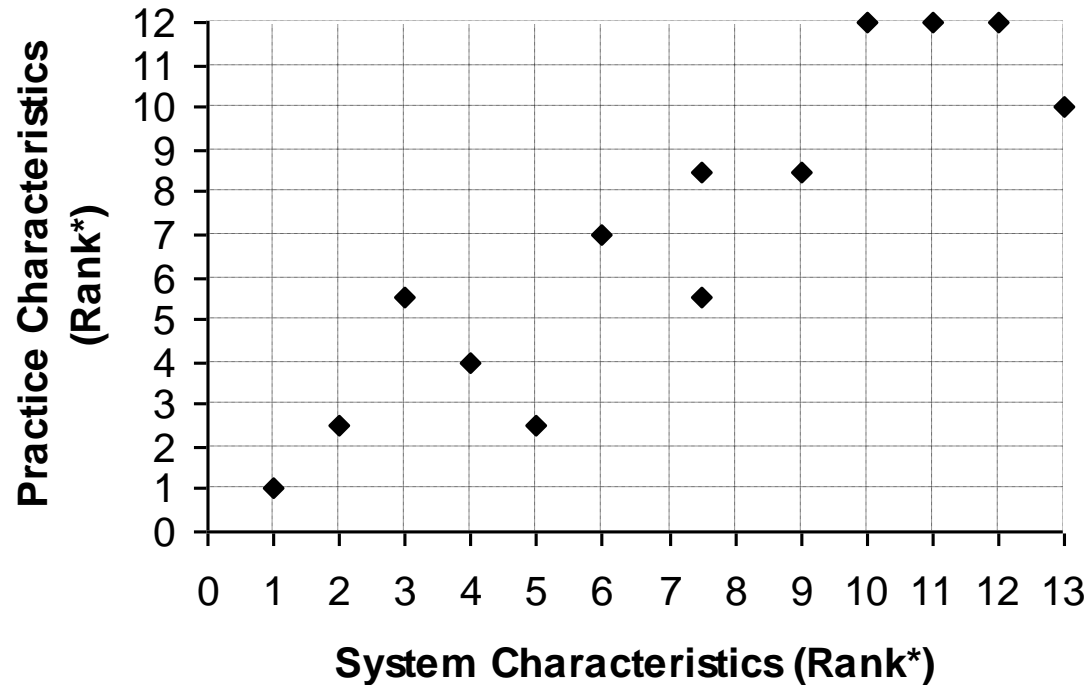
# Overview

- Background
  - Examples in Primary care
- Association of Family Health Teams of Ontario (AFHTO) experience
- Small group discussion: your experience/advice re: composites
- Summary
  - Guidance for next steps for AFHTO
  - Take home messages for participants

# Learning objectives: You will be able to ...

- List the advantages and challenges for using composite quality measures in primary care.
- Identify methods to increase the usefulness of composite measures.
- Determine the readiness of your own settings for incorporating composite measures.

# Starfield: Is primary care essential?



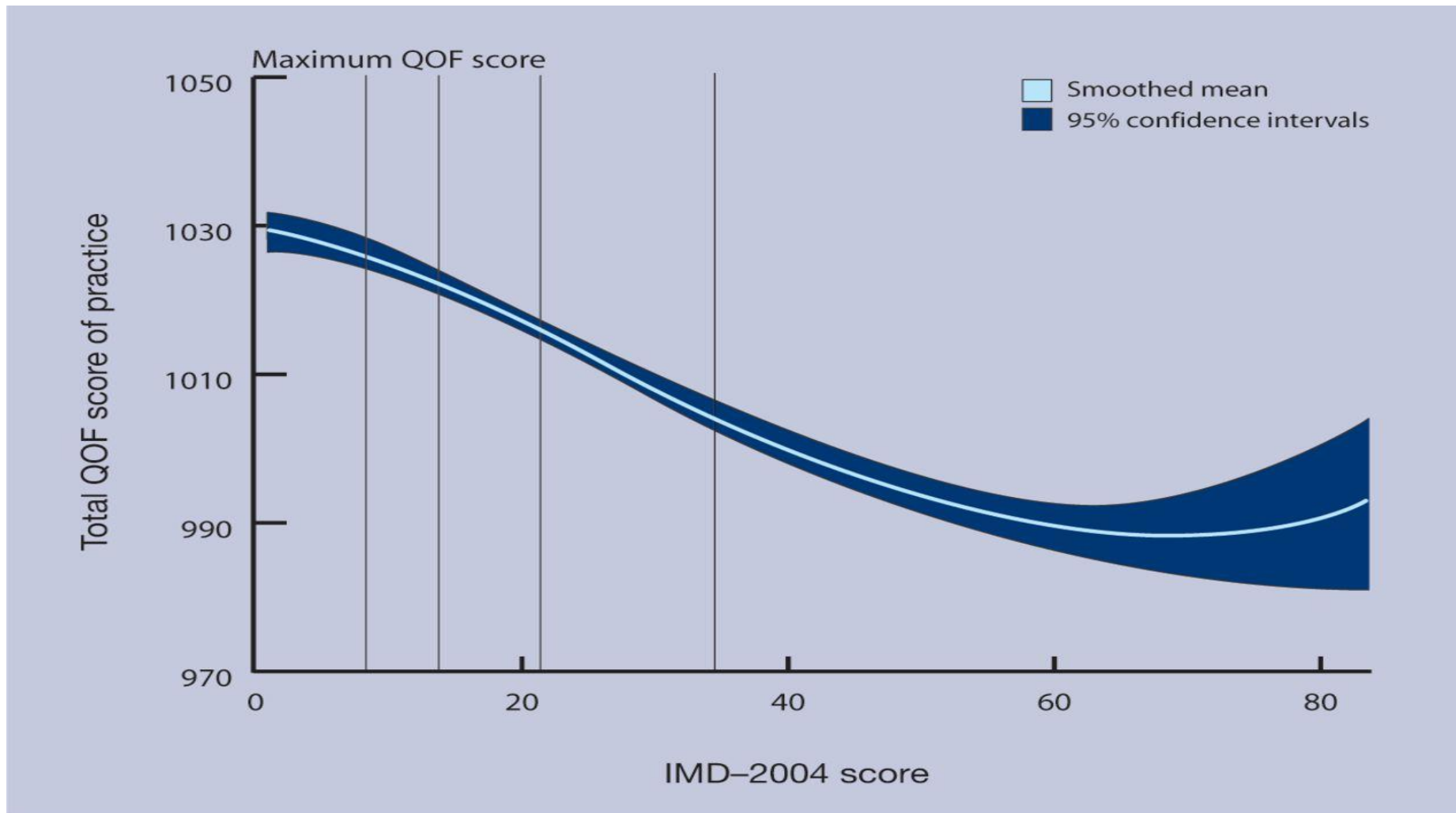
# Measurement challenge in primary care

- Measurement is a key enabler for improvement
- Measurement with a FEW indicators is possible but is it helpful?
  - Represents only a fraction of comprehensive primary care
  - Lack of consensus on which fraction is most important
  - Diversion of resources from unmeasured aspects
- Measurement with MANY indicators is more helpful but is it possible?
  - Actual/perceived impact of data capture burden on care delivery
  - Loss of focus for action
  - Does not facilitate comparison and identification of best practice

# 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

## Relationship between total Quality and Outcomes Framework (QOF) 2005–2006 scores and Index of Multiple Deprivation (IMD-2004) scores.



Mark Ashworth et al. Br J Gen Pract 2007;57:441-448



# Challenges with composites

- Face validity at practice level -- actionable?
- Complex reporting process
- Consensus regarding prioritization (ie weights) of components
- Loss of information through aggregation – high scores cancel low

What is your experience of composite measures?

# AFHTO's experience

# 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 3.0: Feb 2016, +/- two thirds of members contributing
  - D2D 4.0: ETA Sep 2016

# Quality roll-up indicator

- Structure
  - Informed by Starfield Model (George Southey, Dorval Medical Family Health Team)
  - Composite indicator
  - 14 items from various data sources (patient survey, EMR, administrative data)
  - Weighted according to patient input
    - Importance of each indicator in the relationship with provider
- Performance
  - Based on data from 137 teams
  - Moderate internal consistency (Cronbach alpha = 0.516)
  - Explains about 50% of per capita healthcare costs
  - Controlled for rurality, patient complexity, teaching status of team, practice panel size and a measure of EMR connectivity

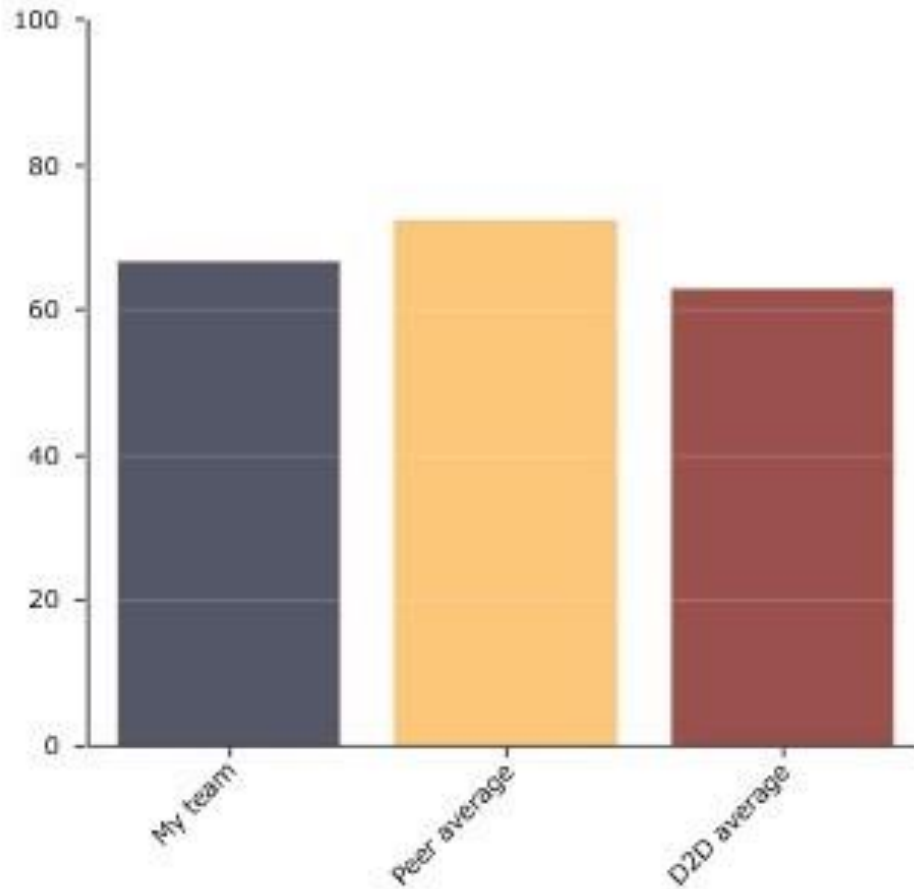
# AFHTO's response to the challenges

- Face validity at practice level – 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

# Quality roll-up score

Click to drill down - Quality

Quality roll-up - See website before interpreting



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

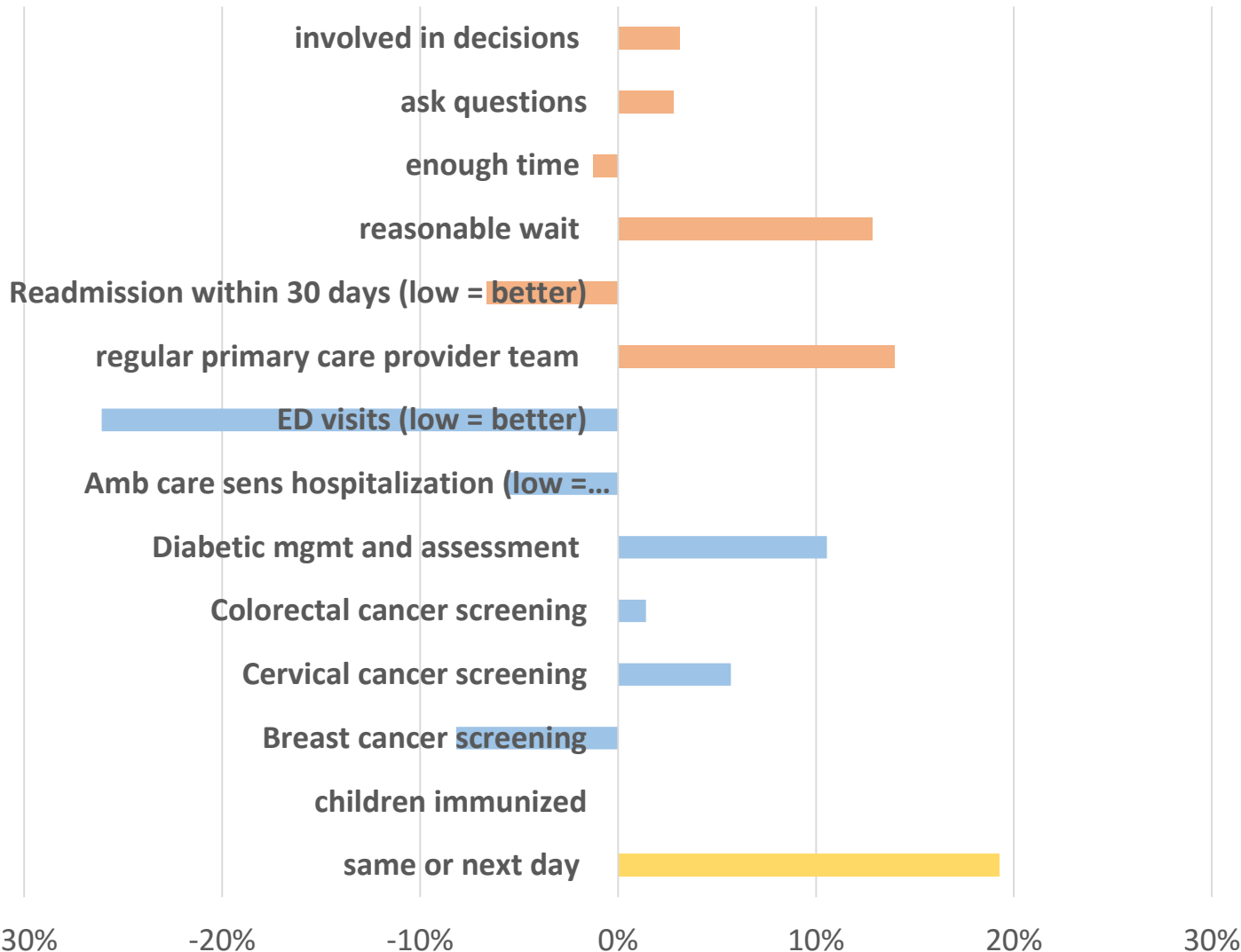
# Outstanding challenges

- Balance scope of components with availability of data
  - the right and the only 14 components?
  - domains of patient-provider relationship
- Local actionability -- quotes from members:
  - *Hard to believe a composite score does more good than bad*
  - *Haven't figured out how/why it is important and what we can do with it.*
  - *Detail and action are lost in roll ups. They are interesting to researchers and planners not to clinicians -- VERY academic*
  - *These quality roll-up indicators are not useful. Let's focus on limited individual indicators.*



# Proposed “drill down” display

Combined effect of difference and patient priority



My team’s performance on each of the components of the quality roll-up score.

Bars show the % difference between my team and the D2D database average, with negative scores showing lower performance EXCEPT for readmission, ED visits and Amb care sens hospitalization where negative scores represent better performance.

Red bars are indicators that higher priority for patients in their relationship with their providers. Blue and yellow bars are indicators of medium and low priority, respectively.

# Small group discussion

- Consider the performance of your practice/team
- What would make a composite quality indicator more useful in your practice/team to improve care?
- What would it take for your practice/team to be ready to use a composite quality indicator?

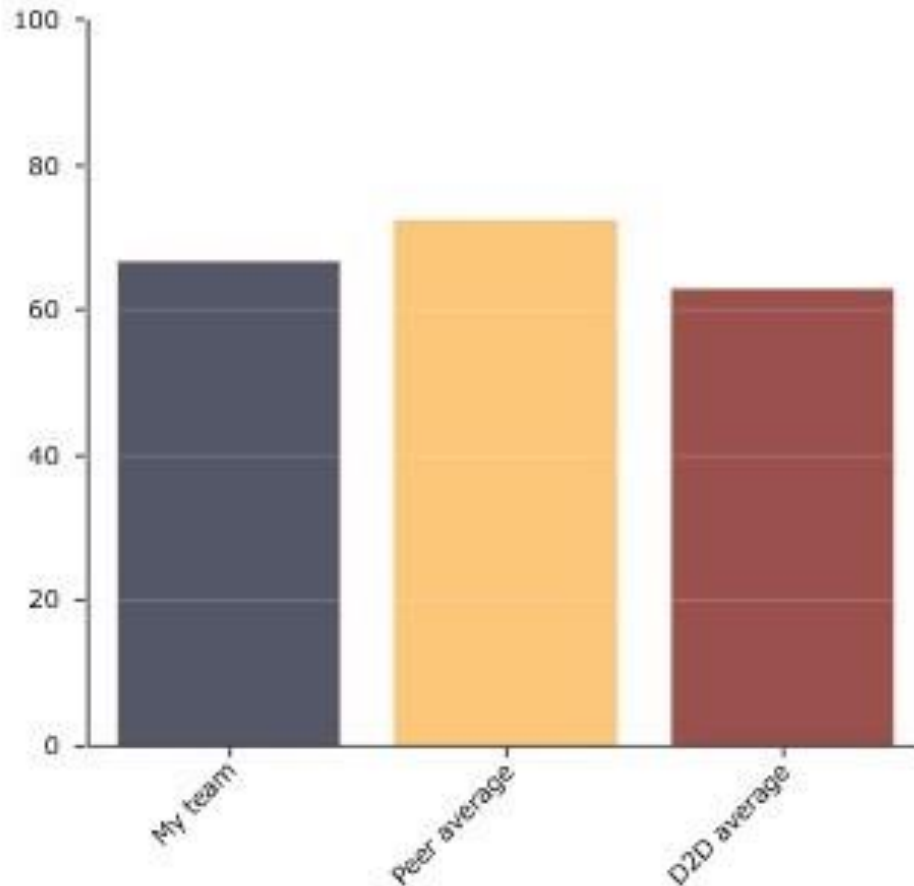
# Summary

- Small groups' guidance for AFHTO
- Take home messages from group participants

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My team score is 67.

My peers (urban, non-teaching teams of 10-30,000 rostered patients) have an average score of 72.

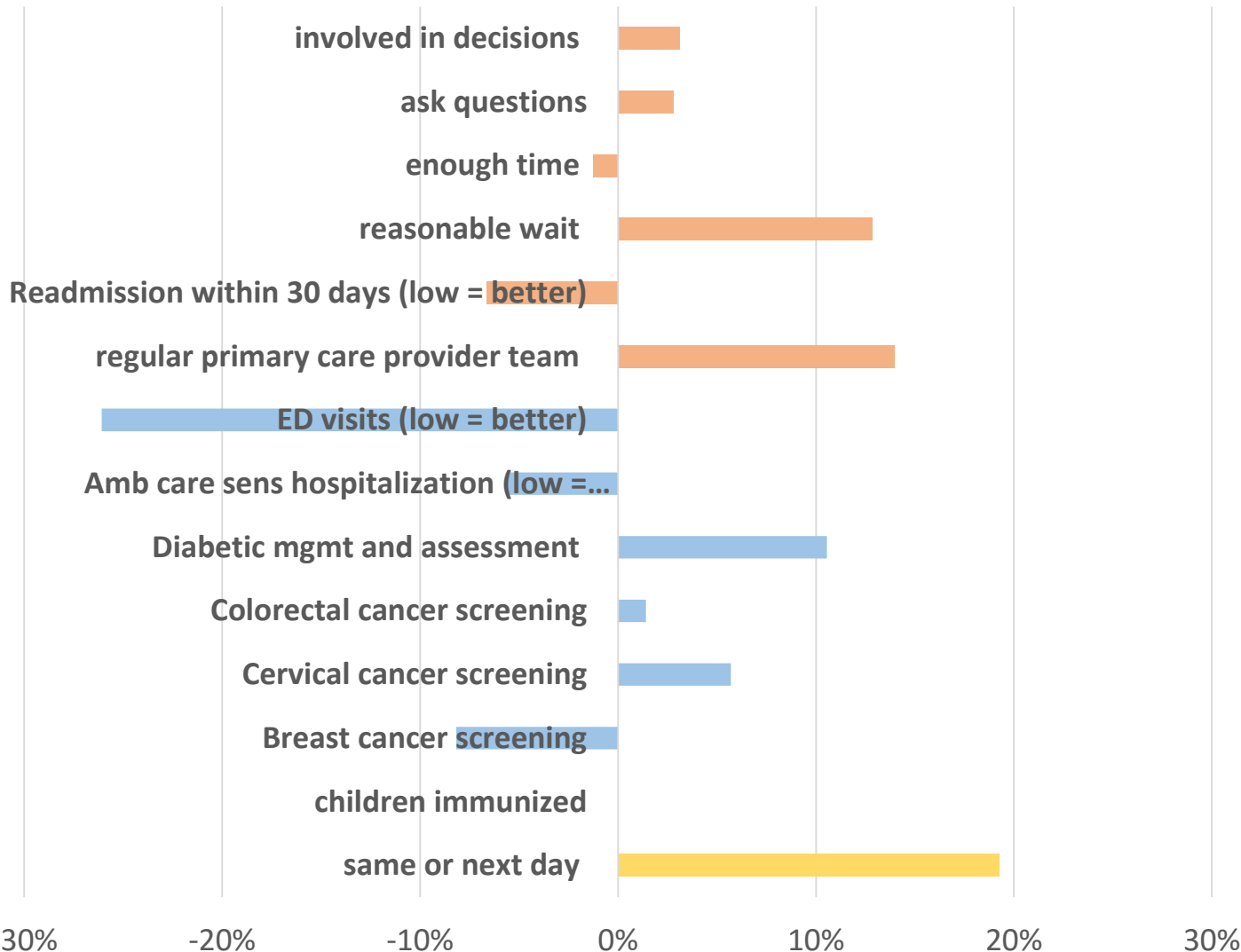
The database average (all teams contributing to D2D) is 63.

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.

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