

Indicator Management: Weighted Indicator Selection Matrix (QSFHT Model)

Abel Gebreyesus CLSSGB, B.A., MHI –

Quality Improvement Decision Support Specialist

Heba Sadek M.B.Ch.B, MHSc –

Executive Director



Presenters Disclosure

Presenters: Abel Gebreyesus and Heba Sadek

Relationships with Commercial Interests:

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

Affiliation / Financial Interest:

- We have not received any financial support from any organization with respect to this work.



Presentation Objectives

- 1) Why Accurate and Precise indicators matter to primary care performance
- 2) How to manage indicators
- 3) Mastering prioritization of indicators Using “Indicator Selection Matrix”
- 4) Show practical demonstration of how the tool works

Why Indicators Matter to Primary Care Performance

- Indicators measure performance: FHT sector is new to the table;
- FHTs are highly encouraged to adhere to the Primary Care Performance Measurement Framework that reflects quality dimensions but not indicators;
- FHTs decide which indicators they would like to report within these areas;
- Then, how do we select which indicators to report on....?

Indicators From Organizing to Prioritizing

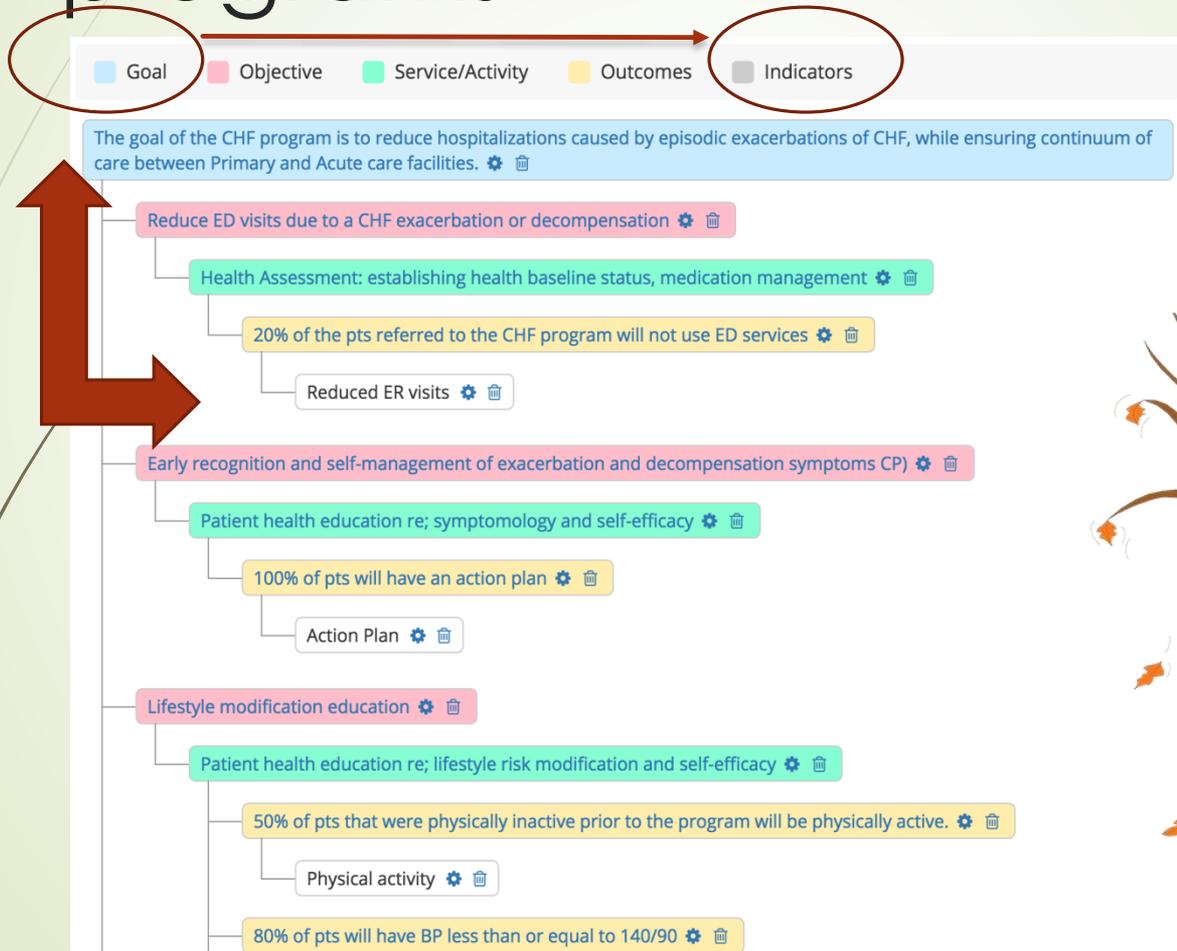
Organizing:
indicators tied to
programs structure
& PCPF

Mapping:
indicators defined

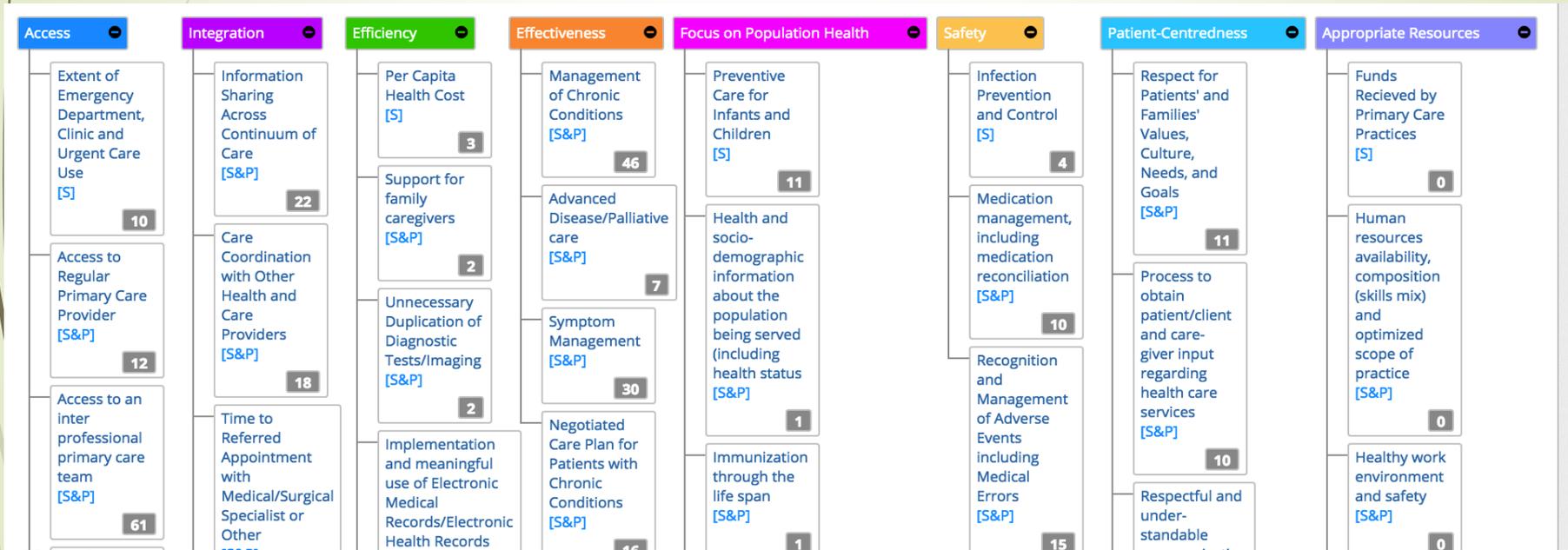
Prioritizing:
SMARTest
Indicator Selection
Matrix



Organizing: indicators tied to programs



Indicators Aligned with the Primary Care Performance Framework



Indicator Mapping for better data collection

A common language between clinical providers and QIDSS:

Reduced ER visits | Indicator Edit Form

Edit Indicator:

Indicator Name: Origin/Idea:

Description:

Measurement Data:

Target Population: Indicator Population:

Where is the data for this indicator found?

Please specify the source of the data?

Reporting Frequency: Annual Semi-Annually Quarterly Monthly Bi-Weekly Weekly Daily

Which reports is this indicator included? Annual Quarterly - Chronic

Please select a Primary Care Performance Measurement

- Access to an inter professional primary care team
- Hospital admissions and readmissions *(Effectiveness)
- Management of Chronic Conditions Symptom Management
- Medication management, including medication reconciliation





And now, prioritizing for
better quality

The Indicator Selection Matrix

Checking the checkers

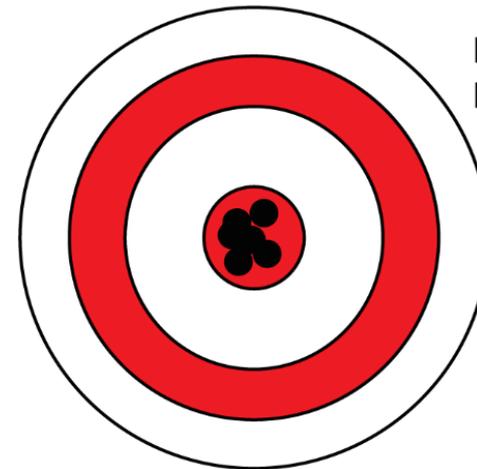
- Indicators check programs; who checks indicators?
- Often, either we don't have data to measure the actual work or the data we have is not accurate and precise.
- Without accuracy and precision, the indicator value is not actually measured. High accuracy with high precision is the basics of measurement of any value.



**High Accuracy
Low Precision**



**Low Accuracy
High Precision**



High accuracy
High precision



Indicators Selection Matrix: How It Works

- Adapted from Six Sigma principle of how to select viable QI projects
- The steps:
 - Establish the selection **criteria**
 - Set up the matrix (can be adapted)
 - Compare and evaluate the ratings
- This process will assure a program to have “SMARTest” indicators

Step 1 - Indicator Selection Criteria

Weight	Selection Criteria
4	Validity: Does the data well represent the indicator, is it valid? Is another data point more clinically robust? The data point chosen should be highly indicative of the indicator.
6	Availability: Can the data be easily obtained through the EMR or other reliable source? Data should be easy to extract and not cumbersome, difficulty in extraction leaves room for errors.
5	Reliability: Is the data entered in a standardized way and trustworthy? Is the data process highly reproducible such that data point of interest can be yielded consistently?
3	Representative: Do the selected data points represent the entire population of interest?
2	Manageability: Is the process to store and analyze the data clearly definable and elegant? Like Availability, Manageability will affect the quality of the data output and usability.
3	Mandatory? Is the indicator highly encouraged or mandated by a funder or reporting body? Weigh system level relevance against organization specific applicability

Criteria: Team Decision

- **Team-based decision tool:** achieve consensus through critical discussion
- **Customize tool:** criteria and weight selection based on organization needs, priorities, etc.
- **Streamline Process:** Get better results through consistency in measuring at the organizational level (especially over time)

Step 2 – Set up the Matrix

(Can be adapted)

	Data Validity		Data Availability		Data Reliability		Representativeness		Manageability		Mandatory?	
	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight
Program A												
Program B												
Program C												
Program D												

Step 3 – Rate, Compare and Evaluate

		Weight Based Indicator Selection Matrix														
		Data Validity		Data Availability		Data Reliability		Representativeness		Manageability		Mandatory?				
Indicator List		Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Total	Benchmark	Decision
Program A	Indicator A	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator B	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator C	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator D	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator E	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
Program B	Indicator A	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator B	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator C	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator D	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator E	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
Program C	Indicator A	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator B	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator C	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator D	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator E	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
Program D	Indicator A	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator B	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator C	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator D	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator E	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
Program E	Indicator A	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator B	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator C	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator D	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		
	Indicator E	4	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0		

Indicators Selection Matrix At Work (Example 1)

- **Reference Program: Diabetes**
- Indicator: Number of patients with T2DM with an HbA1C in target (≤ 7) within 3-6 months of program initiation

		Data Validity		Data Availability		Data Reliability		Representativeness		Manageability		Mandatory?				
Indicator List		Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Total	Benchmark	Decision
Diabetes	A1C Target	4	4	5	6	4	5	2.5	3	2	2	3	3	86.5		
	Indicator B		4		6		5		3		4		3	0		
	Indicator C		4		6		5		3		4		3	0		

- Will this indicator demonstrate effectiveness of clinical intervention on individual diabetes management?

Indicators Selection Matrix At Work (Example 2)

- Reference Program: Diabetes
- Number of patients who attend diabetes group intervention

		Data Validity		Data Availability		Data Reliability		Representativeness		Manageability		Mandatory?		Total	Benchmark	Decision
Indicator List		Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight	Score	Weight			
Diabetes	A1C Target	4	4	5	6	4	5	2.5	3	2	2	3	3	86.5		
	Group Intervention	0	4	6	6	5	5	0	3	2	4	0	3	69		
	Indicator C		4		6		5		3		4		3	0		

- Will this indicator demonstrate the effectiveness of the group intervention at helping patients identify possible psychosocial causes of pain?

Results of using the tool

- Decreased our list of indicators by 1/3;
- Placed data collection at par with clinical outcomes
- 40 or more unique forms were designed with clinical data points; capturing more than 1000 data fields based on selected reportable indicators.



Questions?



THANK
YOU!!!