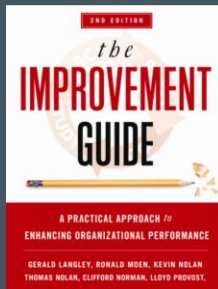


## Improvement Science *in Action*:

# What are we trying to accomplish?



Chapter 5

Debbie Ray

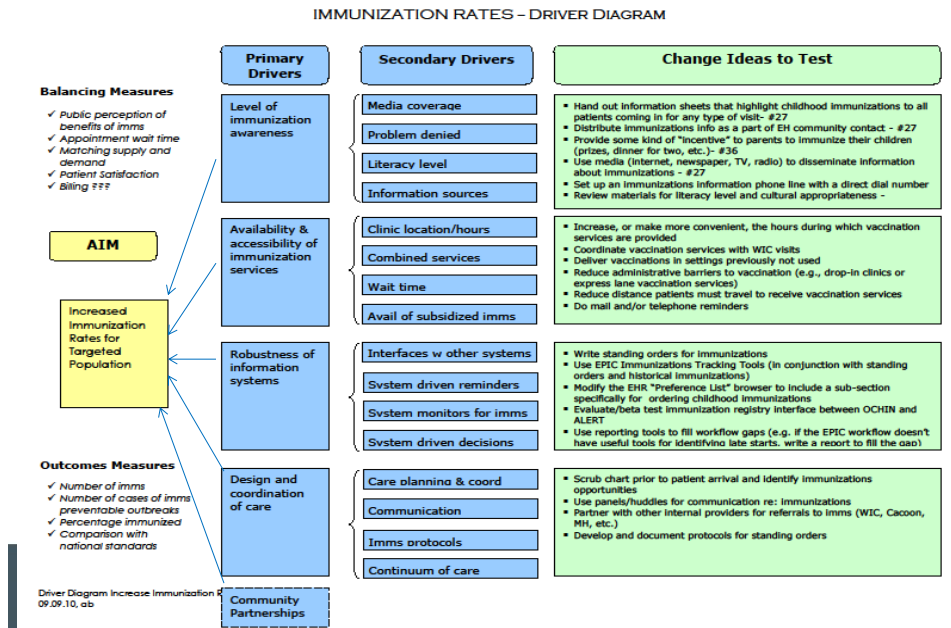
April 30, 2014

## Objectives

By the end of this session you will be able to:

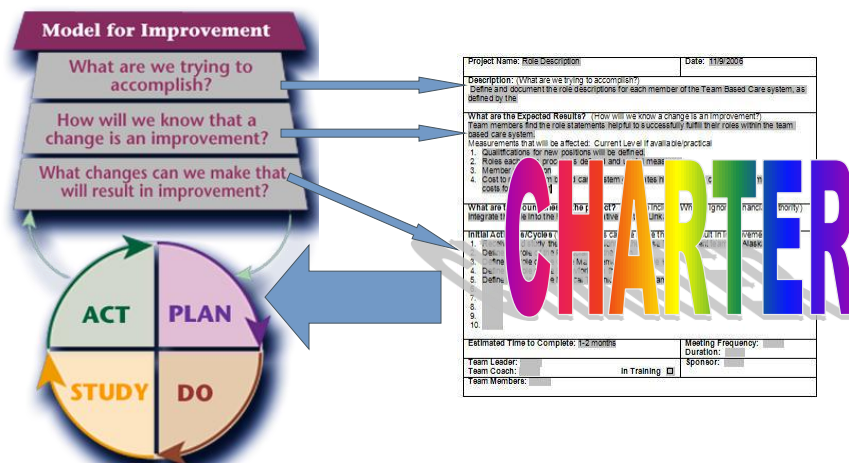
- Evaluate and strengthen improvement charters
- Identify key components and Develop a strong aim statement
- Evaluate your team's project Charter to be more effective and lead to greater likelihood of success
- Identify the contextual factors that influence improvement project success from you MUSIQ evaluation
- Describe ways to mitigate barriers you detected using MUSIQ

## Example of a Driver Diagram



## Use of the Model to ensure changes are Improvements

*The Project Charter provides the set up for answering the three questions.*



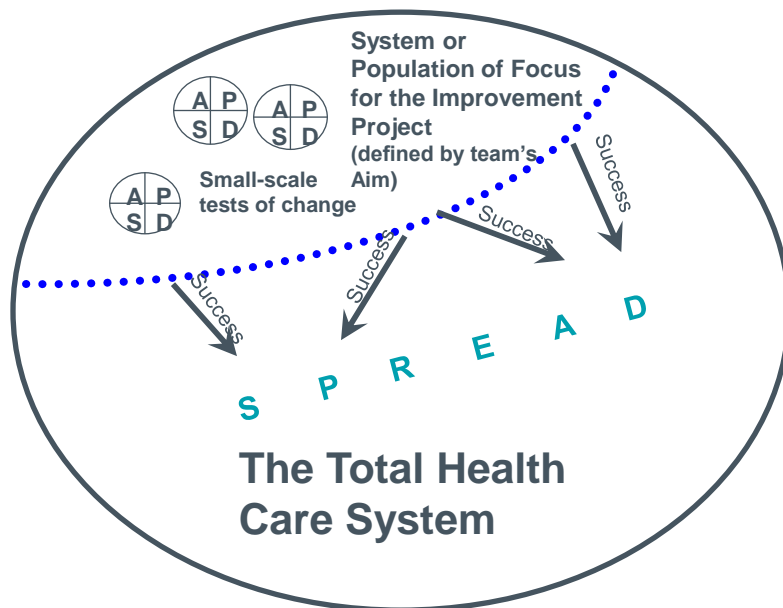
## What Are We Trying to Accomplish?

- A team's aim statement is part of the charter and should include:
  - What is expected to happen
    - Reduce errors, save \$, etc.
  - Timeframe
    - Actual dates
  - The system to be improved
    - Medication distribution, pt assessment, chronic care system
  - The setting or sub-population of patients
    - Pilot populations

IG Page 90



### System to be Improved Vs. Pilot Populations



## What Are We Trying to Accomplish?

- A team's aim statement should include:
  - What is expected to happen
  - Timeframe
  - The system to be improved
  - The setting or sub-population of patients
  - **Goals**
    - Breakthrough numeric goals
    - Why it is important to work on now (business case)
  - **For some teams:**
    - Guidance for the activities such as strategies for the effort, limitations, who to keep involved

IG Page 90



### Example: ABC's Aim:

#### Improve Severe Sepsis Care and Decrease Severe Sepsis Mortality

Between Oct 2011 and Aug 2012, we will improve the care of patients in the City South ED with severe sepsis/septic shock through early recognition and delivery of evidence-based best practices\* thereby decreasing sepsis mortality.

- Goals:
  - 10% relative reduction in severe sepsis mortality rate at City South
  - 90% of patients with severe sepsis coming through ED will be identified within 60 minutes of seeing a provider
  - 100% of ED patients diagnosed with severe sepsis will receive evidence-based treatments
- \*Guidance: Best practices are defined as the bundle elements critical to early recognition and treatment of severe sepsis including:
  - lactate levels, -blood cultures, -antibiotic administration within 60 minutes, -
  - and fluid resuscitation.



## Exercise: Critiquing an Aim Statement---5 Min

---

1. Each table please evaluate this team aim statement
2. Assess the team's aim statement related to the previous slides concerning what an aim statement should include.
3. Be ready to share briefly
  - What are the strengths of the statement?
  - What's missing, needs to be strengthened?



## Exercise: Chronic Asthma Team Aim Statement

---

- Aim: We are a system with 16 clinics serving approximately 8200 people with asthma. We recognize that our current treatment of the population with asthma is not optimal. Using the ICIC Chronic Care Model we will improve such that, over the next 13 months, our population of patients with asthma will experience a 25% increase in symptom-free days, a 30% reduction in the number of exacerbations reported, and a 60% reduction in the total number of hospital days.



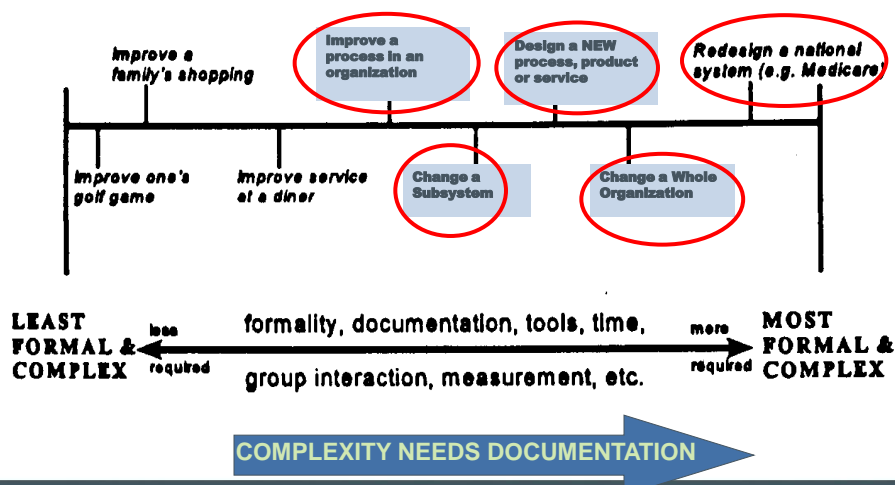
## What Are We Trying to Accomplish?

- A team's aim statement should include:
  - What is expected to happen
  - Timeframe
  - The system to be improved
  - The setting or sub-population of patients
  - Goals
    - Breakthrough numeric goals
    - Why it is important to work on now (business case)
  - For some teams:
    - Guidance for the activities such as strategies for the effort, limitations, who to keep involved

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## Scale of Formality of Approach for Improvement Efforts



IG Page 238



## Standard Format and Definitions for a Charter

13

### What are we trying to accomplish?

General Description (briefly defines WHAT broadly)

•Provides an initial orientation toward the activities of the improvement initiative, e.g., design of a new process, improve an existing product or service, etc. Describes the subsystem(s), pilot population or demonstration unit in the organization in which the improvement will take place.

Reason for the Effort (defines WHY)

- Why is the effort important?
- How will this improvement benefit the organization?
- What is the potential downside of this effort for the organization?
- What data/analysis supports the choice?
- How does it impact patients?

Expected Outcomes (defines WHAT specifically, still not HOW)

- Anticipated outcomes (products, tools, and deliverables) or success criteria.
- Specific objectives to be accomplished.
- Specific, numerical goals to be attained.
- Business impact (financial, throughput, cost, and productivity).
- Time frame: expected dates for key milestones and completion date.

### How do we know that a change is an improvement?

Feedback, Measures or Indicators: define the measures that will be used to monitor the impact of this 10 MONTH improvement effort:

- Connect measures to the goals and outcomes of the charter
- Measures monitor and guide progress of work on the charter.
- Consider qualitative feedback as well as quantitative measures.
- Consider both outcome and process measures.
- Are balancing measures needed to guard against sub-optimization (unintended consequences)?

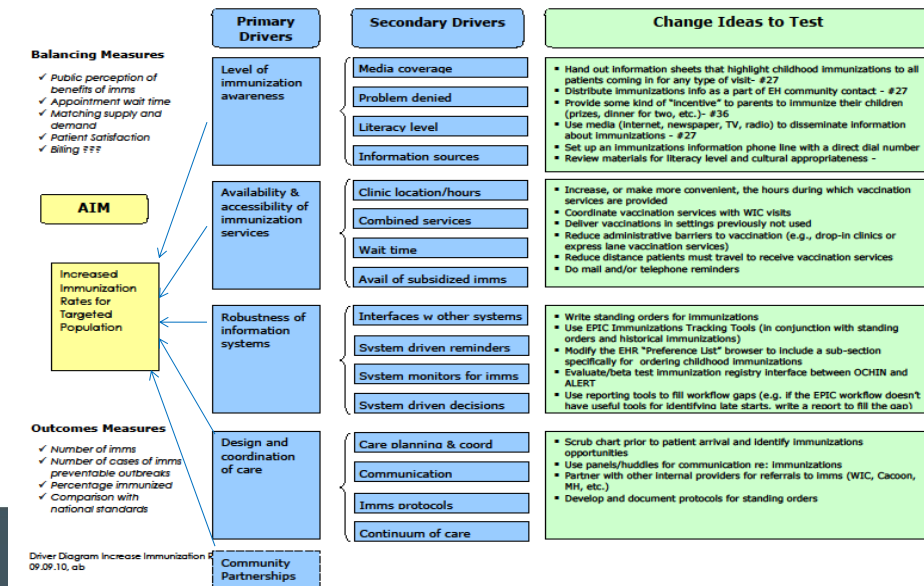
### What changes can we make that will lead to improvement?

- Initial Activities: provide initial focus for the project work, e.g., specific issues to investigate and/or alternatives to consider, concept design for the team to work with, guidance on adapting and testing some specific change ideas, summarize recent patient feedback, do a process map of current reality, etc.
- Boundaries: list any project constraints, financial limitations, existing guidelines or procedures to be adhered to, software considerations, what is not to be addressed, etc.
- Resources: Team membership (includes all members and the rationale for their inclusion on the team) and their expected time commitments for the work.
- Sponsorship: States the person or guidance team that is providing resources to work on the charter.

IG 90-91

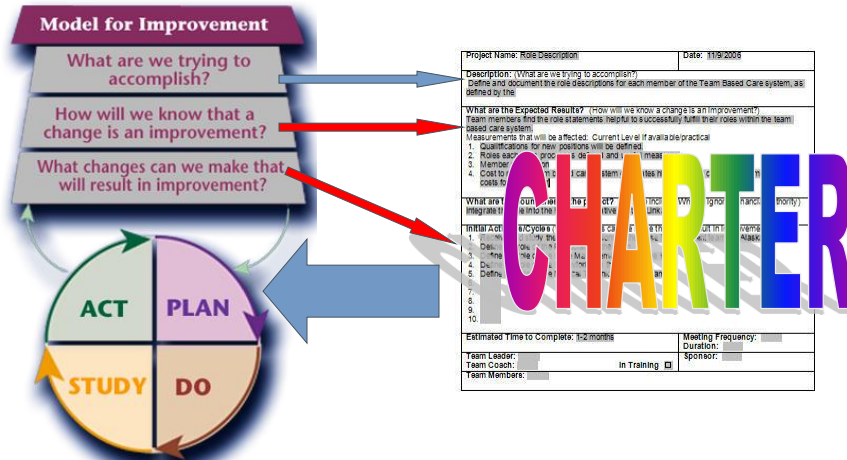
## Example of a Driver Diagram

IMMUNIZATION RATES – DRIVER DIAGRAM



## Use of the Model to ensure changes are Improvements

The Project Charter provides the set up for answering the three questions.



### Improvement Project Charter Assessment

Name:  Project Name:  Reviewer/Date:   
 Assessment: 1: Not at all 2: To a small extent 3: Somewhat  
 4: To a large extent 5: To a very great extent

#### WHAT ARE WE TRYING TO ACCOMPLISH? Aim and Rationale

<input type="checkbox"/>	Charter relates to organization's strategic plans/objectives.	
<input type="checkbox"/>	Charter description clearly states need for improvement.	
<input type="checkbox"/>	Expected impact to the organization is clear (clinical outcomes, cycle time, financial etc.)	
<input type="checkbox"/>	Improvement clearly points to process, product or service or sub-system improvement.	
<input type="checkbox"/>	Impact on patient or external customer is clear	
<input type="checkbox"/>	Expected outcomes are clear and the team will know when it has completed the project.	
<input type="checkbox"/>	Specific, numerical goals to be attained.	
<input type="checkbox"/>	Project can be completed within time frame	

#### HOW WILL WE KNOW A CHANGE IS AN IMPROVEMENT? Feedback and Measures

<input type="checkbox"/>	An appropriate family of measures is identified	
<input type="checkbox"/>	Measures identified are directly related to the project description, objectives, and goals.	
<input type="checkbox"/>	Historical data exist on performance of the process or product to be improved.	
<input type="checkbox"/>	Outcome, process, and balancing measures are specified.	
<input type="checkbox"/>	Measures can be collected at intervals frequent enough to assess progress on the project	
<input type="checkbox"/>	Improvement in the project measures can reasonably be expected within project time frame	
<input type="checkbox"/>	Financial impact is easily calculated and supported by the organization's financial group.	

#### WHAT CHANGES CAN WE MAKE WHICH WILL RESULT IN IMPROVEMENT? INITIAL CYCLES, BOUNDARIES, OTHER GUIDANCE

<input type="checkbox"/>	Specific issues to investigate and/or alternatives to consider are given.	
<input type="checkbox"/>	A concept design or change package is identified	
<input type="checkbox"/>	Project constraints are defined including what is NOT to be addressed.	
<input type="checkbox"/>	The objectives clearly state the team can develop, test and implement changes.	
<input type="checkbox"/>	Project is tied to specific processes or sub-systems	
<input type="checkbox"/>	Initial activities or PDSA cycles are suggested	

#### PARTICIPATION: Team Membership

<input type="checkbox"/>	All appropriate subject matter knowledge is represented on the improvement team	
<input type="checkbox"/>	Process owner (authority to make changes) is represented or Sponsor of team.	
<input type="checkbox"/>	People with detailed knowledge of the targeted system are on the team.	
<input type="checkbox"/>	Patients, customers or suppliers are on the team.	

#### IN CONSIDERATION OF PROJECT SELECTION AND/OR SCOPE

<input type="checkbox"/>	What could cause this project to fail? (Subtract 1 (little) to 5 points. (many things). Include narrative.	
<input type="checkbox"/>	TOTAL RATING	

#### Total Evaluation Rating

- > 95 Good Project charter definition
- 76-95 Consider improving or clarifying the project charter (see low ratings)
- < 75 Rework or Reevaluate the need for this improvement charter

## Exercise: Critique Your Entire Charter (25 min.)

---

1. Each table please evaluate the Charter using the assessment form.
2. Please be sure to record a score for each element on the form as well as the total
3. Be ready to share



Oregon Health Authority

# Model for Understanding Success in Quality - MUSIQ

*Debbie Ray*



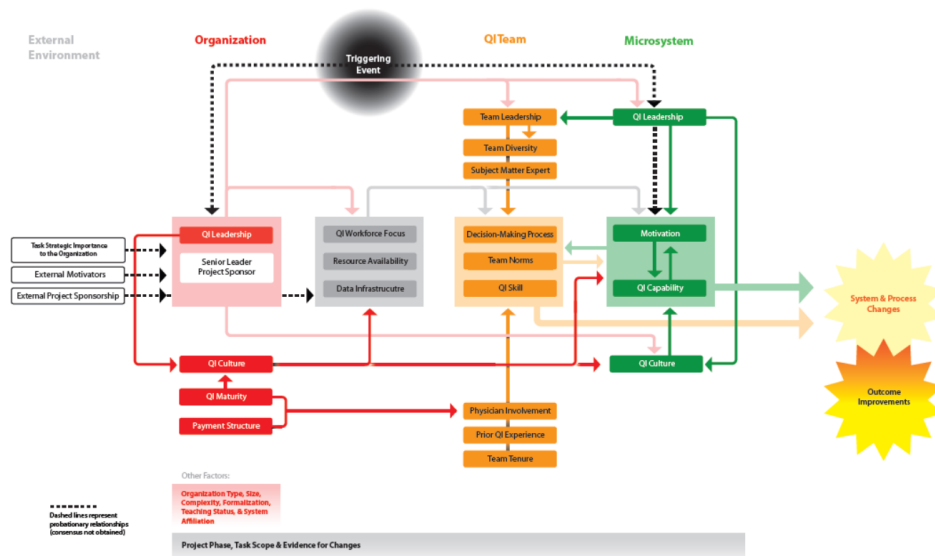
April 30, 2014

## Why use the MUSIQ Assessment?

- Gives us a method to reflect on the set-up and contextual support for our improvement projects.
- Provides the opportunity to make adjustments to project and organizational support systems early in the project.



### MUSIQ: Model for Understanding Success in Quality

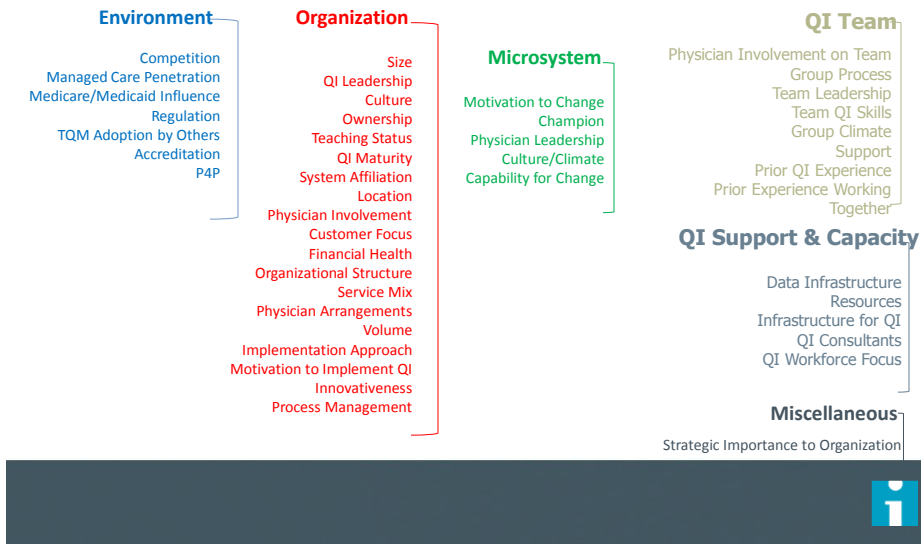


Kaplan et al. *BMJ Quality & Safety*, 2011

## Development of MUSIQ

• Systematic search identified 47 studies empirically examining context in QI.

• 66 Contextual Factors Identified



## Example: Microsystem Motivation

**Ideal: complete survey at team meeting to get input, then consensus, of rest of team members**

Indicate the extent to which you agree or disagree with this statement on a 1-7 scale:

*Microsystem staff who are not members of the QI team have a strong desire to improve performance in the area of focus of this QI project*

<b>Totally Agree</b>				<b>Neither Agree nor Disagree</b>			<b>Totally Disagree</b>
7	6	5	4	3	2	1	

## MUSIQ CALCULATOR SUMMARY TAB

Summarizes the assessments from each of the MUSIQ components after they are completed.

168	Highest possible MUSIQ score	Contextual Factor	Score
120-168	Project has a reasonable chance of success	External Motivators	0
80-119	Project could be successful but possible contextual barriers	External Project Sponsorship	0
50-79	Project has serious contextual issues and is not set up for success	Organizational QI Leadership	0
25-49	Project should not continue as is; consider deploying resources to other improvement projects	Organization Senior Leader Sponsor	0
24	Lowest possible MUSIQ score	Organization QI Culture	8
		Organization QI Maturity	0
		QI Workforce Focus	0
		Resource Availability	0
		Data Infrastructure	0
		QI Team Leadership	0
		QI Team Diversity	0
		QI Team Subject Matter Expert	0
		QI Team Decision-Making Processes	0
		QI Team Norms	0
		QI Team QI Skill	0
		QI Team Physician Involvement	0
		QI Team Prior QI Experience	0
		QI Team Tenure	0
		Microsystem QI Leadership	0
		Microsystem Motivation	0
		Microsystem QI Capability	0
		Microsystem QI Culture	0
		Task Strategic Importance to the Organization	0
		Triggering Event	0

## MUSIQ Insights

- Who completed the MUSIQ assessment by themselves?
- Who completed the MUSIQ assessment with their improvement team?
- Scores - 25-49; 50-79; 80-119; 120-168?
- What are you insights from the MUSIQ assessment?  
Surprises? Identified areas to mitigate?



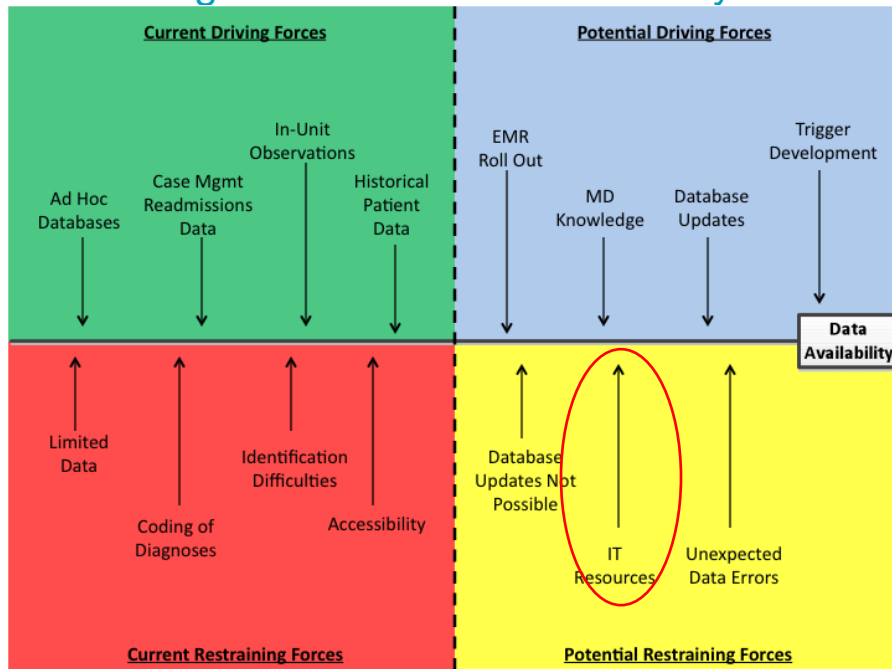
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Contextual Factor	Score
External Motivators	0
External Project Sponsorship	0
Organizational QI Leadership	0
Organization Senior Leader Sponsor	0
Organization QI Culture	8
Organization QI Maturity	0
QI Workforce Focus	0
Resource Availability	0
Data Infrastructure	0
QI Team Leadership	0
QI Team Diversity	0
QI Team Subject Matter Expert	0
QI Team Decision-Making Processes	0
QI Team Norms	0
QI Team QI Skill	0
QI Team Physician Involvement	0
QI Team Prior QI Experience	0
QI Team Tenure	0
Microsystem QI Leadership	0
Microsystem Motivation	0
Microsystem QI Capability	0
Microsystem QI Culture	0
Task Strategic Importance to the Organization	0
Triggering Event	0

## Mitigation and Force Field Analysis



## Force Field Analysis Exercise

- Identify the MUSIQ factor that needs support or mitigation, e.g. Data Infrastructure
- Brainstorm lists of:
  - Current Existing Restraining Forces
  - Current Existing Driving Forces
  - Potential Restraining Forces
  - Potential Driving Forces
- Organize in a Graphical Format
- Prioritize Current Driving and Restraining Forces
- Develop a Plan to Reinforce Drivers and Reduce Restraining Forces

Improvement Handbook, API, pages18-1-3



## Worksheet – 20 min.

Current Driving Forces

Potential Driving Forces

MUSIQ Factor  
In Need of  
Support

Current Restraining Forces

Potential Restraining Forces



## Summary

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- Context is important in the success of QI initiatives and needs to be examined systematically
- Using MUSIQ you can...
  - Identify aspects of context that must be addressed before or during the execution of your QI projects
  - Plan strategies to modify context for increased success



## MUSIQ References

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- Kaplan HC, Brady P, Dritz M, et al. The influence of context on quality improvement success in healthcare: a systematic review of the literature. *Milbank Q* 2010;88:500e59.
- Kaplan HC, Provost LP, Froehle CM, Margolis PA. The Model for Understanding Success in Quality (MUSIQ): Building a Theory of Context in Health Care Quality Improvement. *BMJ Qual Saf.* August, 2011 (doi:10.1136/bmjqs-2011-000010).
- Kaplan HC, Provost LP, Froehle CM, Margolis PA. An Exploratory Analysis of the Model for Understanding Success in Quality (MUSIQ) , *Health Care Management Review*, 2012, in press.

Kaplan, HC, Provost LP, Margolis PA. *Using the Model for Understanding Success in Quality (MUSIQ) to Guide Quality Improvement*, IHI Forum presentation , 2011

