



BUILDING THE BEST DESIGN TO IMPROVE OUTCOMES

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Patient Safety Specialist



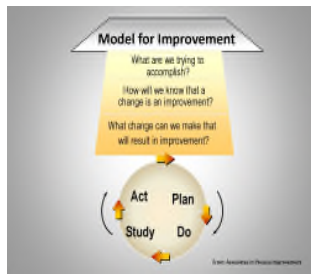
OBJECTIVES

- Describe the quality improvement model as adopted by the Institute of Healthcare Improvement (IHI).
- Examine tools that enhance the implementation of the Model for Improvement.
- Describe the roles and responsibilities of quality improvement teams.



THE MODEL FOR IMPROVEMENT

- The Model for Improvement Framework
- Three Fundamental Questions
- Repeated use of the PDSA cycle



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Model for Improvement

- What are we trying to accomplish? ▶ **Fundamental Question #1**
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Act Plan
Study Do

From: *Breakthrough in Process Improvement*

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- Identify improvement opportunity
- Determine project involvement (fundamental knowledge)
- Determine communication plan (stakeholders and sponsors)

Model for Improvement

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- Create understanding of the project and its scope using
 - Background information
 - Baseline data
 - Best practice information
 - Quality tools
- Establish aim statement(s)
 - S: Specific
 - M: Measurable
 - A: Attainable/Achievable
 - R: Relevant/Realistic
 - T: Time bound

Model for Improvement

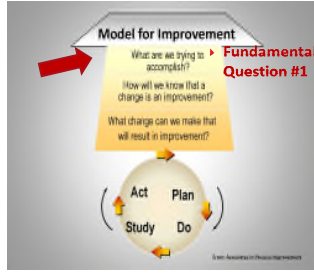
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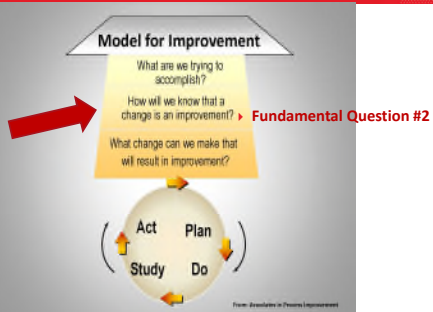
DEVELOPING AN AIM STATEMENT

- Action verb
- Measurable
- Answer "by when"
- Describe target population
- Include approach for change



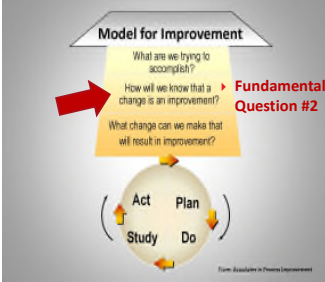
GROUP EXERCISE – HOW "SMART" ARE THESE AIM STATEMENTS?

1. Increase correct use of EHR templates from 0% to 100%.
2. Decrease clinic appointment wait times from 34 minutes to 28 minutes by FY18 Q2.
3. Reduce call abandonment rate by December 31st.



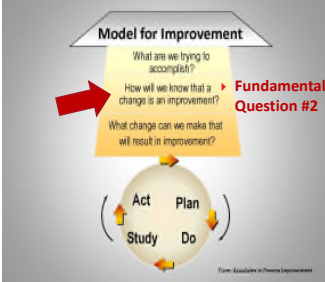
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- Establish measures to assess impact of change
 - Project Level – “Family of Measures”
 - Process
 - Outcome
 - Balancing
 - Patient/Staff Experience
 - PDSA Level – Specific to a particular test of change
- Relate to aim statement



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- What type of measure is needed?
- Give each measure a name
- Define the measure
 - What is to be measured
 - What should not be included
 - Describe data collection
- Determine frequency of reporting



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SAMPLE MEASURES

Aim: Reduce rate of acute care codes by 25% by December 31, 2017.

Type	Measure Name	Definition, how to collect, etc	Frequency
Outcome measure	Code rate	# Code events, as defined by CPR Committee, per 1000 patient days for target units	Monthly
Outcome measure	Days between code events	# Days since last code event, as defined by CPR committee, on target units	Monthly
Process measure	Simulation participation	Percent of staff on target units who participated in simulation exercises on the identification of the deteriorating patient	Weekly by shift
Balancing measure	RRT rate	# of RRT events per 1000 patient days for target units	Monthly

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Model for Improvement

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement? **Fundamental Question #3**

Act Plan
Study Do

From: *Equilibrium in Process Improvement*

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- Research the literature
- Benchmark
- Determine change concepts
 - Context of the issue
- Identify leverage points
 - Quality tools
- BE CREATIVE!!!!

Model for Improvement

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement? **Fundamental Question #3**

Act Plan
Study Do

From: *Equilibrium in Process Improvement*

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- Identify where to focus on making changes and what changes the team should PILOT
- Piloting (or performing tests of change) involves the next part of the Model for Improvement: PDSA Cycles

Model for Improvement

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement? **Fundamental Question #3**

Act Plan
Study Do

From: *Equilibrium in Process Improvement*



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QUALITY IMPROVEMENT TOOLS





POSITIONING FOR ENHANCED ENGAGEMENT IN QUALITY IMPROVEMENT (PEEQ)

BRAINSTORMING

- Need to generate ideas
- Team is stuck on "same old way" of thinking
- Team engagement
 - Pose question to group
 - Time limit
 - Write down and submit
 - NO IDEA IS A BAD IDEA



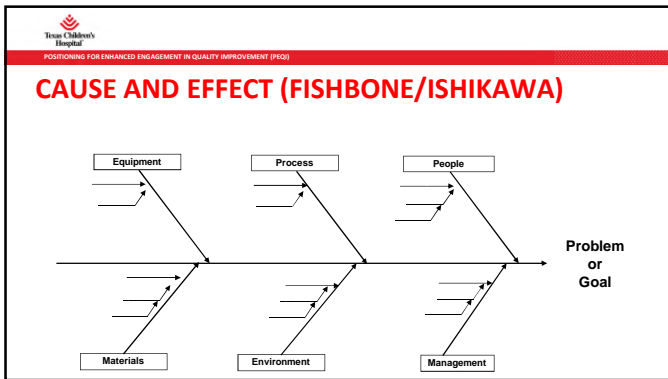


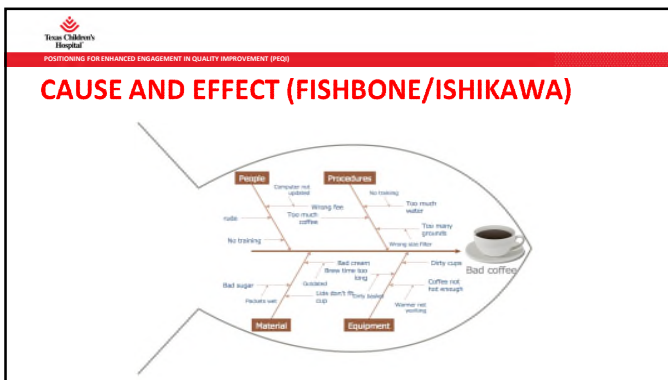
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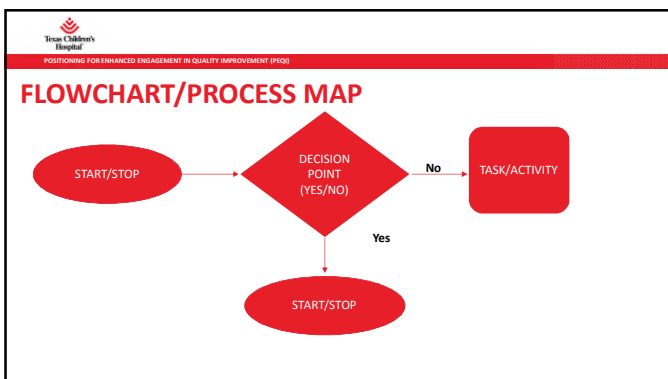
CAUSE AND EFFECT (FISHBONE/ISHIKAWA)

- Identify and display causes related to a problem
- Focus on content of problem
 - Place problem statement in box
 - Create major spines
 - Major cause categories
 - Labels should relate to category

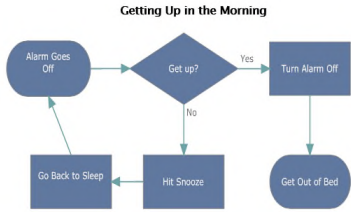








FLOWCHART/PROCESS MAP

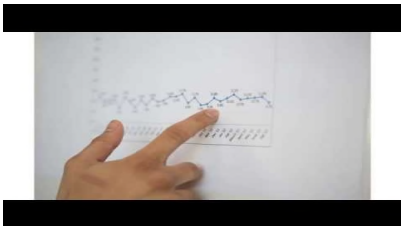


KEY DRIVER DIAGRAM

- Helps illustrate the big picture
- Links change concepts to the issue
- Encourages expansion of thinking
 - Outcomes
 - Drivers that influence outcome
 - Change ideas that can achieve drivers

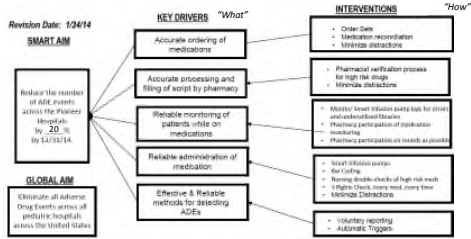


KEY DRIVER DIAGRAMS



https://www.youtube.com/watch?v=vfcE_Q-IRFg&feature=youtu.be

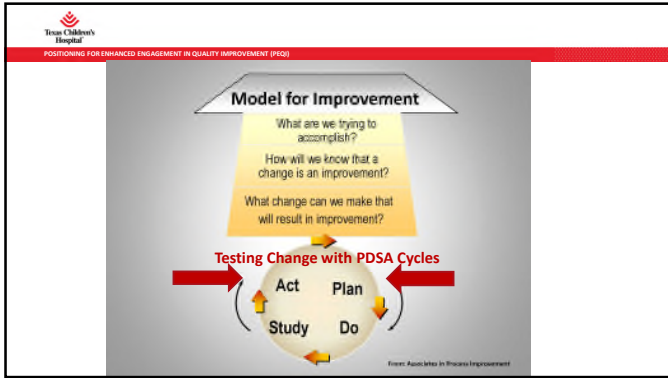
KEY DRIVER DIAGRAM – SPS ADE HAC



BREAK OUT SESSION

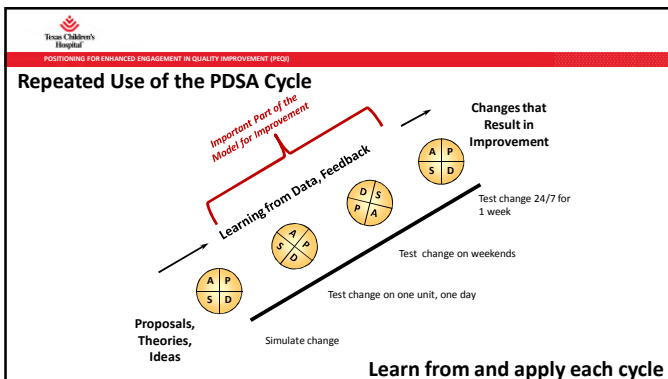


WHAT DID YOU LEARN?

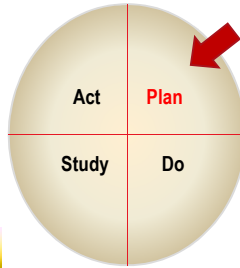


PLAN DO STUDY ACT

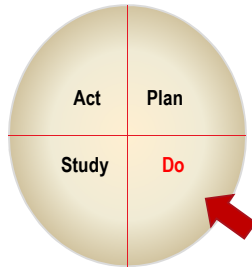
- Which changes lead to improvement
- How much improvement is expected
- Experience change prior to implementation
 - Believe in improvement
 - Minimize resistance
 - Adapt to conditions
- Cost implications



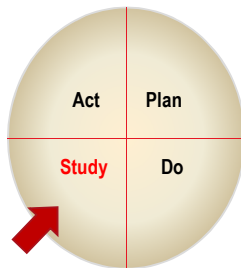
- What to change
- Rationale & predictions
- Plan change/test and data collection
- Avoid buy-in – use early adopters
- Scale down size, scope, and time
- Think a couple of cycles ahead
- **DON'T FORGET THE DATA!**



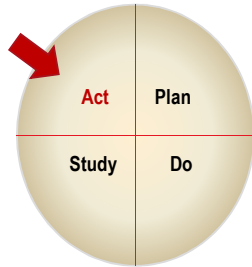
- Carry test/change plan
- Collect data
 - Successes
 - Problems
 - Unexpected observations
 - Feedback
- Begin data analysis



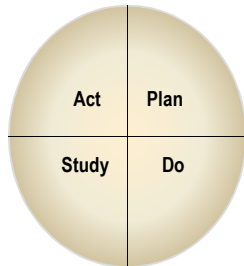
- Complete data analysis
- Compare data to predictions
 - Did it work as intended?
- Summarize what was learned



- Determine changes for next cycle
- Plan next cycle based on new knowledge
- Complete another small test of change



- Test or observation was planned (don't forget the data)
- Plan was attempted
- Data was analyzed
- Action rationally based on findings



PLAN DO STUDY ACT CYCLES

Goal is to learn from each cycle and apply new knowledge to next cycle until you are ready to *"Marry the Change"*



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BREAK OUT SESSION




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WHAT DID YOU LEARN?

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TEST YOUR KNOWLEDGE - THREE FUNDAMENTAL QUESTIONS

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What change can we make that will result in improvement?



<http://www.texasstate.edu/ivemen/ordental/Pag.html>



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TEST YOUR KNOWLEDGE - FAMILY OF MEASURES

- 1. Process
- 2. Outcome
- 3. Balancing
- 4. Patient/Staff Experience



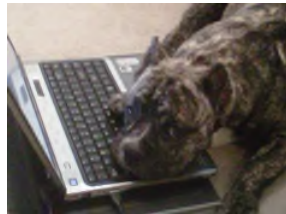
<http://www.texaschildrenshospital.org/credentialed/pag.html>



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TEST YOUR KNOWLEDGE - 4 STAGES OF PDSA CYCLES

- 1. Plan
- 2. Do
- 3. Study
- 4. Act
- 5. What is the goal of PDSA Cycles?





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REMEMBER!

- All improvement requires change but all change does not lead to improvement
- Data is key in impacting change
- The Model for Improvement and PDSA cycles are your friends
- **YOU ARE INTEGRAL TO THE CHANGE!!!**





QUALITY IMPROVEMENT TEAMS

Sharon Jacobson MBA RN CPHQ
Patient Safety Specialist



OBJECTIVES:

- Review the attributes of effective high performing teams.
- Describe the roles and responsibilities of quality improvement teams.
- Recognize team dynamics that maximize team effectiveness.



TEAM

- A *group* of multi-skilled employees
- Improve production or process
- Design new process
- Linked in a common purpose
 - High-complex tasks
 - Interdependent subtasks





TYPES OF TEAMS

- Project Teams
 - Temporary, special focus
 - Core members participate throughout project
 - Affiliated (resource) members participate when needed
- Ongoing or Functional Teams
 - More permanent
 - May be natural work teams or process management teams



GROUP EXERCISE

- Experiences/Observations
 - Characteristics of Effective Teams
 - Characteristics of Ineffective Teams



CHARACTERISTICS OF EFFECTIVE TEAMS



<https://www.bing.com/videos/search?q=Successful+Team+Characteristics&viewwdetail&mid:B891AE58A64DE5D85C228A91AE58A64DE5D85C22&FORM=VRDGAR>



HIGH PERFORMING TEAMS

- Goal Clarity
- Complementary Leadership
- Appropriate Membership
- Collaborative Style
- Organizational Support





STAGES OF TEAM GROWTH

- **Forming**
 - Proud and excited yet worried about the job ahead
- **Storming**
 - Fluctuations in attitudes - defensiveness, competition, arguing, disunity
- **Norming**
 - Formation of cohesion
- **Performing**
 - Ability to prevent work group problems or work through them
 - Satisfaction at the team's progress



CHALLENGES OF TEAMWORK

- Unclear or meaningless goal or purpose
- Meetings unfocused or waste of time
- Lack of contribution
- Blaming vs. owning
- Expression of concerns or frustration
- Constructively discuss differing views and opinions
- No clear plan for achieving their goals

TEAM MEMBER ROLES AND RESPONSIBILITIES



TEAM ROLES

- Sponsor
 - Aids in problems/process selection
- Leader
 - Orchestrates activities
 - Maintain records
 - Communication link to organization
- Coach
 - Facilitates project



TEAM ROLES

- Members
 - Complete project tasks
 - Share knowledge/experience
 - Patient and families
- Stakeholder(s)
 - Impacted by work
 - Involved at different levels





EFFECTIVE TEAM LEADERS

- Organize the team - assign roles
- Articulate clear goals – timeline and deliverables
- Make decisions through collective input of members
- Empower members to speak up and challenge when appropriate
- Make it safe - mutual respect and purpose
- Actively promote collaboration
- Skillful at conflict management



EFFECTIVE TEAM MEMBERS

- Contribute fully to the project
- Assist team leader with meeting management
- Listen to others and stay open to ideas
- Carry out assignments between meetings including getting input and “buy in” from their colleagues along the way
- Recognize they may implement the change themselves



TEAM MEMBER PROFILES



CHAMPION (THE HUSKY)

- Outspoken, Confronting
- Rule Breaking, Iconoclastic
- Power/Control Seeking
- Driven, Passionate
- Action Oriented
- Content/technical expert, but may wear leader hat



Adapted from Andri' L. Delbecq, TCH AQI Fall Course, 2011

STATESPERSON (THE MASTIFF)

- Strategic Thinker
- Influential in Organization
- Politically Discriminating
- Effective Communicator
- Trusted Exemplar of Values
- Well Networked



Adapted from Andri' L. Delbecq, TCH AQI Fall Course, 2011

COORDINATOR/FACILITATOR (THE GOLDEN RETRIEVER)

- Well Developed Internal/External Networks
- Social Orientation
- Facilitation Skills
- Low Power Needs



Adapted from Andri' L. Delbecq, TCH AQI Fall Course, 2011

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TECHNICAL SUPPORT (THE TERRIER)

- Budgets, Forms, Documentation
- Compliance
- Bureaucratic Buffering
- General Support
 - *Often Part-Time Assignment*



Adapted from André L. DeBacco, TCH AQI Fall Course, 2011

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KEY TEAM INGREDIENTS

Today's Recipe for Teamwork Success

1 Gallon of Trust
 3 Quarts of Commitment
 5 Pints of Effective Communication
 4 Cups of Collaboration
 2 Tbsp. of Conflict Resolution
 12 Tsp. of Innovation and Creativity
 and a Blended Dash of Team Spirit,
 Desired Outcomes and Success

**Adjust portions where needed.*

~ Ty Howard

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Quality Resources























REFERENCES

- Langley G. J., Nolan K. M., Norman C. L., Provost L. P., Nolan T.W. (2009). *The improvement guide: a practical approach to enhancing organizational performance*. (2nd ed.) New York, NY; Jossey-Bass.
- Scholtes, P. R., Joiner, B. L., & Streibel, B. J. (1996). *The team handbook*. (2nd ed.). Madison, WI: Oriell Incorporated.
- Brassard, M., Ritter, D. (1994). *The memory jogger II: a pocket guide of tools for continuous improvement and effective planning*. (1st ed.). Salem, New Hampshire; Goal QPC Incorporated.



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COMMENTS/QUESTIONS?

Improvement Methodology

Model for Improvement

- Identify Improvement Opportunity
- Determine who needs to be involved in the project (fundamental knowledge)
- Determine who needs to be informed of project (stakeholders; project sponsors)
- Build common understanding using quality tools, background information, baseline data, and best practice information
- Establish project aim statement(s)

What are we trying to accomplish?

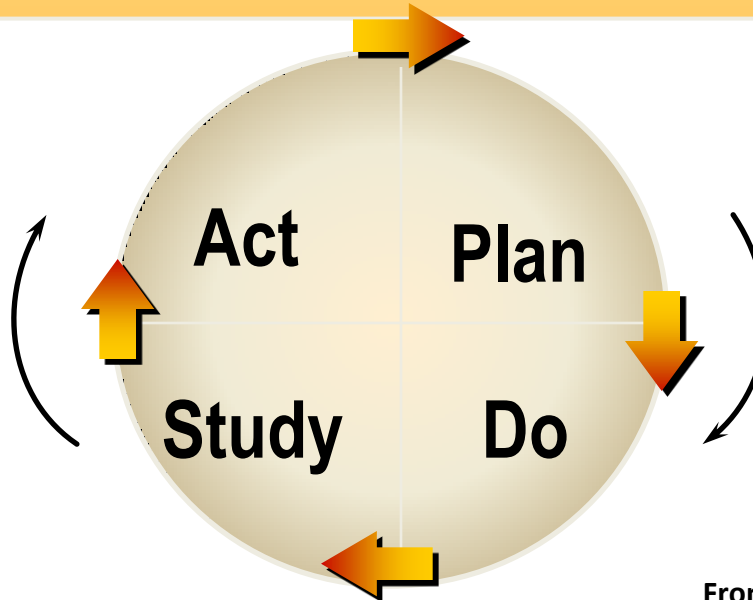
How will we know that a change is an improvement?

What change can we make that will result in improvement?

- Establish (outcome, process, balancing, & financial) measures to assess impact of change
- Key measures relate back to project aim statement

- Develop change idea(s) / concepts by identifying leverage points in current system or inventing new ideas

- Test change idea(s) using PDSA cycles: planning and carrying out tests of change (starting small and increasing in size, as appropriate), collecting test data, analyzing the data, and making necessary modifications based upon data for next PDSA cycle



MEASURE DEVELOPMENT TOOL

What do you need to know? (notes section)

Measure Type:

Outcome Process Balancing Experience (perception) Structural

Focus/Population: Criteria of what's in and/or what's out

Data Source: Describe where to get the information needed for the measure

EPIC (report or abstract) Survey Observation Experience

Other:

Plan for Collecting Data: What is needed to collect data for this measure? Who is going to do? When will it be done?

Frequency measure to be calculated : Daily?, Weekly?, Monthly?, Quarterly?, Other?

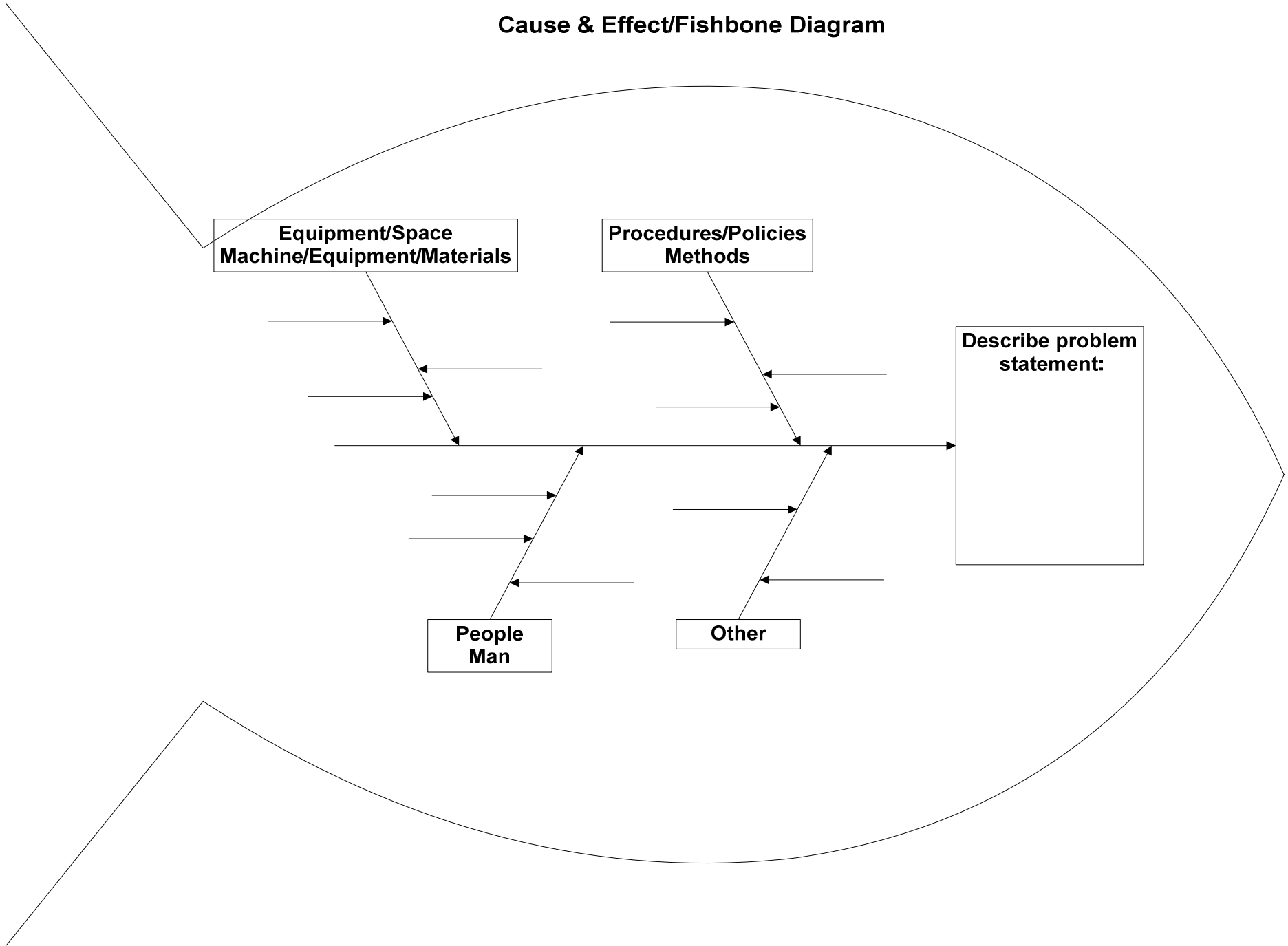
Is there a numerator and denominator? If so, describe:

Numerator:

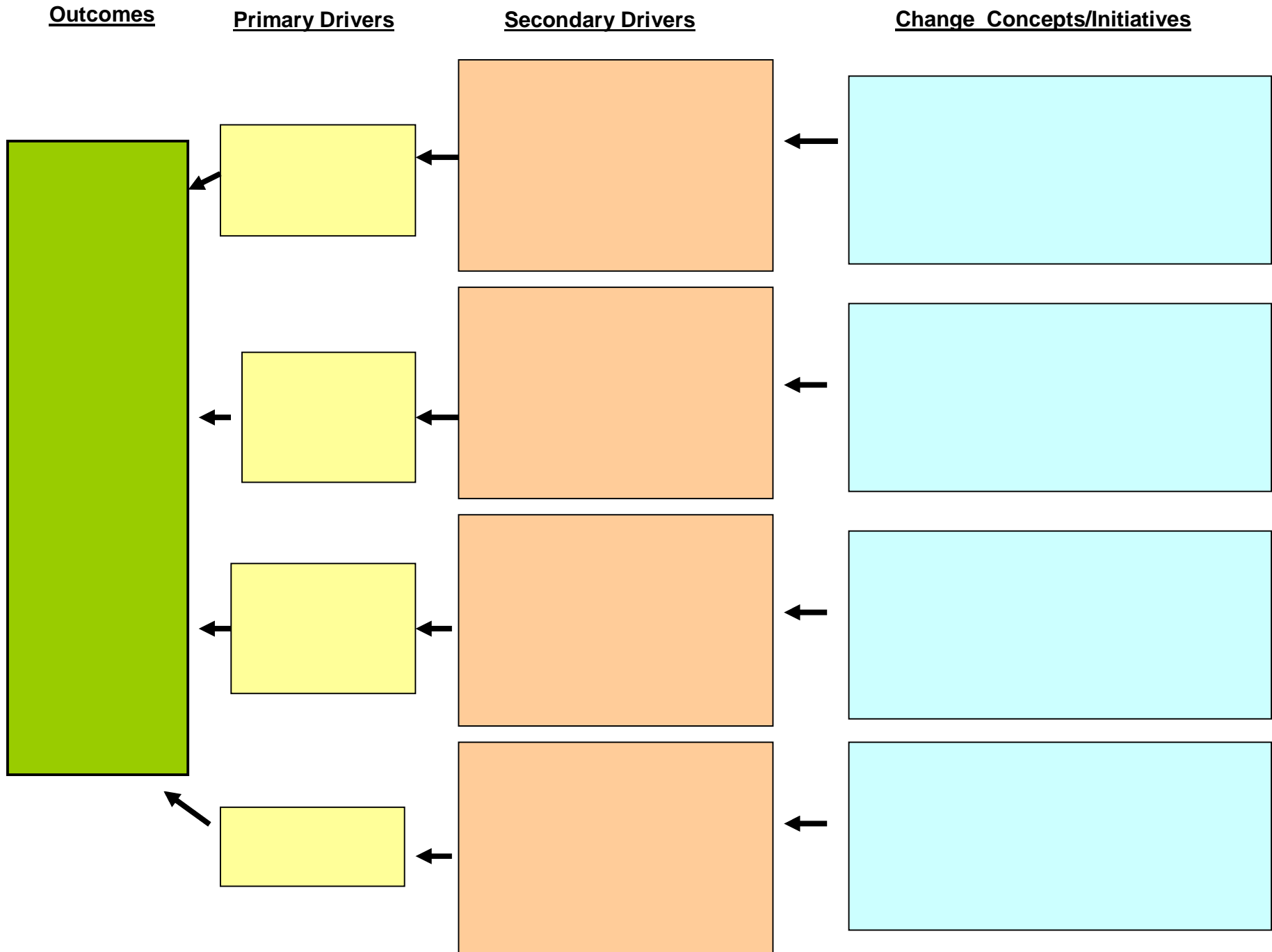
Denominator:

Measure Name:

Cause & Effect/Fishbone Diagram



Blank Key Driver Diagram





PLAN DO STUDY ACT Worksheet

Project:			
P S	D A	PDSA Topic:	
		Cycle #:	Date:
		Objective for this PDSA Cycle:	
P L A N	Questions:		
	Predictions:		
	Plan for Change or Test: <ul style="list-style-type: none"> • Who: • What: • When: • Where: 		
	Plan for Collection of Data: <ul style="list-style-type: none"> • Who: • What: • When: • Where: 		
D O	Carry out the Change or Test. Collect Data and Begin Analysis.		
S T U D Y	Complete Analysis of Data. Summarize what was Learned.		
A C T	Are We Ready to Make a Change? Plan for the Next Cycle.		