

# Introduction to the Use of Systems Tools in Health Systems

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# Goals

- Understand traditional Strategic Analysis tools for systems
- Learn about more complex Strategic Analysis tools that can be used for systems
- See example of the use of a Systems Thinking Tool

# Value of Systems Tools in Health Systems

- Health systems are complex
- Health systems are expensive
- Funds are always limited
- Using a systems tool effectively can
  - Improve efficiency and quality of an organization / health system
  - Reduce costs of organization / system
  - Increase **value** of the organization / system

# Traditional Tools in Strategic Analysis

- SWOT
- McKinsey 7
- Force Field Analysis
- Scenario Planning
- Others

# SWOT Analysis

- Strengths

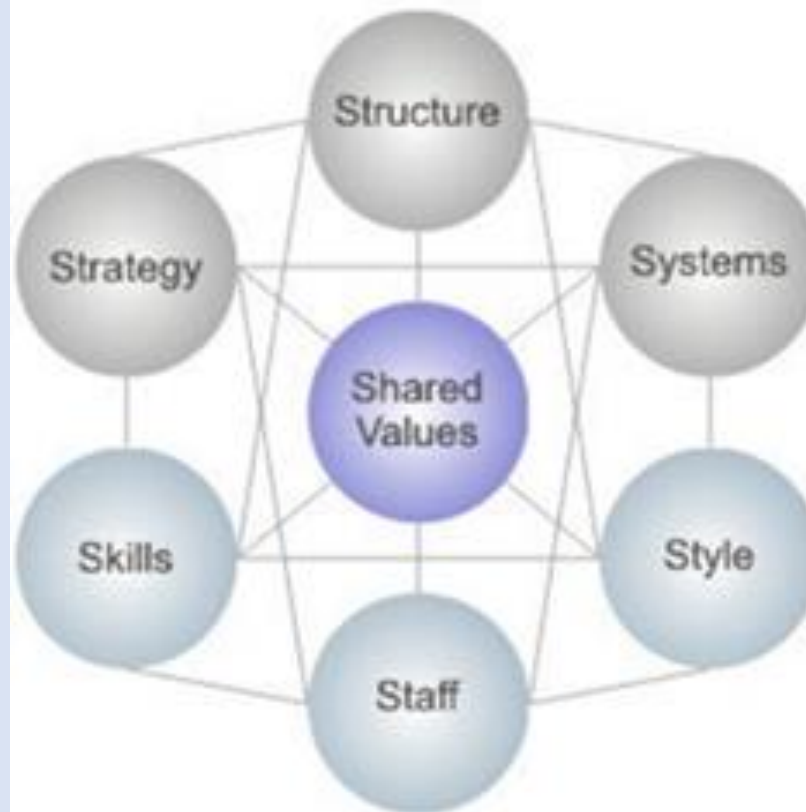
- Weaknesses

- Opportunities

- Threats

# McKinsey 7

Figure 1: The McKinsey 7S Model



# Force Field Analysis

## Force Field Analysis

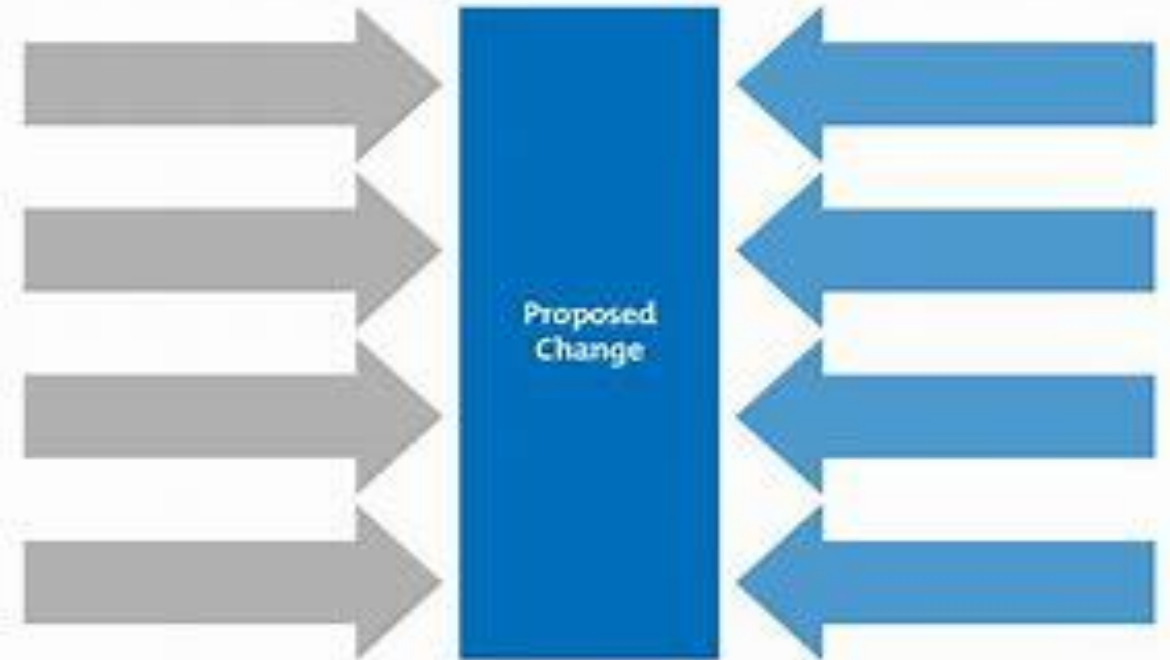
Driving Forces

Restraining Forces

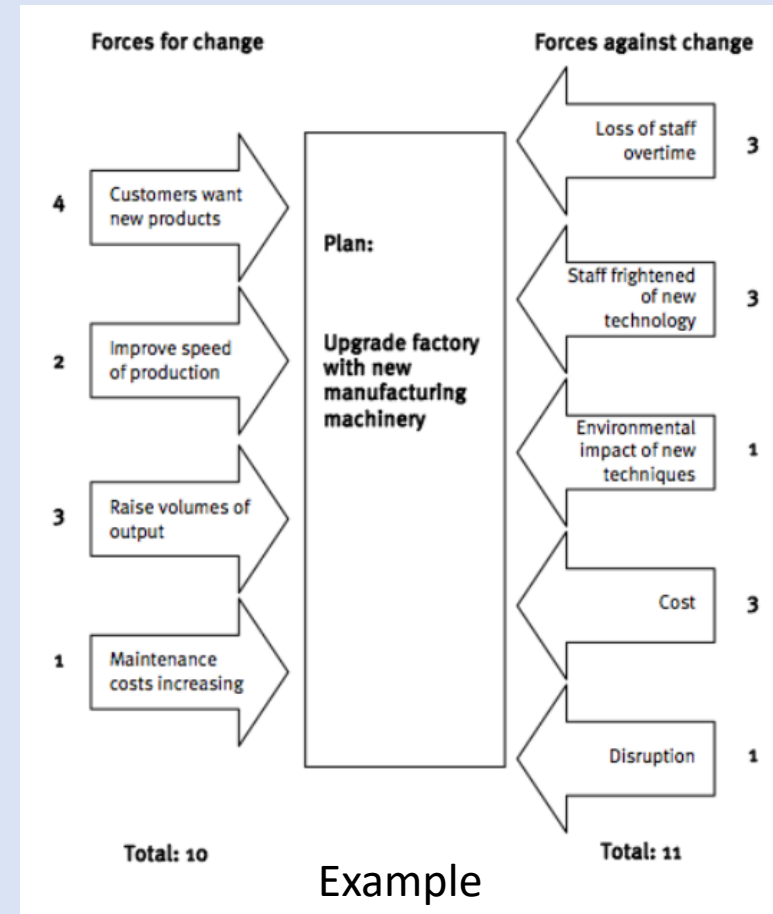
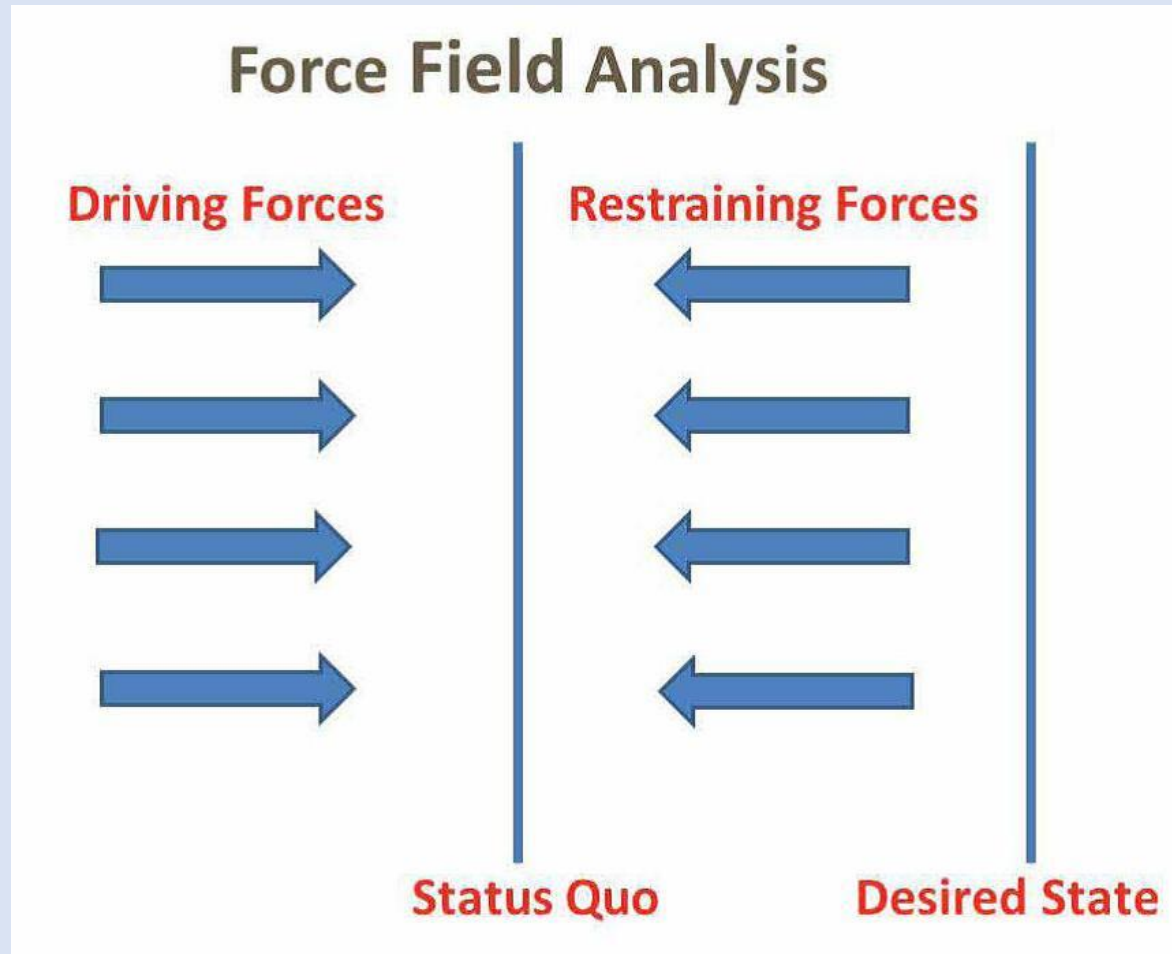


Forces for change

Forces resisting change



# Force Field Analysis





# Scenario Planning in Public/Global Health

## General

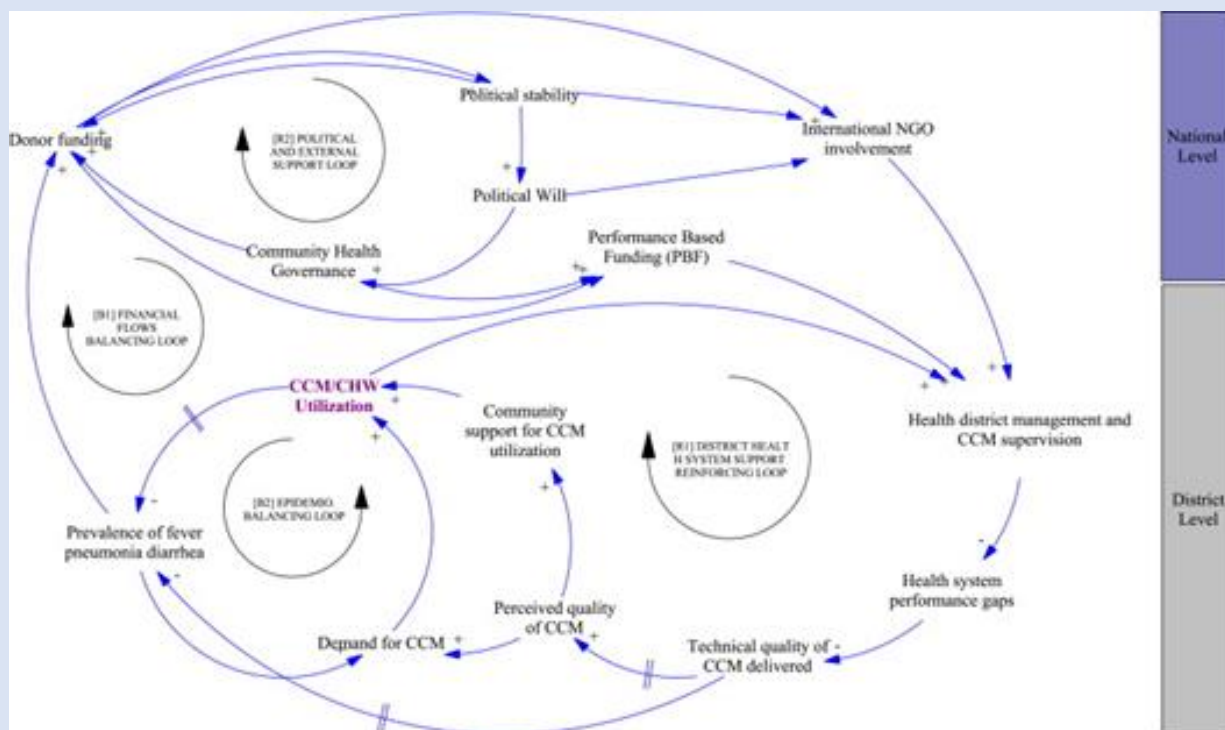
- If “A” happens, what do we do?
- If “B” happens, what do we do?
- If “C” happens, what do we do?
- If “D” happens, what do we do?

## Examples

- “A” = Financial Crisis in MOH
- “B” = Taxes increase and budget increase for MOH
- “C” = Epidemic affecting many
- “D” = Influx of many refugees

# Newer Tools in Systems Thinking for Public Health

- Causal Loop Diagrams (CLD) [Columbia University document]



# Participatory Impact Pathways Analysis (PIPA)

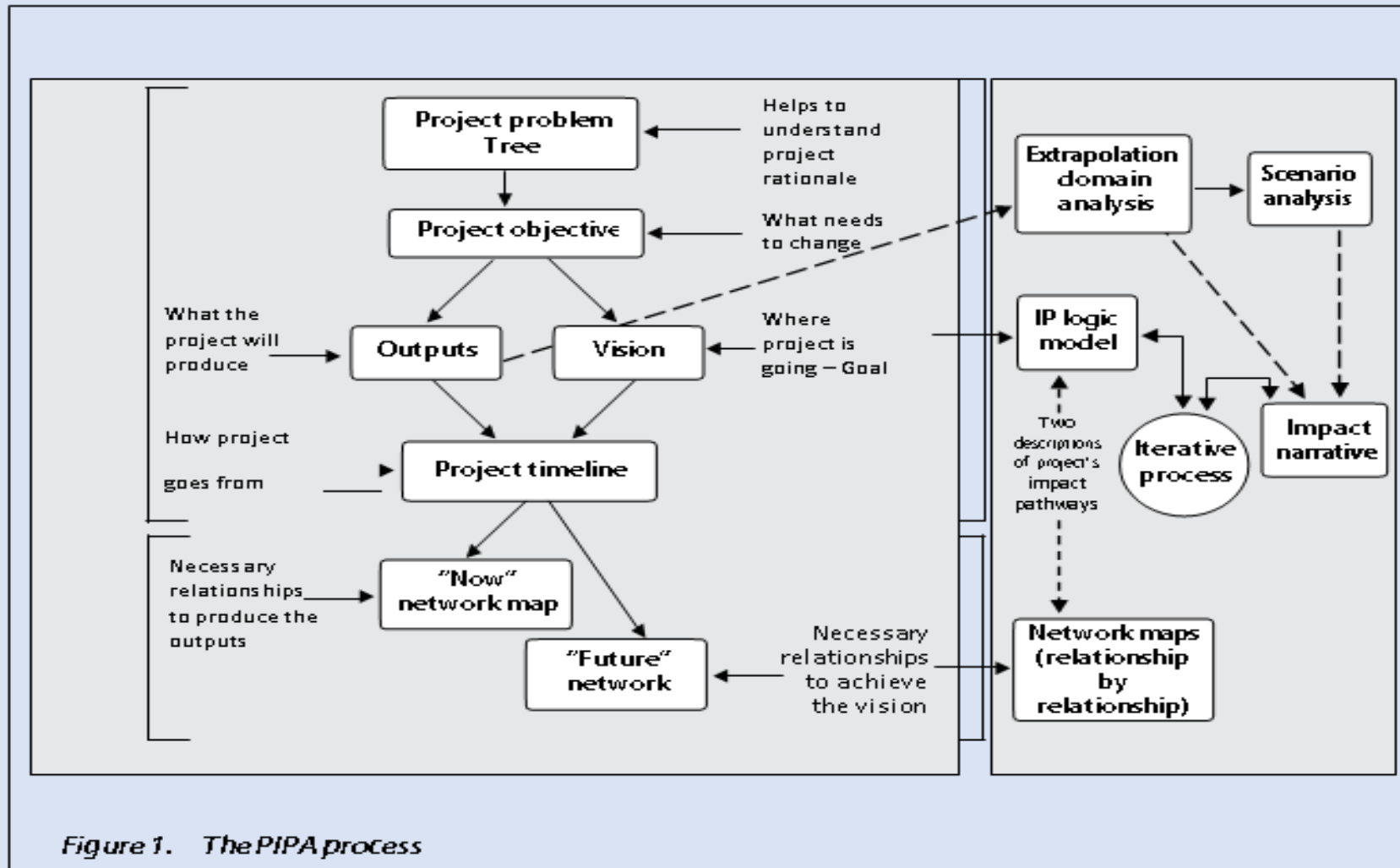


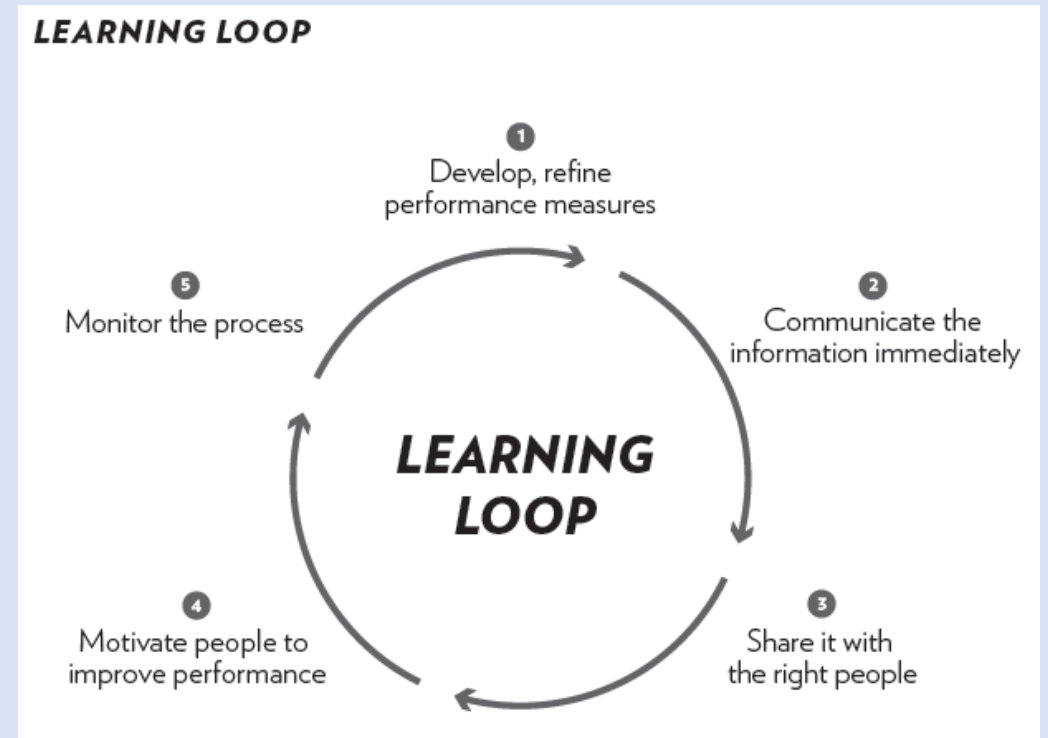
Figure 1. The PIPA process

# Learning Organization Approach: Peter Senge

- Continuous Learning Processes

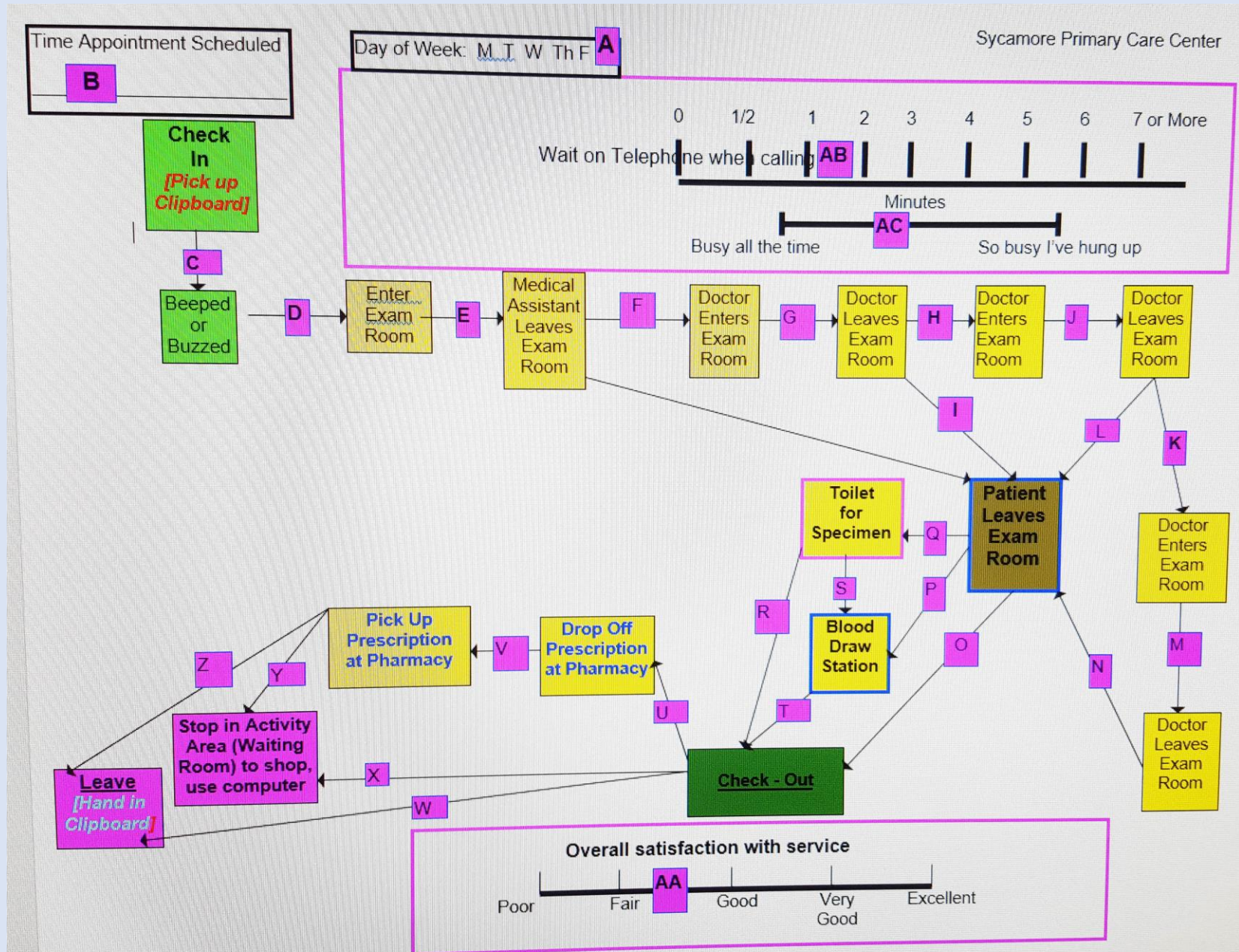
- Building a Shared Vision. In learning organizations, the vision should be created through interaction with the employees in the enterprise. ...
- Systems Thinking. ...
- Mental Models. ...
- Team Learning. ...
- Personal Mastery...

- Innovation History – formalized tool



# Process Mapping

- Study the flow of work
- Example: *Why are patients waiting so long in the clinic?*



# Systems Thinking Tools: References

- Easy to find on web
- Peters D., “The Application of Systems Thinking in Health: Why Use Systems Thinking,” *Health Res Pol & Systems* 2014,12:51.
- Systems Thinking – described:  
[https://www.youtube.com/watch?v=GPW0j2Bo\\_eY](https://www.youtube.com/watch?v=GPW0j2Bo_eY)
- <https://www.youtube.com/watch?v=HzT1-BZIJQA>
- Process Mapping: <https://healthit.ahrq.gov/health-it-tools-and-resources/evaluation-resources/workflow-assessment-health-it-toolkit/all-workflow-tools/process-0>
- Schuster, Richard J. and Marianne Weber, “Quantitative Methods in Healthcare: Contributing to Customer Satisfaction and Quality Design,” *Academy Journal* [American Institute of Architecture], Vol. 2, October, 1999. [http://www.e-architect.com/pia/acadjour/articles/v2\\_06/article06a.asp](http://www.e-architect.com/pia/acadjour/articles/v2_06/article06a.asp)

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