

Access Improvement Model – Quality Improvement (QI) Workbook

Version: April 2025

Contact information:

Email: aim@sharedhealthmb.ca

Website: <https://healthproviders.sharedhealthmb.ca/aim>

Phone: 431-336-9892

Address: AD109-720 McDermot Avenue, Winnipeg, Manitoba, R3E 0T3



Quick Reference Guide

QI Workbook Contents	2
Attacking Change	3
Opportunity for Improvement.....	4
Measuring Improvement	5
Data Collection Plan Template	6
System Diagnostics	9
Fishbone Diagram Template	11
Process Map Basics.....	13
Implementing a Change Idea	14
PDSA Template	15
Effective Team Communication	16
Communication Plan Guide	17
Documenting Your QI Work.....	18
Project Charter Template	18

Quick Reference Guide

ARE YOU READY FOR A CHANGE?

- | | Agree | Disagree |
|--|--|--|
| <ul style="list-style-type: none"> Do you agree or disagree with the following statements across the various domains related to team-based care within your clinic? <ul style="list-style-type: none"> Role Clarity: Staff members understand their own role and the role of others within the clinic Collaborative Leadership: Your team supports a culture of shared leadership and decision-making Team Functioning: Effective interprofessional collaboration is supported through feedback, learning, assessment, reflection, etc. Communication: Information is shared with the team and also collected from the team, including patients (and their family) Patient-Centred Care: Your team works with patients, patient family members, and community members to allow for shared decision-making and engagement Conflict: Your team constructively addresses issues that may lead to conflict by resolving disagreements and developing solutions | <input type="checkbox"/>

<input type="checkbox"/>

<input type="checkbox"/>

<input type="checkbox"/>

<input type="checkbox"/>

<input type="checkbox"/> | <input type="checkbox"/>

<input type="checkbox"/>

<input type="checkbox"/>

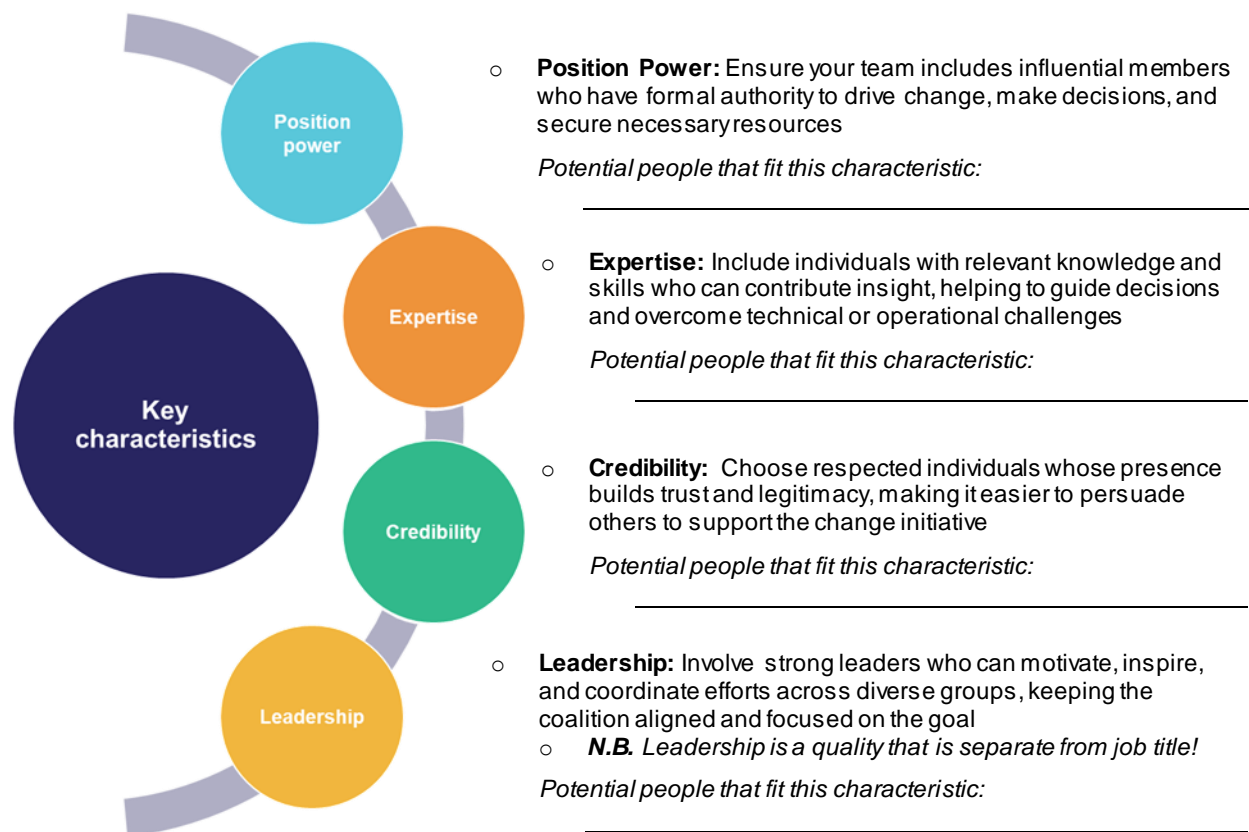
<input type="checkbox"/>

<input type="checkbox"/>

<input type="checkbox"/> |
- If you feel there is a desire for change based on your responses and considering the current climate around patient access, building a guiding coalition is an integral part to leading your team through a quality improvement change initiative!

BUILDING A QUALITY IMPROVEMENT (QI) TEAM

- When identifying who should be on your team, consider the following characteristics:



Quick Reference Guide

PROBLEM STATEMENTS (I.E. CURRENT STATE)

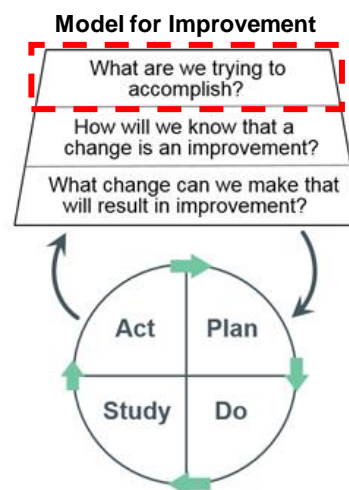
- Creating a problem statement is the start of your quality improvement initiative and is a chance to combine your group's thoughts and opinions by creating a shared understanding of the opportunity for improvement
- The 5W2H tool can be used to keep teams on the same page when identifying the key problem when it comes to patient access

5W2H		Response
5W	What is the problem? Describe it in a single sentence, so others will be able to understand what you mean.	<u>THE PROBLEM IS...</u>
	Why is it a problem? What is the "pain"?	This is a problem because...
	Where do we encounter the problem?	We encounter the problem at (location) (time) by... (others) by ...
	Who is impacted?	Patients, families, providers are impacted (how)... • Highlight the "pain"
	When did we first encounter the problem?	We first encountered this problem...
2H	How did we know there was a problem?	The symptoms of this problem are...
	How often do we encounter the problem?	We encounter this problem (x) times and each encounter is (this big). The problem is getting (better/worse).

- Once it has been completed, summarize your 5W2H in one to two sentences to highlight the pain; i.e. your problem statement
- Example of a problem statement:
 - *Our clinic is experiencing a significant challenge in meeting the demand for same-day appointments. This has led to increased patient dissatisfaction, longer wait-times, and a higher number of patients seeking care from emergency departments or urgent care facilities. This situation not only impacts patient health outcomes but also places additional strain on clinic staff and resources.*

AIM STATEMENTS (I.E. FUTURE STATE)

- Building on your problem statement, your problem statement lays the groundwork for your improvement efforts and is required to identify your future state; i.e. your aim statement
- Creating an aim statement aligns with the first step of the Institute for Healthcare Improvement's Model for Improvement
- Follow the S.M.A.R.T. framework when creating your aim statement:
 - **S**pecific – Be precise about your action and your target population
 - **M**easurable – Must have a clear, objective outcome measure to know if the change is an improvement
 - **A**ctionable/**A**ttainable – Is your goal practical and are your outcomes realistically achievable?
 - **R**elevant/**R**ealistic – Does your outcome align with the long-term goal and is it feasible?
 - **T**ime-bound – A specific timeline identified
- Example of an aim statement:
 - *By November 1st, 2025 we aim to increase the percent of same-day appointment availability for our primary care physicians from our current mark of 1% to 10%.*



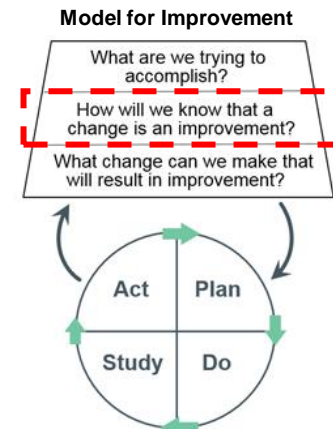
Langley, G.J., Moen, R.D., Nolan, K.M., Nolan, T.W., Norman, C.L., & Provost, L.P. (2009). *The Improvement Guide*.

Measuring Improvement

Quick Reference Guide

MEASUREMENT

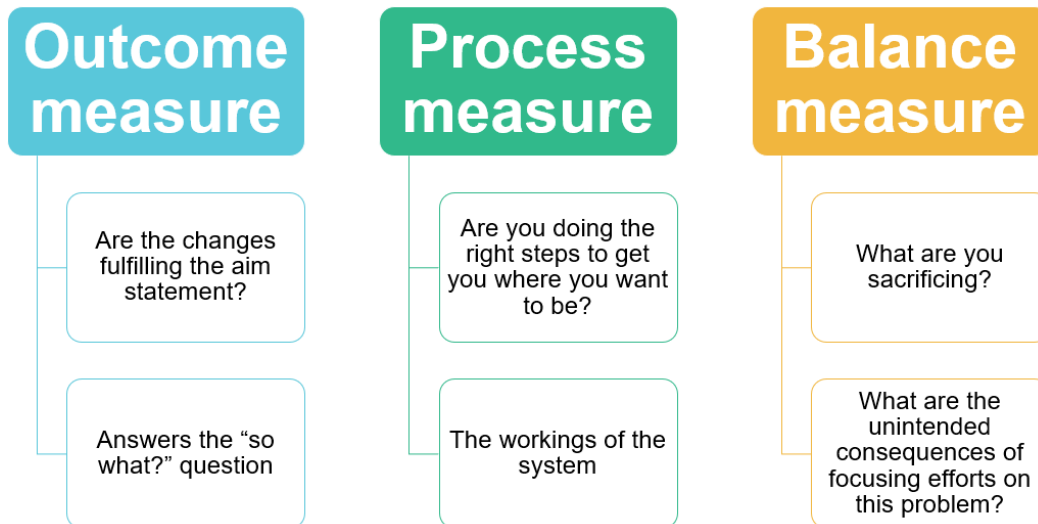
- Contributes to understanding of current performance levels
- Allows teams to monitor changes over time and assess if the implemented change(s) are resulting in improvement
 - Aligns with the second question of the Model for Improvement
- Encourages accountability within team members
- Essential for creating a sense of urgency and building buy-in in amongst clinic staff and other stakeholders



Langley, G. L., Moen, R. D., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The Improvement Guide*.

FAMILY OF MEASURES

- Data does not need to be exhaustive; we need just enough data to represent current system performance and for monitoring (amount of) change
- Three types of measures (outcome, process, and balance) are used to measure and understand your improvements; aka. the “family of measures”



SOURCES OF DATA

- *EMR*
- *Patients*: surveys, focus groups, interviews
- *Staff/providers*: surveys, interviews
- *User-generated*: tick sheets

TIPS

- Collect early and often → Establishes baseline for future comparisons
- Be mindful of effort required for data collection → Keep it as simple as possible
- Visualize data → Easier to interpret data when looking at charts/graphs versus tables
 - Consider histograms, run charts, etc.
 - Use the tool that fits your data
- Create and follow a data collection plan to standardize the process (one for each type of measure)
 - **N.B.** Some measures will be evident towards the start of your project (outcome), whereas others will become apparent as you identify root causes and change ideas (process and balance)

For a blank Data Collection Plan Template, please see page 6

Data Collection Plan Template

Type of project measure

☐ Outcome measure

☐ Balance measure

☐ Process measure

Name of the measure?

--

Operational definition of the measure; i.e. What is the measure? (Describe in quantifiable terms what to measure and how to measure it consistently. Define the “event” or “occurrence” of the measure, how to record measurement, the unit of measurement, calculation of rate, etc.)

--

Who will collect the data?

How often will data be collected?

--	--

How will measures be collected? *(Tick sheet, survey, EMR data pull, etc.)*

Does a data collection tool need to be created?

	<input type="checkbox"/> No	<input type="checkbox"/> Yes
--	-----------------------------	------------------------------

Quick Reference Guide

EXAMPLES OF OUTCOME, PROCESS, AND BALANCE MEASURES

- Specific measures are dependent on the established aim statement and primary root cause identified (i.e. the theory behind your identified problem)

Consider the following for examples of possible outcome, process, and balance measures:

Aim statement:

- Our goal is to increase the average number of same-day appointment slots available on a daily basis from 1 to 3 by December 1st, 2025.
 - Primary root cause:
 - Physicians are currently having to spend too much time in meetings which are taking up same-day appointment slots in the calendar.
 - Change idea:
 - Reduce the number of meetings each physician is required to attend
- a) **Outcome measure:**
- The number of same-day appointments available each day
 - **N.B.** *The outcome measure is directly tied to the aim statement*
- b) **Process measure:**
- The number of meetings scheduled each day in physician calendars
 - **N.B.** *The process measure should logically link to the outcome measure and tells you if you are taking the right step(s) to accomplish your aim (goal)*
- c) **Balance measure:**
- The number of days where a physician was unable to leave the clinic on time
 - **N.B.** *The balance measure will look at potential unintended consequences from implementing a change idea*

Quick Reference Guide

EXAMPLE OF A COMPLETED DATA COLLECTION PLAN TEMPLATE

Type of project measure

☒ Outcome measure

☐ Balance measure

☐ Process measure

Name of the measure?

Same-day appointment availability

Operational definition of the measure; i.e. What is the measure? (Describe in quantifiable terms what to measure and how to measure it consistently. Define the “event” or “occurrence” of the measure, how to record measurement, the unit of measurement, calculation of rate, etc.)

The total number of same-day appointments that were available will be calculated every Monday for the previous week. Only appointments labelled as “same-day” in the EMR will be included. The total number of providers in-clinic each day will also be tabulated.

Each instance of a same-day appointment will be entered into a tally sheet and totals calculated for the week. Data will be averaged on a per day and per provider basis.

i.e. Week 1 average $\rightarrow \frac{1.2 \text{ same-day appointments}}{\text{Day} \times \text{Provider}}$

Who will collect the data?

Colin

How often will data be collected?

Every Monday morning for the previous week. Data will be collected on an on-going basis.

How will measures be collected? (Tick sheet, survey, EMR data pull, etc.)

Custom tick sheet and entered into an Excel spreadsheet

Does a data collection tool need to be created?

☐ No

☒ Yes

Quick Reference Guide

ROOT CAUSE ANALYSIS

- Goes beyond the symptoms; discovers the underlying cause(s) of an identified problem
- Anyone that is involved in the process being analyzed (i.e. touches the work), should be involved in the root cause analysis
- Can enhance team collaboration by engaging all members of a team and foster a culture of shared responsibility
- Makes use of data being collected by quality improvement team
- Shifts teams away from blaming individuals and focuses on modifying processes and systems to improve outcomes and reduce the likelihood of the problem reoccurring
- Common tools include:
 - Fishbone Diagrams (aka. Ishikawa Diagrams)
 - Process Maps
 - 5 Whys
- Use completed root cause analysis tool to identify where problems/conflicts/issues exist and start creating a list of change ideas

For a sample Fishbone Diagram, please see page 10

For a sample Process Map, please see page 12

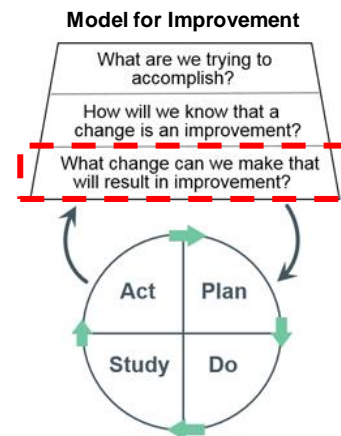
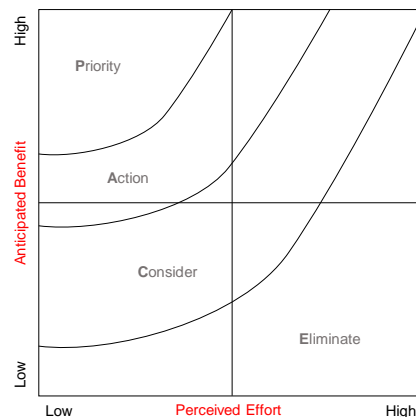
N.B. Interactive tools (Zoom, Teams, etc.) can be used to create Fishbone diagrams and process maps

CHANGE IDEAS

- Aligns with the third question of the Model for Improvement
- Specific and actionable proposal
- Developed to target the root cause(s)
- Encourages creative thinking and collaboration to identify practical solutions
- Each change idea provides valuable learning for future improvement efforts

Tips and tricks

- Think outside the box → Unconventional ideas can often lead to improvement
- Borrow with pride → Look at other clinics and see how they do things; no need to reinvent the wheel!
- Prioritize feasibility and impact → Consider which change idea will yield the greatest benefit with the least amount of effort
- Consider using a PACE matrix:

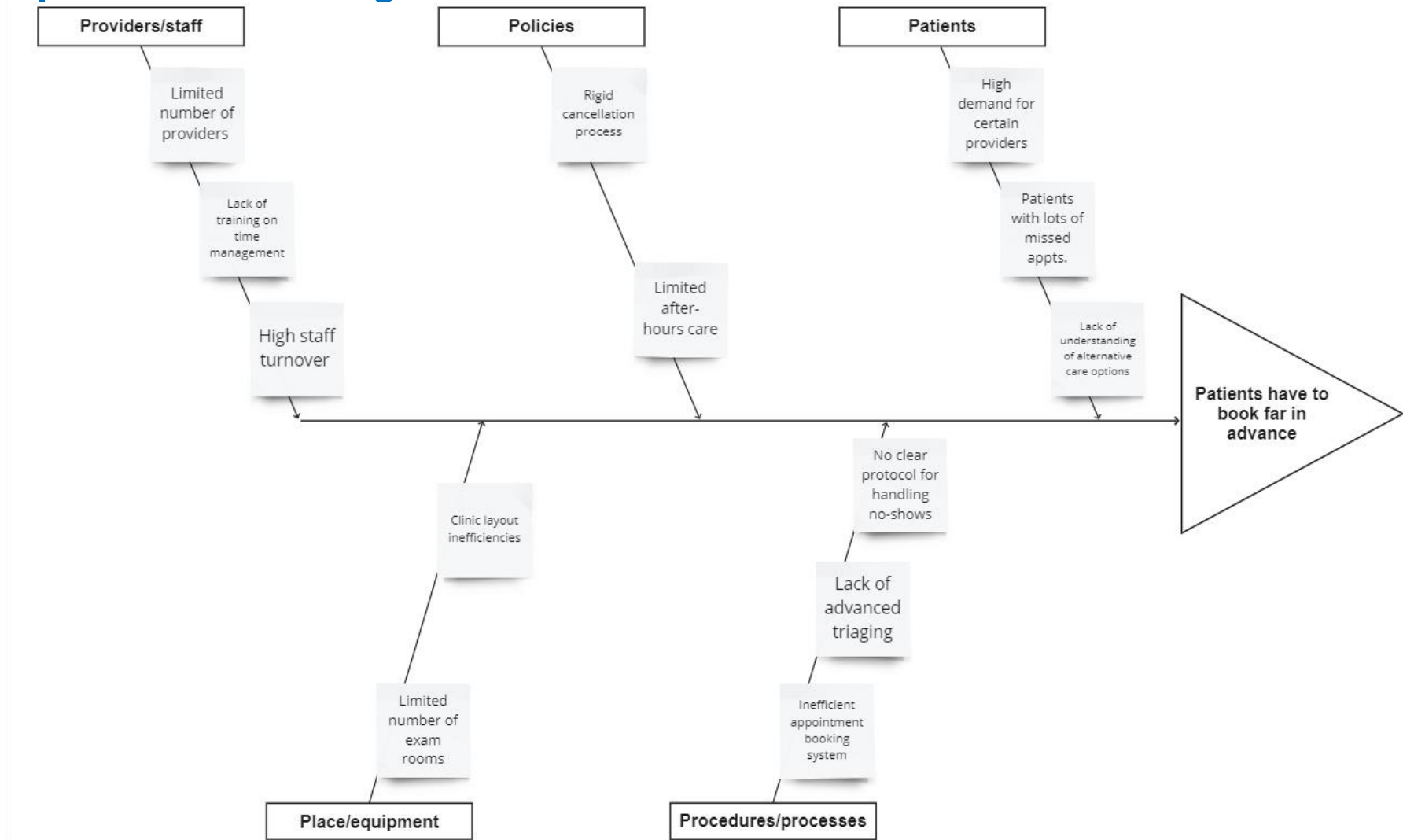


Langley, G. J., Moen, R. D., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The Improvement Guide*.

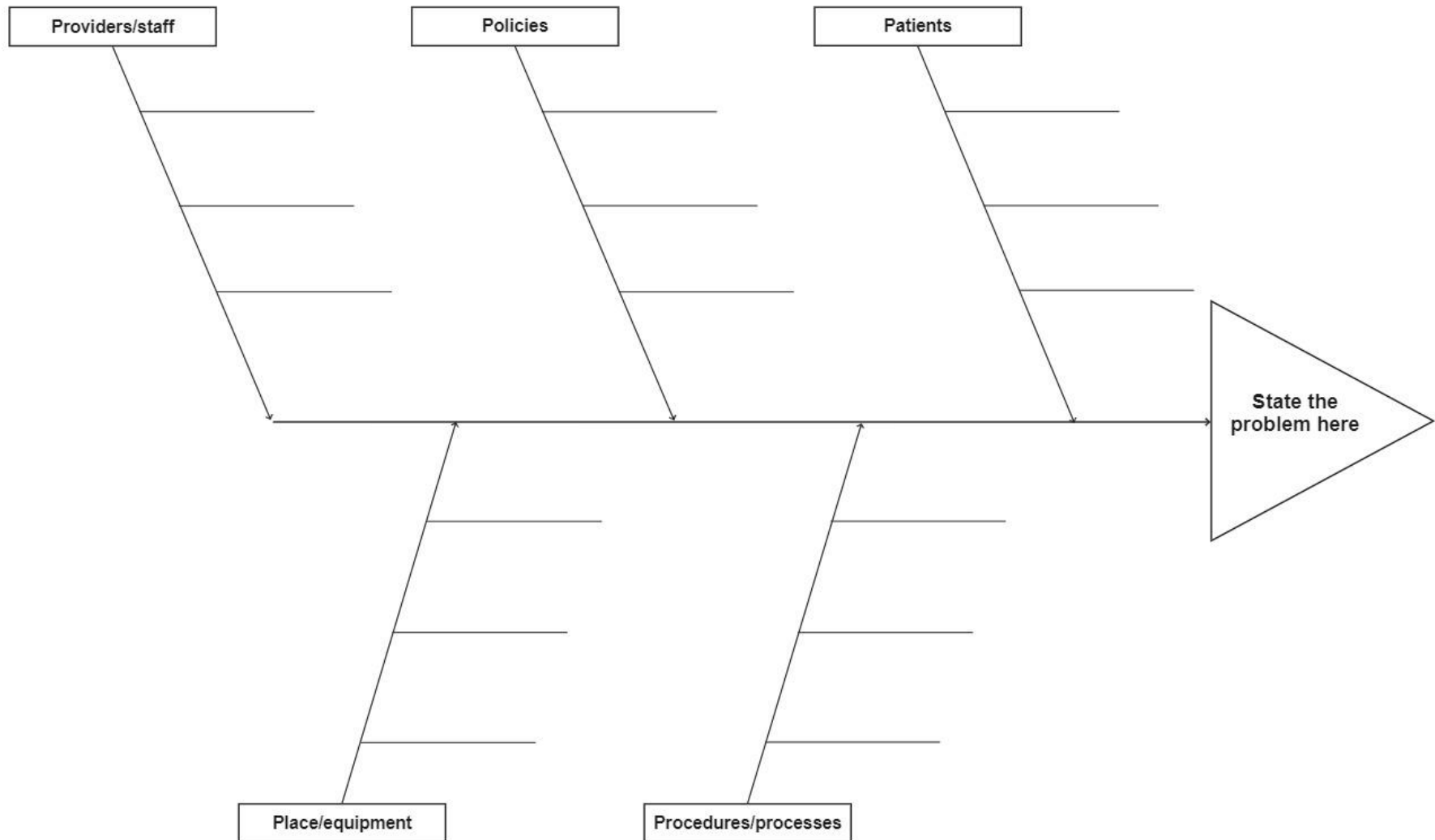
System Diagnostics

Quick Reference Guide

Sample Fishbone Diagram

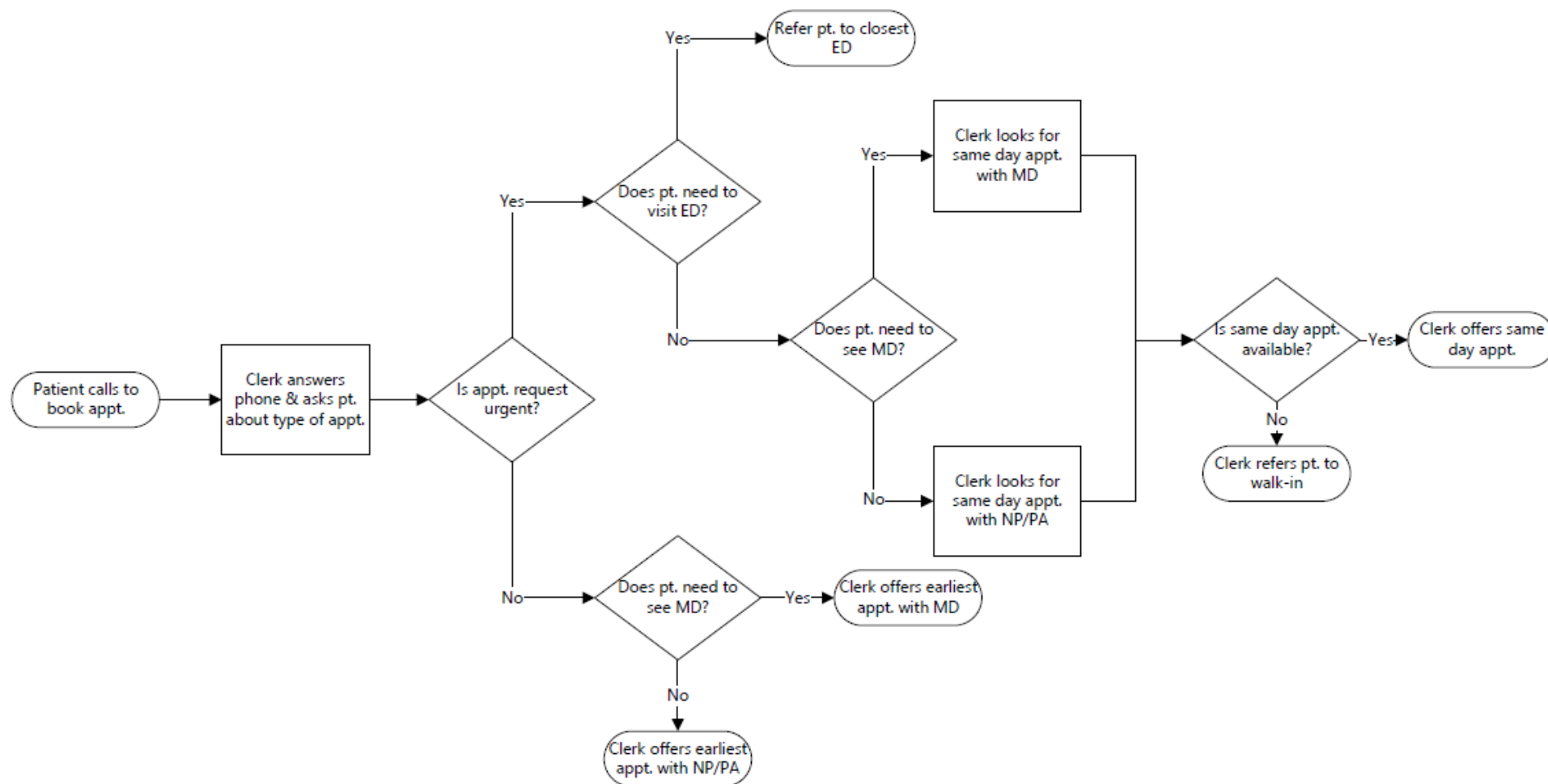


Fishbone Diagram Template





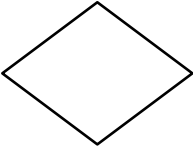


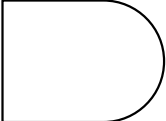
Sample Process Map

- This example of a process map is outlining what happens when a patient calls a clinic to book an appointment



Process Map Basics

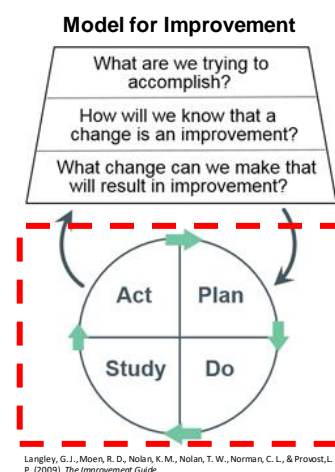
- The following are common process map shapes:

Shape	Use
	<ul style="list-style-type: none">Start and end of a process
	<ul style="list-style-type: none">Step/activity of a process
	<ul style="list-style-type: none">A decision that has to be made
	<ul style="list-style-type: none">Connection between two steps and direction of flow<ul style="list-style-type: none">Insert arrow only after the map has been finalized
	<ul style="list-style-type: none">Data or information that can be read by people
	<ul style="list-style-type: none">Delay in a process

Quick Reference Guide

PLAN-DO-STUDY-ACT (PDSA) CYCLES

- An opportunity to put ideas into action and aligns with the last portion of the Model for Improvement
- Allows teams to try change ideas in small and manageable parts, thereby minimizing risk of widespread disruptions
 - Evolves from developing an idea, testing an idea in various situations, and finally implementing an idea clinic-wide
- Measurement continues to be important, as decisions will need to be made using real-time data and evidence
- Teams can offer a prediction of what will happen, ensuring teams think through the “why” a change idea will work
- Promotes collaboration by engaging team members through shared responsibilities
 - Identifies the “what”, “who”, “when”, and “where” for the tasks related to the specific PDSA cycle
- Encourages a culture of experimentation through a structured method of trying new change ideas without fear of failure
- Build confidence in change idea contributing to an improvement, along with confidence in team being able to implement and sustain larger-scale changes



Tips and tricks

- Begin small → Full implementation of a change idea will require multiple PDSA cycles
- Clearly define objective(s) for each cycle → Will make it easier to track progress and determine success
- Avoid making decisions on “gut feel” → make use of data collected during PDSA cycles
 - **N.B.** *This data is separate from any measures (outcome, process, and/or balance) related to the aim statement that are being collected long-term*
- Encourage rapid feedback → Allows team to make timely adjustments as project progresses
- Learn from failures → Use an unsuccessful cycle as a learning opportunity and a chance to refine future cycles
 - **N.B.** *Dropping a change idea should be a last resort!*
- **Do not let perfection be the enemy of good** → Waiting for the perfect opportunity to conduct a PDSA will likely never come and only delay progress and improvements

For a blank PDSA Template, please see page 15

PDSA Template

Cycle #:

Date:
Plan

Root cause:
Change idea:
Purpose of this cycle is to:
<input type="checkbox"/> Develop <input type="checkbox"/> Test <input type="checkbox"/> Implement
Objective of this cycle is to:
Questions for the cycle to answer:
Prediction:

Task(s) required

What? (specific task)	Who?	When?	Where?

Data collection

What data will be collected?	How? (Chart audit, checklist, etc)	Who?	When?	Where?

Data collected (Summarize the data collected)

--

Study

What was learned?	Were there any barriers?

Act – What comes next?

Next step(s)	Drop/Modify/Test/Other

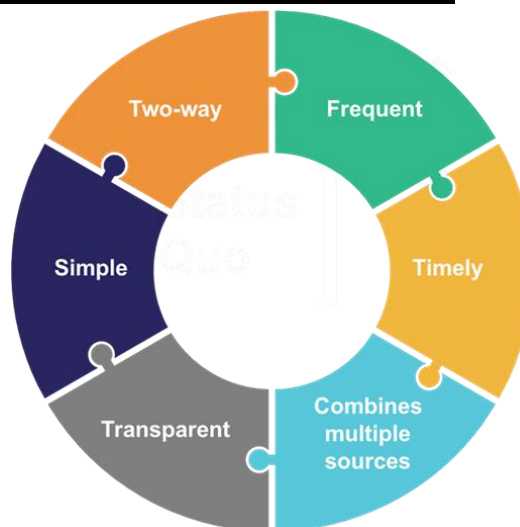
Quick Reference Guide

COMMUNICATION

- The sharing of information is crucial to the success of your on-going quality improvement (QI) initiatives
 - This can include sharing your goals (problem and aim statements), identified root causes, change ideas, and wins (no matter how big or small) achieved along the way
- Engaging and enabling key stakeholders is important to building the sense of urgency around the identified problem and increasing the likelihood of group buy-in
- You may also quickly identify key players in your QI/change initiative through effective communication

CHARACTERISTICS OF GOOD COMMUNICATION (WRITTEN AND SPOKEN)

1. *Frequent*
 - Communicate consistently and often
 - Ensure goal(s) and steps ahead stay top-of-mind for everyone
2. *Timely*
 - Be mindful of when you are sending out a piece of communication
 - Avoid times when people may be less likely to pay attention
3. *Combines multiple sources*
 - Use various methods of communication to reach different audiences effectively
4. *Transparent*
 - Explain/address inconsistencies to build credibility and trust
 - Be honest when challenges are met and let other know
5. *Simple*
 - Keep messages clear, straightforward to avoid confusion
 - Avoid jargon so that everyone understands the key points
6. *Two-way*
 - Provide opportunity for feedback
 - Allow outside concerns to be raised



For a blank Communication Plan Guide, please see page 17



Quick Reference Guide

Communication Plan Guide

What mode of communication will be used for the message?

- | | |
|---------------------------------|--|
| <input type="checkbox"/> Email | <input type="checkbox"/> Clinic-wide meeting |
| <input type="checkbox"/> Phone | <input type="checkbox"/> Stand-up meeting |
| <input type="checkbox"/> Poster | <input type="checkbox"/> Other |

If other, please list:

Who will be in charge of this communication piece? (Crafting, distributing, etc.)

What is the key message? *NB. Message should be transparent, simple, and relevant to stakeholders.*

Is this a recurring message?

☐ No

☐ Yes

If yes, how frequently will this message and subsequent updates be sent?

☐ Daily

☐ Monthly

☐ Weekly

☐ Whenever new information is available

Who needs to receive this message? (Who are the key stakeholders that need to be updated?)

How will feedback be collected and who will be responsible for feedback collection?

Quick Reference Guide

PROJECT CHARTER

- Clarifies goals and objectives of the team
- Serves as a roadmap, outlining timelines, milestones, and key deliverables, helping teams stay focused on priorities
- Acts as a communication tool, aligning clinical teams and leadership around the project's future state (vision) and progress
- Ensures that change management principles are incorporated into the process, enhancing the likelihood of successful and sustained improvements

For a blank Project Charter Template, please see below

Project Charter Template

Project title - Does not need to be overly descriptive; enough to give an idea of the focus of the project

--

Team members – Refer to AIM Tool 1 – Attacking Change (Building a QI Team)

Name	Position

Problem statement (What is wrong/not working?) – Refer to AIM Tool 2 – Opportunity for Improvement (5W2H)

--

Aim statement (What is the team trying to accomplish?) – Refer to AIM Tool 2 – Opportunity for Improvement (Aim Statements)

--

Measures:

Outcome (Answers the “so what?” question) – Refer to AIM Tool 3 – Measuring Improvement

N.B. Provide a summary of the measure from the respective Data Collection Plan Template

--

Quick Reference Guide

Process (Is the team doing the right things to get there?) – Refer to AIM Tool 3 – Measuring Improvement

N.B. Provide a summary of the measure from the respective Data Collection Plan Template

Balance (Are the changes the team is making to one part of the system causing problems elsewhere?) – Refer to AIM Tool 3 – Measuring Improvement

N.B. Provide a summary of the measure from the respective Data Collection Plan Template

Root cause (What root cause(s) will the team focus on?) – Refer to AIM Tool 4 – System Diagnostics

N.B. Summarize the (primary) root cause that is leading to the identified problem, as identified by your completed Fishbone diagram, process map, etc.

Change ideas (What can we do that may lead to an improvement?) – Refer to AIM Tool 4 – System Diagnostics

N.B. Summarize the change ideas identified by the team and highlight the idea that will be implemented through your first (and subsequent) PDSA cycle.

Communication plan (How will you inform others about the plan(s) for change?) – Refer to AIM Tool 6 – Effective Team Communication

N.B. Provide a summary of each communication sent to the larger clinical team and stakeholders

What is the key message?	How will the message be communicated (what mode)?	Who should receive this message?	Person responsible