

A healthcare professional, a woman with dark hair tied back, wearing a white lab coat and a red lanyard, is standing and smiling while talking to a patient. The patient, a woman with dark hair, is sitting in a brown leather medical chair, also smiling. They are in a medical office with a window in the background showing greenery outside. A printer and some medical supplies are visible on a counter behind them.

# Expanding Quality Improvement: Establishing Measures and Data Collection for Diabetes Screening and Management

**Maia Morse, MPH, CPC-A, PCMH CCE**  
**Amy Goodman, LCSW, CPC-A, PCMH CCE**

# Today's Moderator



**Andrew Philip, PhD**  
Senior Director of Clinical & Population Health  
Primary Care Development Corporation  
New York, NY



# About PCDC

- Primary Care Development Corporation (PCDC) is a national nonprofit organization and a community development financial institution catalyzing excellence in primary care through strategic community investment, capacity building, and policy initiatives to achieve health equity.

# Disclaimer

The views, opinions, and content expressed in this presentation do not necessarily reflect the views, opinions, or policies of the Center for Mental Health Services (CMHS), the Substance Abuse and Mental Health Services Administration (SAMHSA), or the U.S. Department of Health and Human Services (HHS).



[www.samhsa.gov](http://www.samhsa.gov)



# An Integrative Approach to Addressing Diabetes

- Improve screening and management and partner with patients to better address diabetes
  - Maximize the value of interprofessional teams
  - Enhance what you have (even if it's just you!)
  - Build efficient processes and procedures



(Image courtesy C. Aguilar)

# An Integrative Approach to Addressing Diabetes

1. Behavioral Treatment
2. Evidence-based Prescribing Practices
3. Nutrition, Food Insecurity and Health Promotion
4. Integrating Clinical Pharmacy
5. Expanding Quality Improvement
6. Operational and Clinical Pathways
7. Persons with Lived Experience

# Why Address Diabetes in Integrated Behavioral Health?

- Patients with behavioral health conditions are disproportionately likely to struggle with diabetes and associated metabolic conditions
- Behavioral health providers are uniquely positioned to impact diabetes
- Integrated care will increasingly involve integrating metrics

# Today's Presenters



Maia Morse, MPH, CPC-A, is Senior Program Manager at PCDC, and an expert coach and facilitator for Patient-Centered Medical Home (PCMH) transformation. Currently Maia leads PCDC's billing and coding program and continues to providing coaching and facilitation related to access, quality improvement, and PCMH. Prior to joining PCDC, Maia worked as the Site Manager at Norwalk Community Health Center, where she managed daily operations and provided departmental oversight, throughout the center.



Amy Goodman, LCSW, CPC-A, is a Senior Project Manager at PCDC who has worked for over 20 years in non-profit healthcare. As a Patient-Centered Medical Home (PCMH) content expert, she has led transformation and quality improvement projects across the country. She develops PCMH training tools, analyzes client practice workflows, policies and data to advise practices on opportunities for improvement. Amy has extensive experience working in the Intellectual and Developmental Disabilities (I/DD) field as a behavioral health clinician, multi-specialty practice manager and EHR training manager.



# Learning Objectives

- Define Team Member Roles and Responsibilities
- Describe Quality Improvement (QI)
  - Focus on the difference between data collection and data analysis
- Discuss Model for Improvement and Improvement Science
- List Diabetes Measures
  - Watch PDSA Video
  - Review Diabetes Case Study

# Making Your Team Work For QI



# Set Team Expectations and Values

- Expectations
  - Sense of Urgency → Momentum
  - Everyone contributes to work – team members & leaders
  - Highest quality & best results always
  - Stumble forward but keep testing & improving
- Values
  - Transparency
  - Sharing
  - Learning
  - Accountability for results



# Team Roles Identified

- Primary point of contact for the team
- Push and support team to achieve improvement goals
- Provide guidance on activities & tools
- Connect team to other available resources
- Meet regularly as a team to do the work
- Communicate with coach by phone and email as arranged
- Establish schedule for briefing leaders
- Attend every scheduled project event

# Quality Improvement





# Data Analytics and Its Role in Healthcare

- Data and the use of information collected during the patient encounter can drive how physicians and their practices address patient outcomes
- Over the last 10 years, improvements in care delivery have prompted the use of data collected in EHRs
- Using data is critical to your ability to quantify effectiveness and efficiency

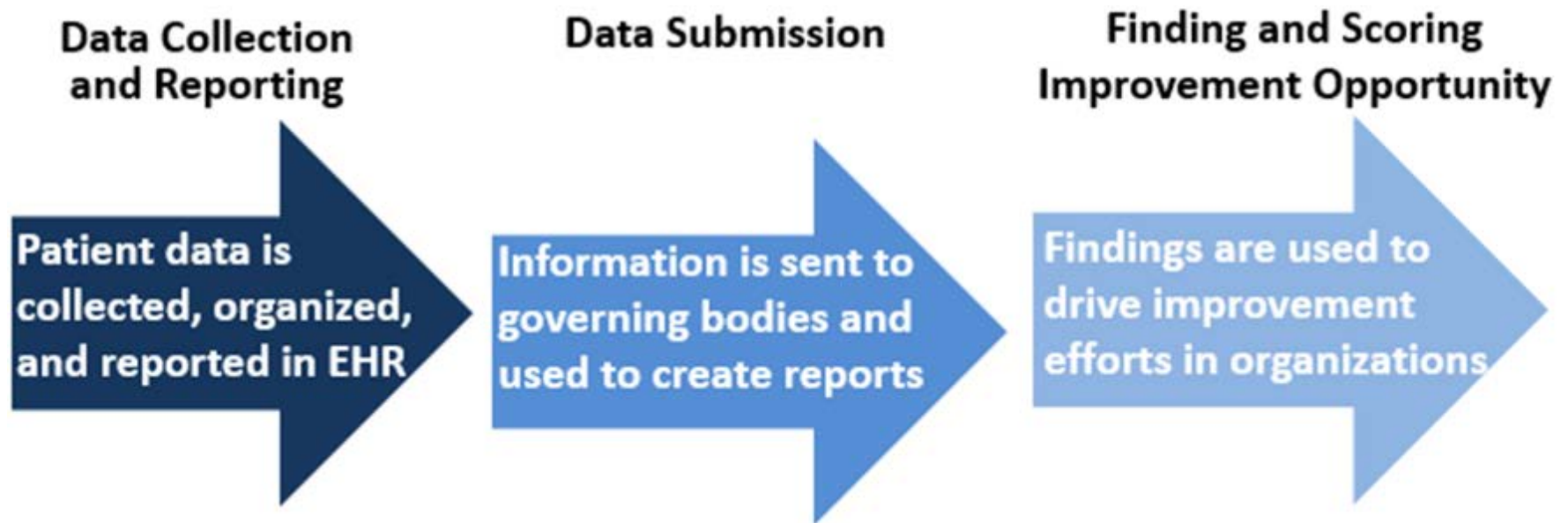
**Analytics** the studying past historical data to research potential trends, to analyze the effects of certain decisions or events, or to evaluate the performance of a given tool or scenario

# How Data Can Be Leveraged to Improve Outcomes

- Some health plans have launched/are launching quality improvement initiatives based on claims submissions data
- These initiatives include the monitoring and targeting for improvements in care delivery and/or patient outcomes
- Improving quality and lowering cost of care are key drivers in emerging payment policy and care coordination activities

Quality Improvement (QI) refers to activities aimed at improving performance and is an approach to the continuous study and improvement of the processes of providing services to meet the needs of the individual and others

# How Data Can be Leveraged to Improve Outcomes - Example



Data is constantly being used to improve patient outcomes. This includes individual patient outcomes (micro) and population level (macro) improvements.

# Data Visualization - Measures Crosswalk

METRICS	UDS (CQI)	PSA CYCLES	HEDIS	STATEN ISLAND PPS	NYU PPS	OCH PPS	ACO	PCMH
Adult BMI Percentile/Value: Weight Screening & Follow-up	Tracked	Tracked	Tracked				Tracked	
Alcohol and Drug Abuse Screening			Tracked					Tracked
Antidepressant Medication Management			Tracked					
Asthma Appropriate Medication/Pharmacological Therapy	Tracked		Tracked					
Beta-Blocker Treatment after Heart Attack			Tracked					
Breast Cancer Screening			Tracked				Tracked	
Cervical Cancer Screening	Tracked							
Child BMI Percentile/Follow-up Plan	Tracked		Tracked				Tracked	
Child Lead Screening			Tracked					
Childhood Immunizations	Tracked		Tracked					
Children with Pharyngitis Testing			Tracked					
Chlamydia Screening			Tracked					
Colorectal Cancer Screening	Tracked	Tracked	Tracked				Tracked	
Controlling High Blood Pressure/Hypertension	Tracked	Tracked	Tracked				Tracked	Tracked
Continuity Rate/Provider Capacity								Tracked
Cycle Time Studies								Tracked
Depression Screening and Follow-up Ages 12+	Tracked			Tracked	Tracked	Tracked	Tracked	
Diabetes - Dilated Eye Exam					Tracked		Tracked	
Diabetes HbA1c >9 or Untested	Tracked	Tracked					Tracked	
Diabetes HbA1c Screening			Tracked	Tracked				
Diabetes HbA1c in Control - HbA1c <8					Tracked		Tracked	Tracked
Diabetes Monitor Nephropathy					Tracked			
Diabetes Monitoring for People With Diabetes and Schizophrenia			Tracked					
Diabetes Screening for People taking Antipsychotic medications			Tracked					
Disease-Modifying Anti-Rheumatic Drug Therapy for RA			Tracked					
DSRIP Training Modules				Tracked	Tracked	Tracked		
Ease of Obtaining Medications Prescribed by PCP								Tracked
Employee FTE Rate	Tracked							
Extended Health Center Hours for Patients								Tracked
Fall Risk Screening							Tracked	
HbA1c Testing - High Risk Pre-Diabetic				Tracked				
High Cost Patient Report							Tracked	
High ER Utilizers							Tracked	Tracked

# CHC Monthly Public Dashboard

Date: January 2020

Target Key: ■ >5% Below Target Goal ■ Within 5% of Target Goal ■ At or Above Target Goal

Clinical Quality Indicators	HP (CDC) 2020 Goal	NY State 2017	Target Goal MCHC 2019 UDS	Eligibility Criteria	Comparison to 2019	January	Comments
Adult Weight Screening & Follow-up (18 & older)		58%	81.7%	Screening and intervention	↑ 13.2%	94.9%	Proper documentation of Follow-up Plan must be recorded in Preventative Section
Asthma Pharmacological Therapy (Diagnosed)			90.7%	Prescribed qualifying med	↑ 4.5%	95.2%	Qualifying medication prescribed to those with persistent-mild, -moderate, & -severe
Depression Screening (12 and older)		70%	63.0%	PHQ-2 and PHQ-9 screen	↓ -2.7%	60.3%	Ensure that screening is performed in Social History section/Smart Form
Childhood Immunizations (Up to age 3)		45%			0.0%		*No qualifying visits
Colorectal Cancer Screen (Ages 51-74)	71%	46%	50.1%	Colonoscopy or Flexible Sig	↑ 11.1%	61.2%	Proper lab documentation must be made in the Labs section. FOBT must be documented in Lab section as well
Cardiovascular Disease (21 & older) *NEW METRIC			59.5%	Statin therapy	↑ 0.9%	60.4%	Patients considered at high risk of cardiovascular events who were prescribed or were on statin therapy
Diabetes (Diagnosed)	16%	30%	13.4%	A1c >9 or Untested	↑ -6.3%	7.1%	*% is supposed to be low. Patients with diabetes with an A1c that was above 9 or Untested
Hypertension (18-85; Diagnosed)	61%	65%	83.4%	BP below 140/90; Cholesterol	↑ 3.3%	86.7%	If a patient is hypertensive, they must have a BP below 140/90 at encounter to be compliant
Ischemic Vascular Disease (18 & older; Diagnosed)			64.7%	Prescribed qualifying med	↓ -2.8%	61.9%	If patient's Hx includes IVD, they must have been prescribed an aspirin or antiplatelet within the past 12 months
Oral Health (Ages 6-9)	28%	45%	50.0%	Dental sealants	-50.0%		*Dr. Bilello manually gathers data
Cervical Cancer Screening (Age 24-64)	93%	57%	61.1%	Test within last 2 years	↑ 9.3%	70.4%	Proper attachment of results must be recorded in Labs section
Tobacco Screening & Cessation Intervention (18 & older)		87%	95.9%	Screening & intervention for smokers	↑ 1.6%	97.5%	Screening must be recorded in Social History/Smart Form and Counseling/Follow-Up can be found in the Preventative section
Weight Assessment & Counseling (Children and Adolescents; Age 2-17)		67%	14.3%	Screening and intervention	↑ 10.7%	25.0%	ALL children's BMI must be recorded and regardless if it is high/low, counseling must be performed. Counseling can be recorded in the Preventative section
							Screening must be recorded in Social History/Smart



# Model for Improvement and Improvement Science



# Model for Improvement

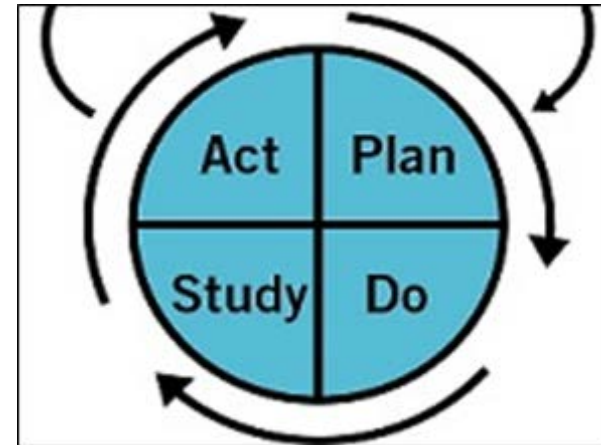
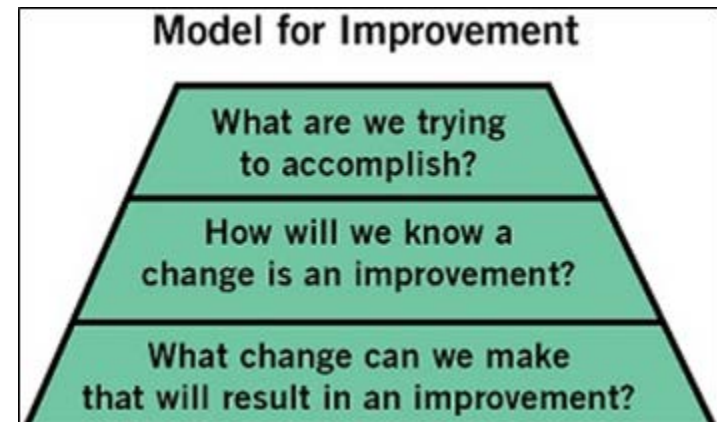
The Model for Improvement, developed by [Associates in Process Improvement](#), is a tool for accelerating improvement.

The model is not meant to replace change models that organizations may already be using, but rather to accelerate improvement.

This model has been used very successfully by hundreds of health care organizations in many countries to improve many different health care processes and outcomes.

# Model for Improvement – Cont'd

- The model has two parts:
  - Three fundamental questions, which can be addressed in any order
  - The Plan-Do-Study-Act (PDSA) cycle to test changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement



# What is a PDSA?

- Tested method for action-oriented, real time learning and change
- Test a change – plan it, try it, observe the results and act on what is learned in next test
- Key principle: test on a small scale initially, use rapid cycles, scale up in short timeframe

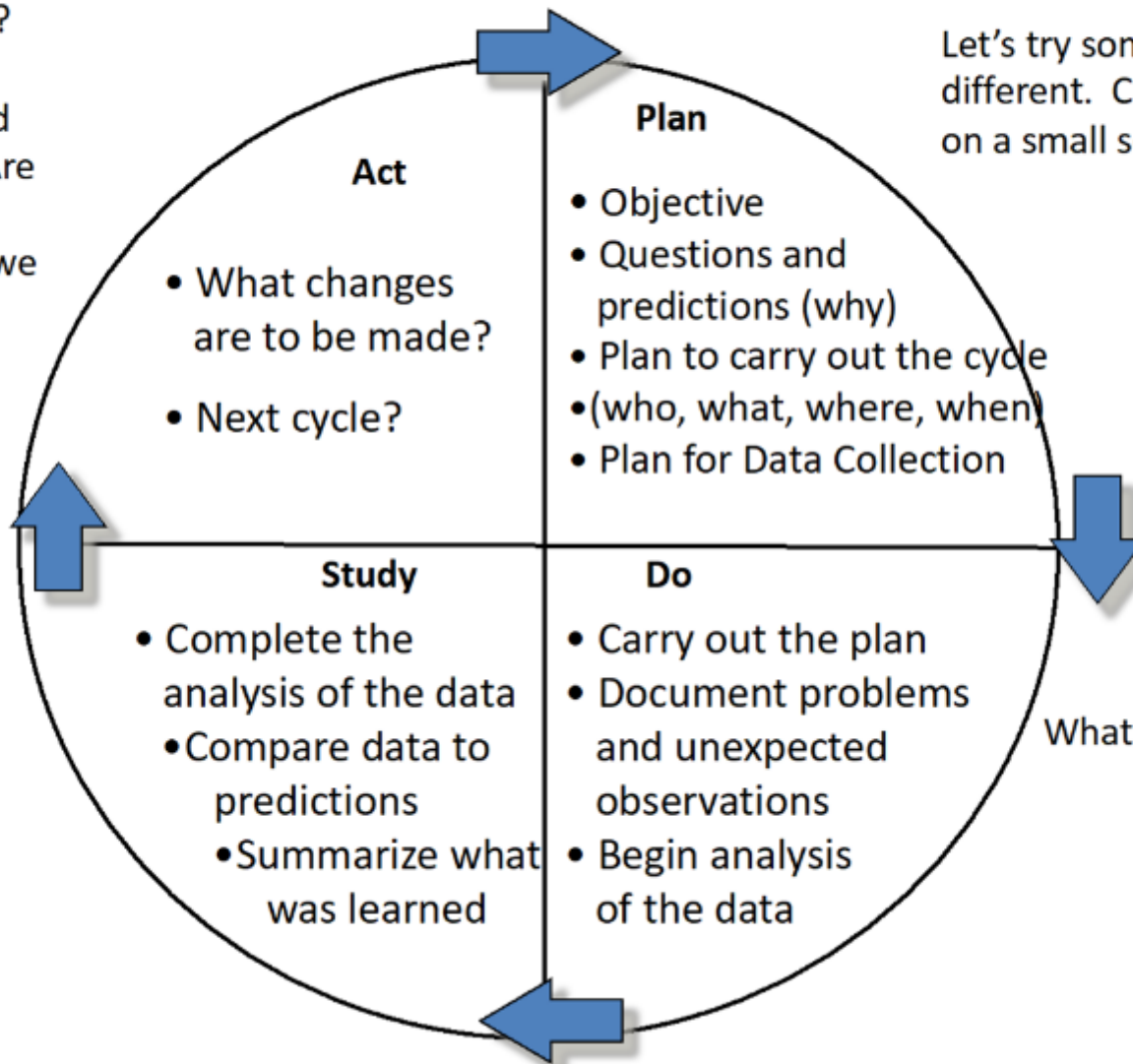
# What is a PDSA Cycle?

What should we try next?  
Should we tweak it and try again? Are there other conditions we should consider testing?

Let's try something different. Can we do it on a small scale?

What did we learn?  
Compared to our prediction?

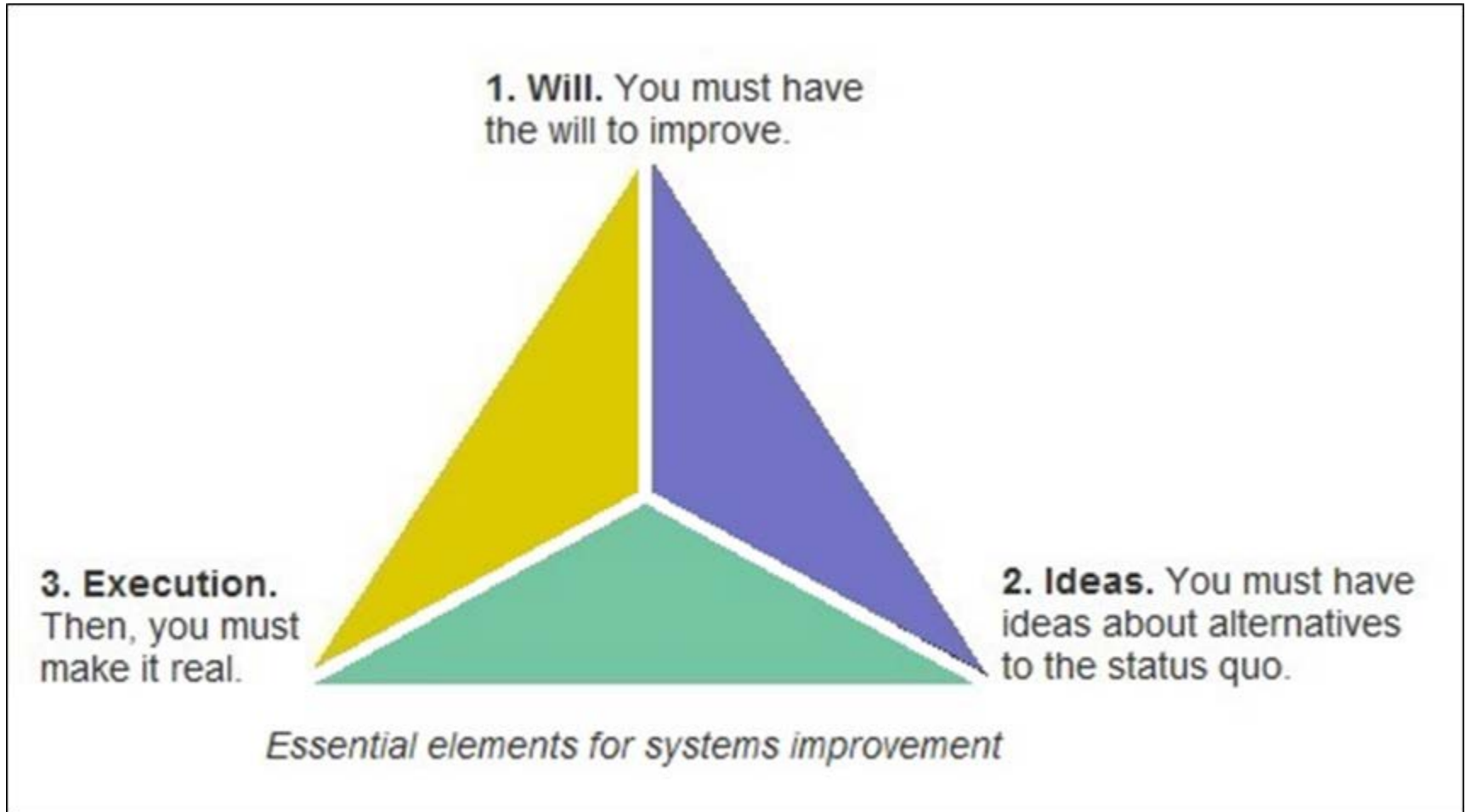
What happened?





# Understanding Systems

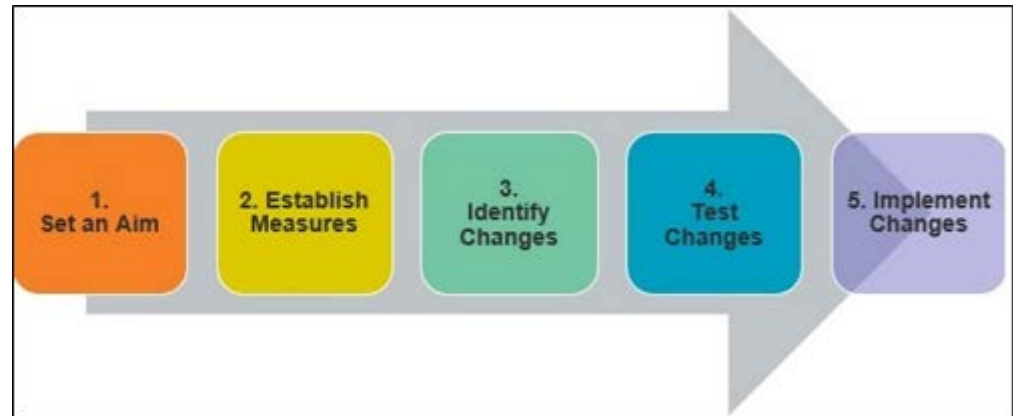
**“Every system is perfectly designed to get the results it gets.”**



# Improvement Science

An applied **science** that emphasizes innovation, rapid-cycle testing, and spread in order to generate learning about what changes produce **improvements**

- Setting Aims
- Choosing Measures
- Developing Changes
- Testing Changes



# Aim Statement



The **aim statement** should be time-specific and measurable, stating exactly: “How good?” “By when?” and “For whom?”

## Example

- By December 1, we will increase the % of diabetes patients screened for severity & control

# Establish Measures

Feedback to know if a specific change actually leads to an improvement, and quantitative measures can often provide the best feedback



- Outcome measures
- Process measures
- Balancing measures

## Example Measures:

- % patients with controlled diabetes
- MCO quality scores
- # ED visits related to diabetes

# Identify Changes

How are you going to achieve your aim?  
Where do new ideas come from?

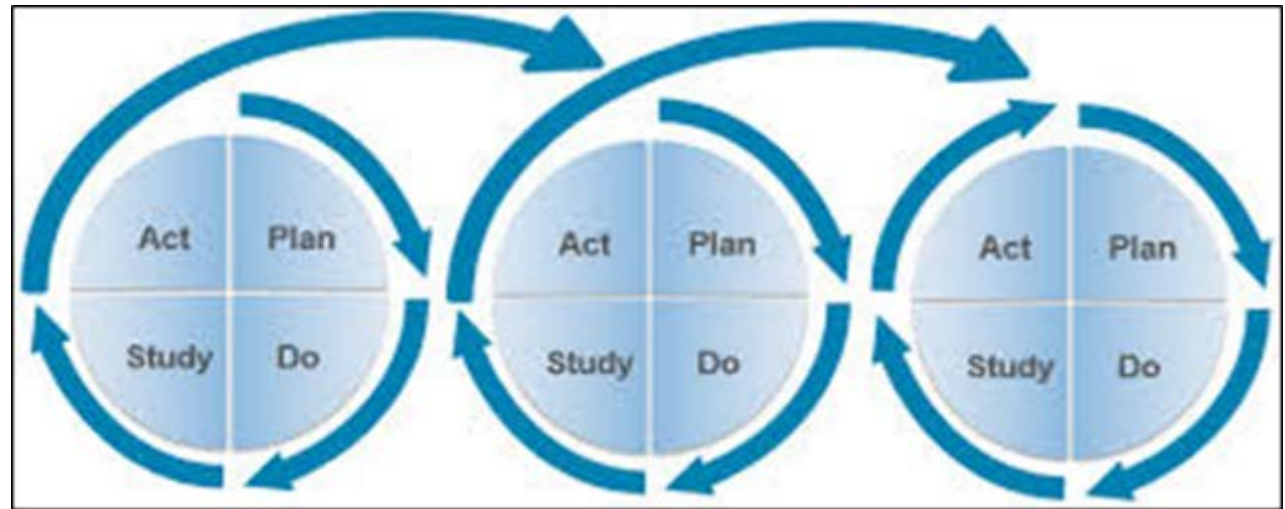


- Changes: running registry lists, using EMR alerts, completing diabetes care plans, etc.
- Prediction: that by using these change tactics we will be able to decrease % of patients with diabetes who have H<sub>1c</sub> >9 and lower # ED visits related to diabetes



# Test Changes

- This is where the **PDSA cycle** portion of the Model for Improvement comes in. By planning a test of change, trying the plan, observing the results, and acting on what you learn, you will progressively move toward your aim.



# Implement Changes



- Change that results in improvement, logically has a next step to implement it — meaning, make the change the new standard process in one defined setting

# Diabetes Measures



# PDSA Video

<https://www.youtube.com/watch?v=b6kHVZwQpVg>

# Measures for Improving Diabetes Care

## ■ Outcome Measure

- % patients with controlled Ha1C
- MCO quality scores
- # ED visits related to diabetes

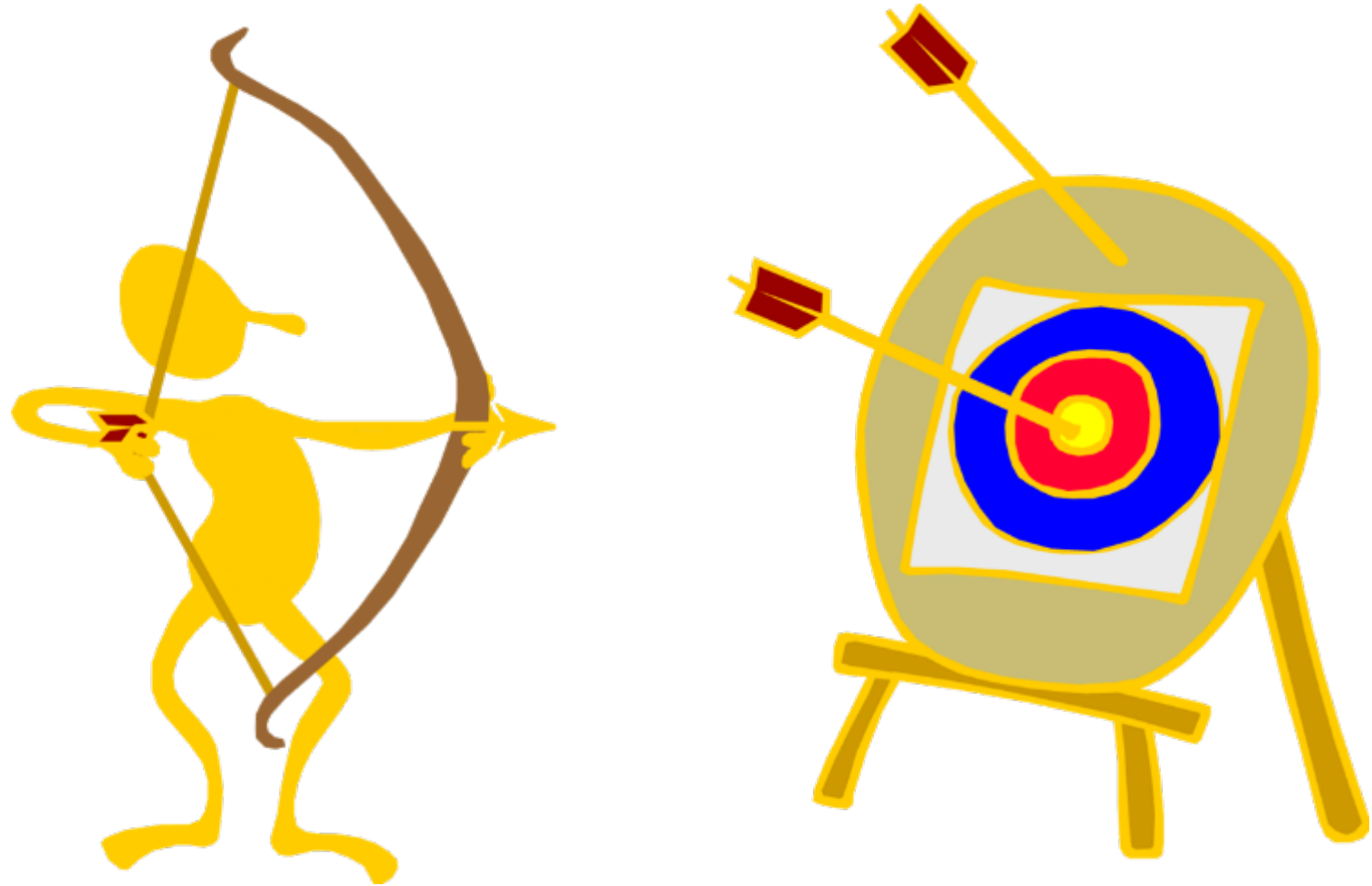
## ■ Process Measures

- % of diabetes patients screened for severity & control
- % of eligible patients referred to endocrinologist
- % of providers making referrals to endocrinologist

## ■ Balancing Measure

- Screenings for other chronic disease control - balancing priorities among patients with co-morbid diseases within constraints of visit

# What Are We Trying To Accomplish?





# Aim Statement

- What we want to do?
- By when?
- For whom?
- How much improvement?

# A Good Aim is SMAART

- **S** → Specific
- **M** → Measurable
- **A** → Actionable
- **A** → Achievable
- **R** → Relevant
- **T** → Time-framed

# Example of an Aim Statement

**By March 2020, ABC Medical Group will improve care for adult patients with uncontrolled diabetes to ensure that**

- 90 % of diabetes patients are screened for severity & control
- 75 % of diabetes patients received A1c screening every six months
- 100 % of providers refer eligible patients to the endocrinologist
- Average # monthly ED visits for diabetes decrease from 10 to 2

**Specific**

**Measurable**

**Actionable**

**Achievable**

**Relevant**

**Time-bound**

# Diabetes Case Example

- ABC Health Center has been looking at their population of patients diagnosed with both diabetes and schizophrenia. In addition to monitoring, they have decided to pay special attention to medication adherence for these patients
- Currently only 62% of these patients at the practice are consistently adhering to their medication
- The health center forms a project team and discusses possible interventions to enhance the monitoring of medication adherence. In addition to medical staff, the team would like to make sure behavioral health providers are discussing medication adherence with patients and communicating with medical providers accordingly
- The focus of the intervention will be to discuss and flag patients with diabetes and schizophrenia during the morning team huddle. When available, the on-site social worker will be included. Additionally, the group will consider using the on-site community health worker to follow up with patients by telephone

# Measure Rationale

- The measure selected is used to assess the percentage of members 18 to 64 years of age with schizophrenia or bipolar disorder who were dispensed an antipsychotic medication and had a diabetes screening test
- People with schizophrenia are at a greater risk of metabolic syndrome due to their serious mental illness (Cohn et al., 2004)
- Diabetes screening is important for anyone with schizophrenia or bipolar disorder, and the added risk associated with antipsychotic medications contributes to the need to screen people with schizophrenia for diabetes
- Diabetes screening for individuals with schizophrenia or bipolar disorder who are prescribed an antipsychotic medication may lead to earlier identification and treatment of diabetes

Source: National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

# Polling Post Case Example

- Best AIMS statement examples based on Diabetes Case provided:
  - A. By September 30, 2020 increase medication adherence by 5%
  - B. Increase medication adherence by 20%
  - C. Decrease medication adherence
  - D. Increase medication adherence for all patients



# PDSA Diabetes Example: Review gaps-in-care report during team huddle

## ■ PLAN

- On Tuesday afternoon, PCA will run gap-in care report for patients with appointment for next day. Patients with a diagnosis of diabetes and schizophrenia will be identified, reviewed, and discussed as needed.
- On Wednesday morning, MD, MA, LPN, MSW, and front desk clerk on green team will huddle at 8:00 AM
- The team will take note of gaps to be addressed and make a plan for addressing them
- Data collection: Did meeting took place, If yes, how long (minutes), # gaps identified, # gaps addressed

## ■ DO

- Test ran as planned
- Huddle took 15 minutes
- Long line of patients waiting for clerk after the huddle
- 3 walk-in appointments that were scheduled the night before that weren't on the report
- 6 patients had gaps to be addressed; 3 had gaps addressed

# PDSA Diabetes Example: Review gaps-in-care report during team huddle – Cont'd

- STUDY (Results vs. Predictions)
  - The huddle took longer than expected (15 vs 10 min)
  - Only 50% of patients' gaps were addressed (vs. 75% predicted)
  - Realized we needed a better system for noting who has a gap and documenting the plan to address it
  - 2 of the patients that were walk-ins also had gaps in care
  - Identifying patients with diabetes and schizophrenia did not take long and seemed productive
  - Created a backlog for the front desk clerk
- ACT
  - Repeat the test and use a planning worksheet to assign responsibilities for making sure gaps are addressed (without clerk)
  - MA to scan charts of walk-in patients to review for gaps and do 1:1 huddle with MD to address

# Act

- Adapt
  - Revise this change and try again
  - Complete another cycle
- Adopt
  - Proceed with this change and figure out how to implement/scale up
  - Complete another cycle
- Abandon
  - Try a different idea altogether
  - Complete another cycle

# Learning from “Failed” Tests

What doesn't work and why not?

- Change not executed well
- Support processes inadequate
- Hypothesis/hunch was wrong
  - Change executed but did not result in local improvement
  - Local improvement did not impact larger measure

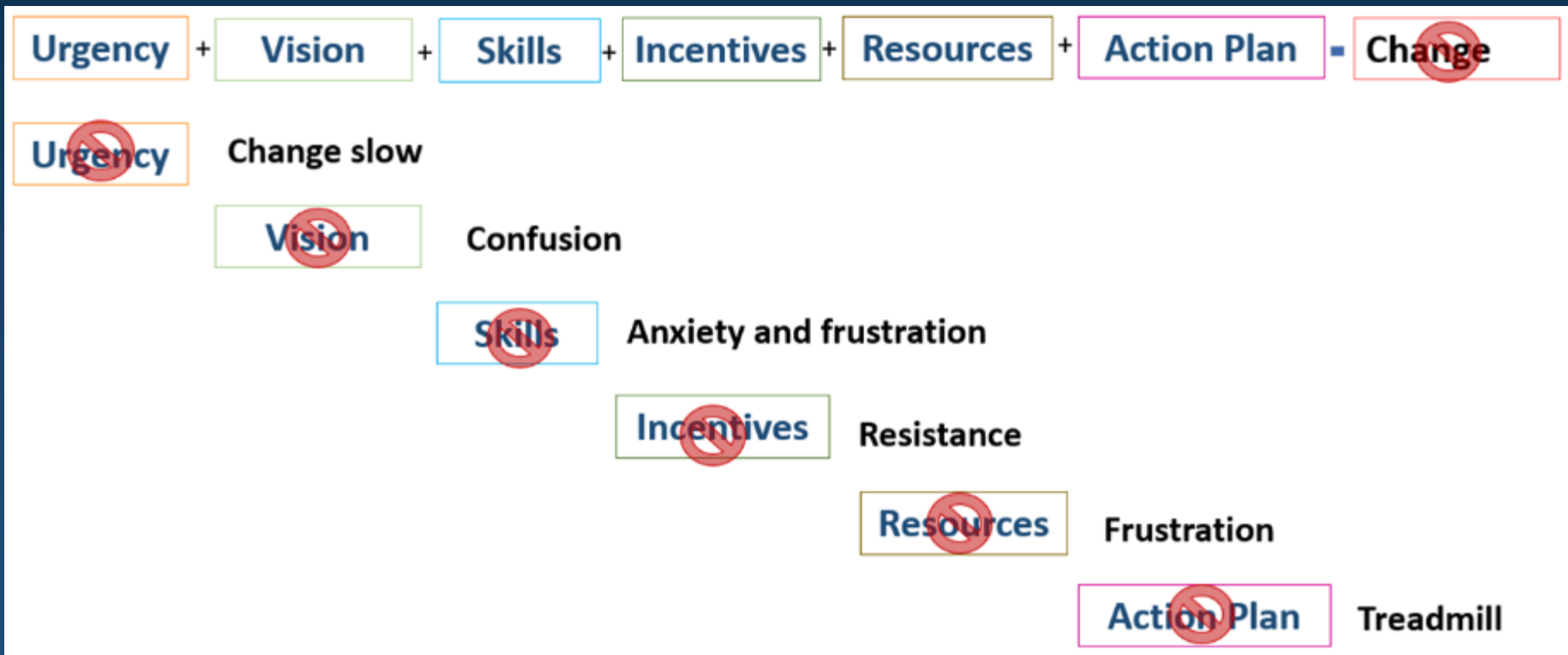


# What It Takes To Improve

- Will to change the current system –
  - Strong positive leadership and a realistic appraisal of resources and barriers
- Ideas about changes that will improve the system
  - And a theory that links changes to outcomes
- Execution of the ideas
  - And a way to distinguish successful from unsuccessful changes

*From “Back to the Basics: Building Essential QI Skills”, Jane Taylor, Ed.D. Michael A. Posencheg, MD ,  
@ IHI Forum*

# When one is missing.....



Adapted from <https://reveln.com/wp-content/uploads/2013/02/Mary-Lippitt-Complex-Change-Model-REVELN.com-2012.pdf>



# Developing Your Aim Statement - Handout

## Aim Statement

**Our team intends to . . . .**

**For this patient population:**

**How good? (state the numeric goals the team must achieve)**


**By when?**

# Planning SMAART Goals - Handout

<b>Development Need</b> (Skill, competency, or project to complete or improve)	<b>Specific</b> (Clear, concise answer to question “at what? for whom? by how much?”)	<b>Measurable</b> (How will you measure your goal to know if progress has occurred?)	<b>Aggressive</b> (What about this goal will push you to achieve more than you have before?)	<b>Achievable</b> (While staying aggressive, what parameters make this goal achievable?)	<b>Relevant</b> (How will this directly relate to your job and/or department’s needs?)	<b>Time-Bound</b> (Goal should clearly answer the question “by when?”)

# Handout

## Model For Improvement Worksheet – Page 1

	TEAM:	CYCLE:	DATE:
	PDSA NAME:		
	OBJECTIVE(S) FOR THIS PDSA CYCLE		
<b>PLAN</b>			
Questions:			
Plan for Change or Test: who, what, when, where.			
Plan for Collection of Data: who, what, when, where.			
Predictions (quantifiable):			

# Handout

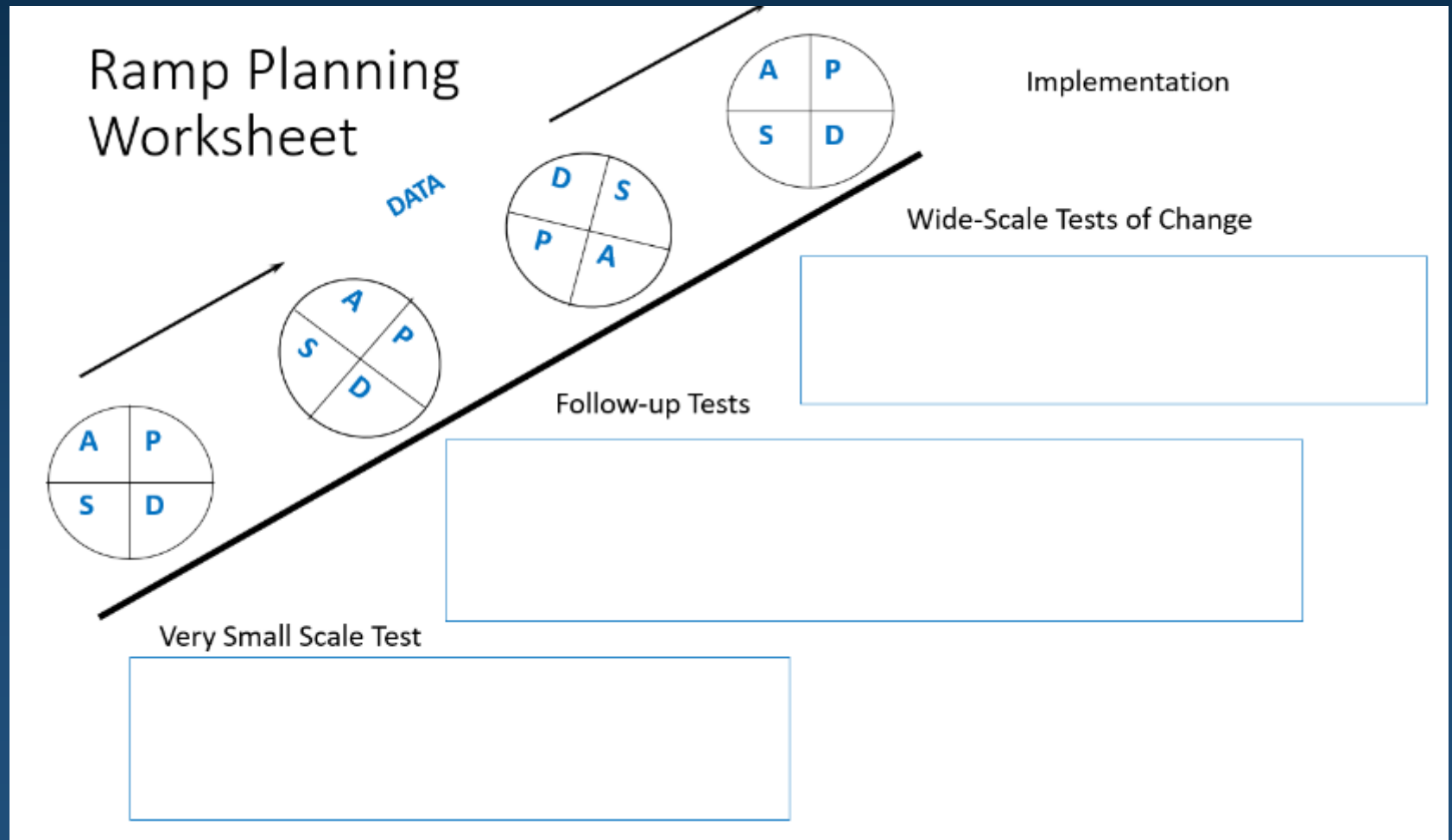
## Model For Improvement Worksheet – Page 2

**DO:** carry out the change or test; collect data and begin analysis.

**STUDY:** complete analysis of data; compare results to predictions. Summarize what was learned.

**ACT:** are we ready to make a change? Plan for the next cycle.

# Ramp Planning Worksheet - Handout



# Take Away

1. Consistently training staff to document properly will assure you help your organization meet its strategic and operational goals
2. Participating in QI reporting and having identified staff perform data analytics ensures that the practice will prioritize efforts, monitor results and plan for the future
3. Utilizing dashboards to share data and highlight areas of concern is a way for all team members within a practice to discuss lessons learned





# Contact Us



**Andrew Philip, PhD**  
Primary Care Development Corporation  
[aphilip@pcdc.org](mailto:aphilip@pcdc.org)