

# **Ready, Set, Go!**

## **Enhancing RW QI Programs Using the Clinical Microsystems Model**

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*Community Health Center, Inc.*

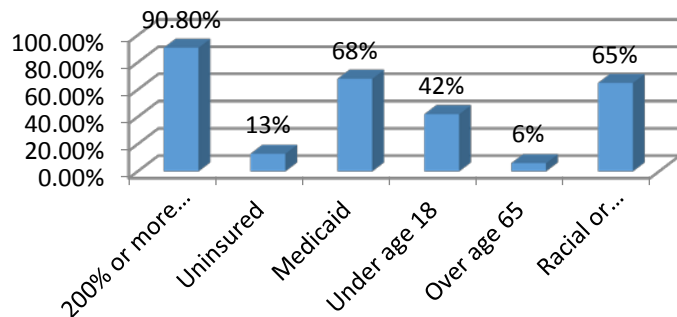
*Connecticut*

## Community Health Center Inc. Profile:

- Founding Year - 1972
- Primary Care Hubs – 13
- No. of Service Locations - 216
- Licensed /Total SBHC locations – 51
- Mobile dental in 200 locations
- Organization Staff – 800

## CHC Patient Profile:

- #consider CHC their health care home: 130,000
- Health care visits: more than 429,000



## Three Foundational Pillars:

Clinical Excellence

Research & Development

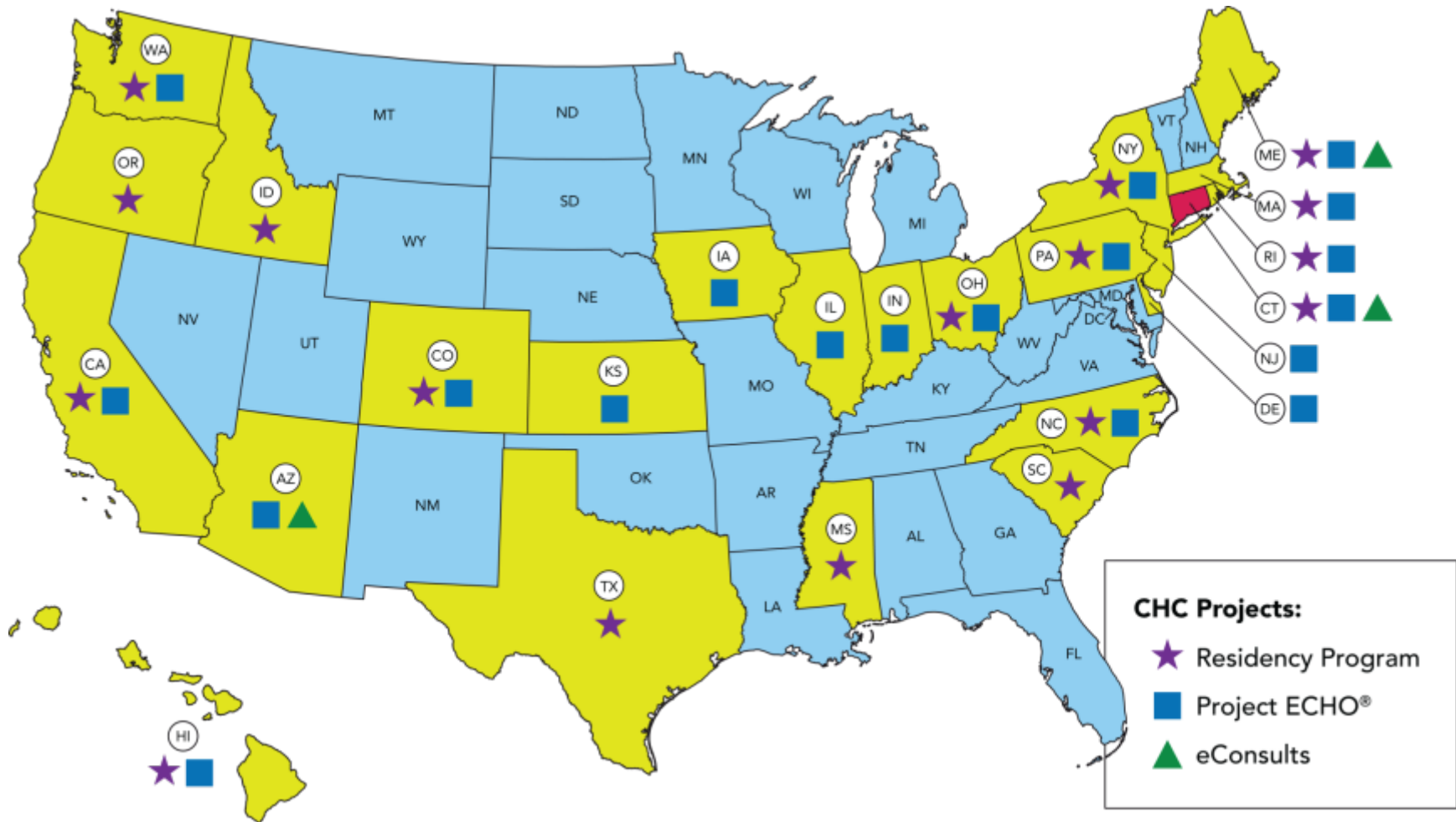
Training the Next Generation



## Innovations:

- Center for Key Populations
- Weitzman Institute
- Project ECHO for vulnerable populations
- National NCA on clinical workforce development
- Post graduate residency training for NPs and postdoctoral psychologists
- Formal research program
- Transformative quality improvement program
- E-consult specialty services

# CHC's Educational, Technical & Innovation Projects



# Our Mission



- To ensure that key populations in the communities we serve have a central and cohesive focus.
- To ensure that the integration of their care is fully realized through the integral collaboration and utilization of the vast and rich resources available at CHC, including
  - World-class clinical care
  - Quality improvement
  - Training and education of the next generation to care for these populations, and
  - Research and publication to help study, improve and transform the care they receive.

# Center for Key Populations

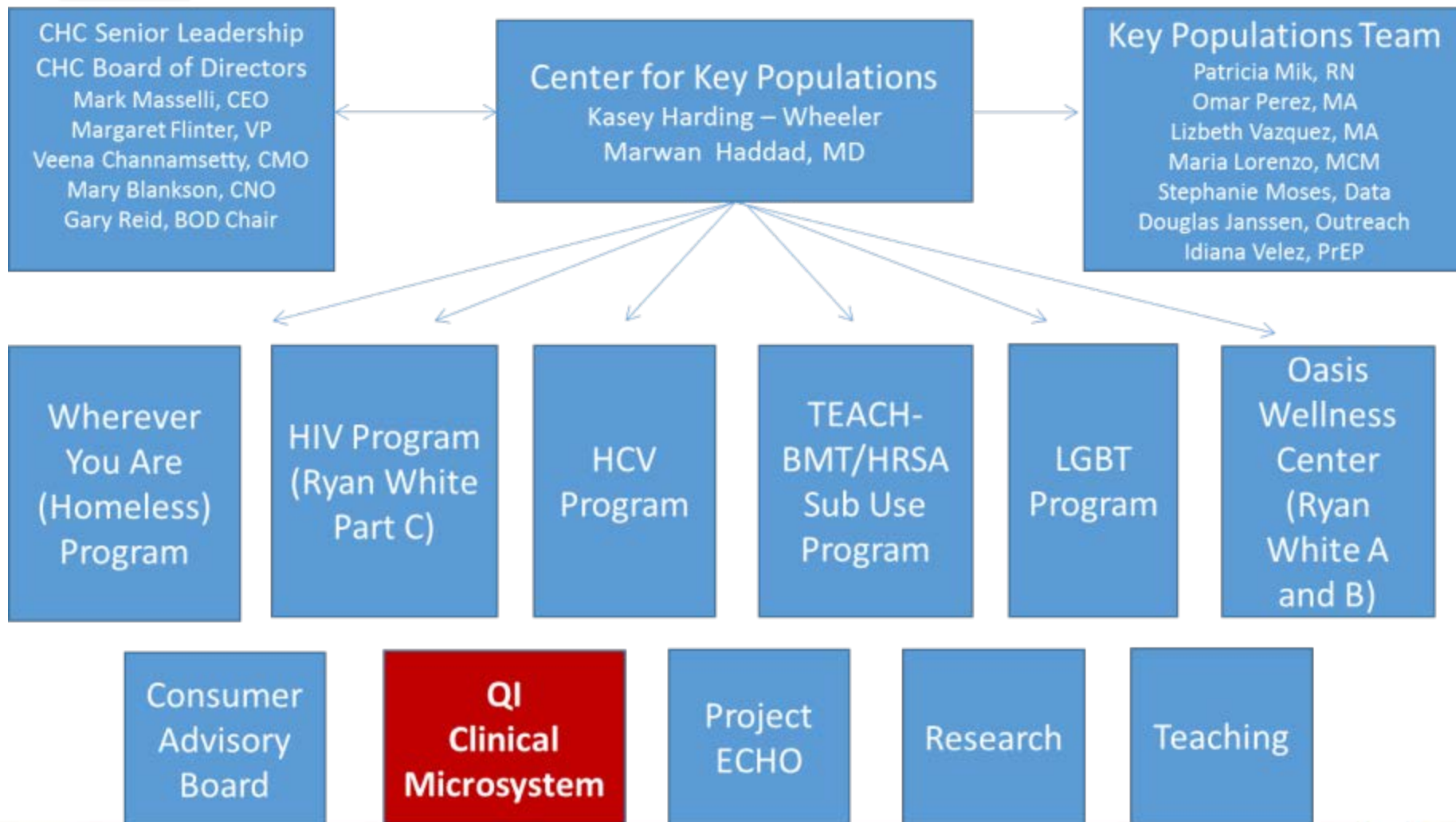


- Ensures access to integrated, quality specialty care for 5 key groups with highest burden of, and risk for, HIV who experience barriers to comprehensive, respectful and safe care.
  - Men who have sex with men
  - Transgender people
  - People who inject drugs
  - (Recently) incarcerated
  - Sex workers
- Services:
  - HIV screening, prevention, and treatment
  - HCV screening, prevention and treatment
  - STI screening, prevention and treatment
  - Buprenorphine maintenance therapy for opioid use disorder
  - Homeless care services
  - LGBTQ health





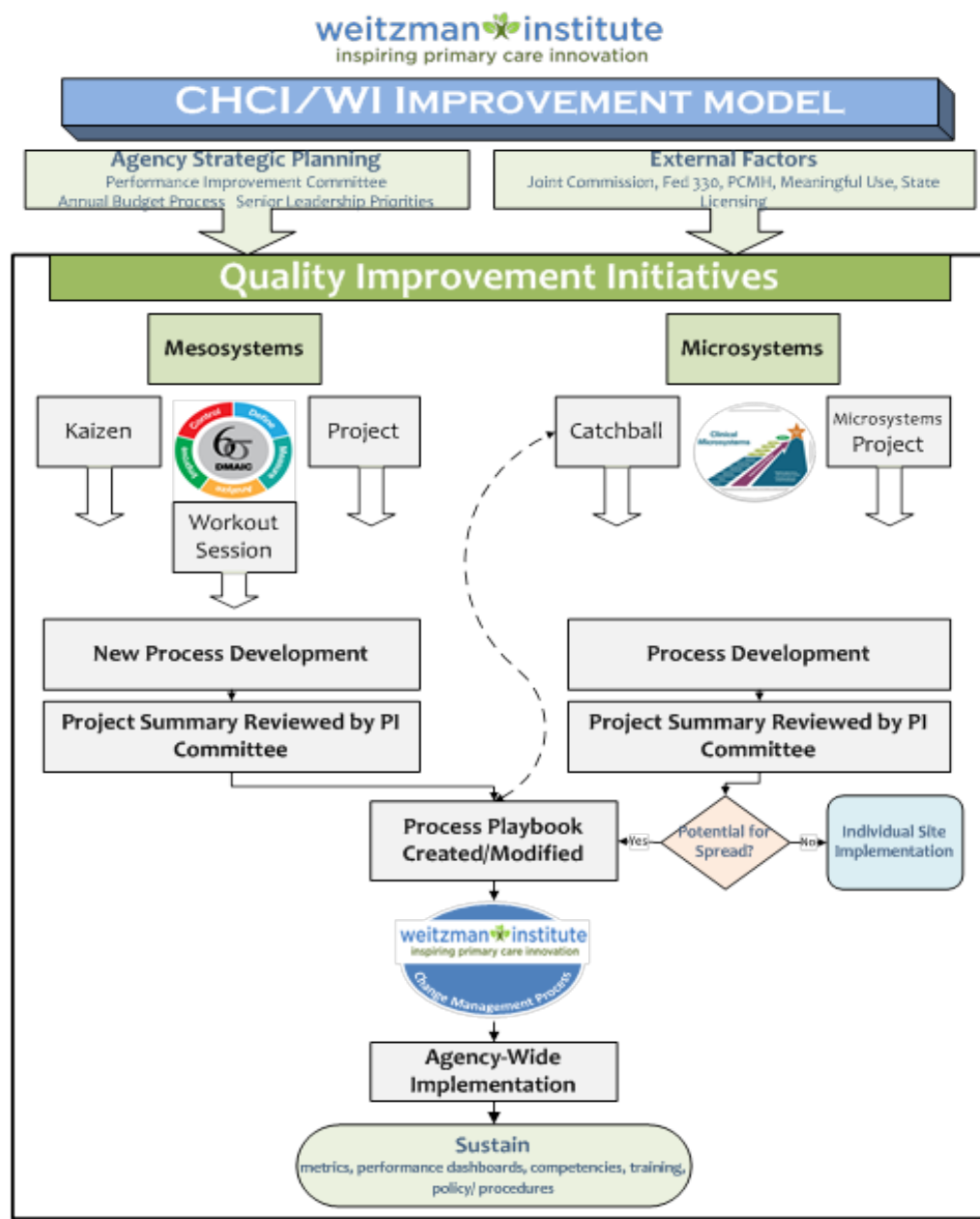
# Center for Key Populations Organizational Chart



# CHC QI Clinical Microsystems

- The QI model is driven by a core set of agency-wide goals and objectives, documented in an annual Performance Improvement Plan.
- Microsystems are frontline improvement teams sponsored by local and department leadership that are supported by trained improvement coaches and a data analyst.
- Their purpose is to engage in improvement work at the local level in alignment with agency performance improvement goals.
- They meet weekly or biweekly to design and test effective solutions to specific problems.
- The improvement coaches and QI Department monitor and support the work of each microsystem team.
- Microsystem teams create a “bottom up” source of improvement ideas and solutions that improve quality at the front lines and often generate ideas that have relevance to the wider organization.

# CHC QI Structure Model





# Microsystem Coach

- Key member of the CHC QI team.
- Receive training in use of tools and processes needed to guide improvement initiatives.
- Play a critical role enhancing team functioning.
- Lead meetings, provide expertise in the QI process, and employ a range of tools and techniques to support the collaborative process and help teams efficiently and effectively achieve their goals.
- Supervised by QI Department's Quality Manager.



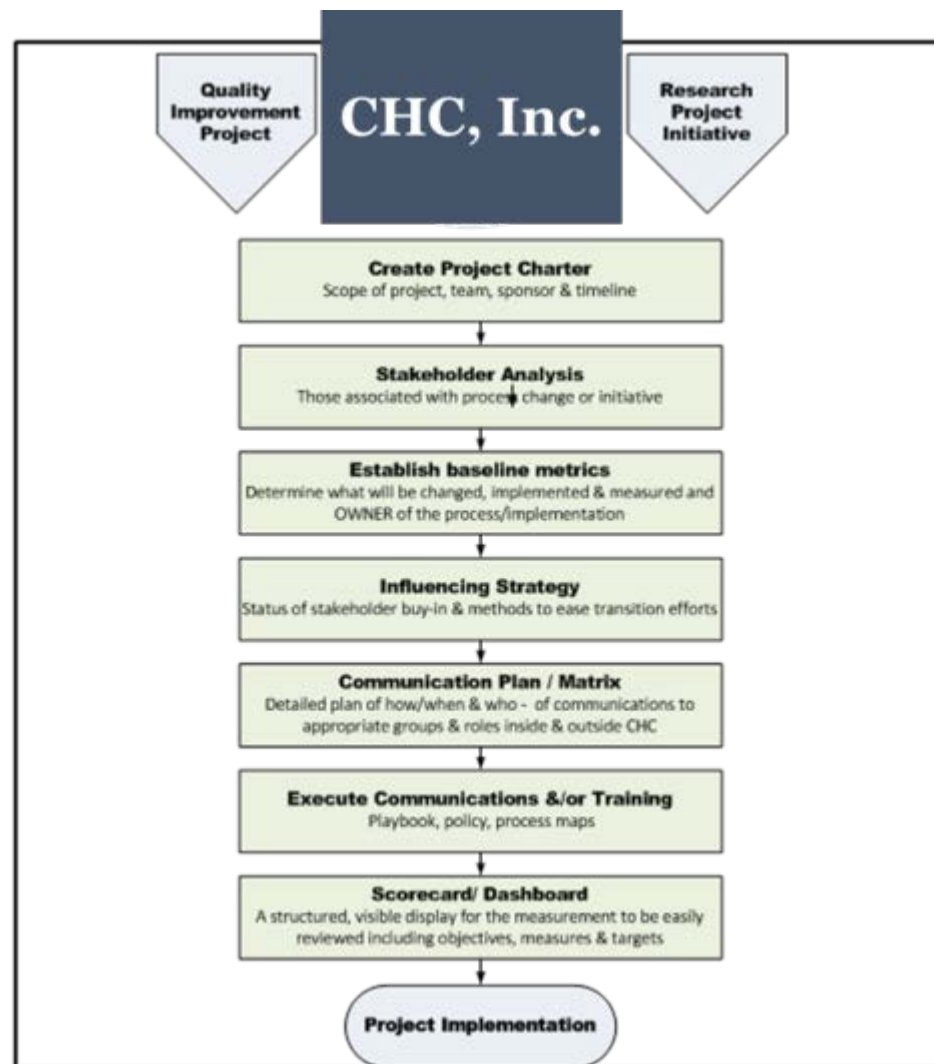
# Microsystem Coach Continued

- **Qualifications for CHC Coaches:**
  - Identified by QI team, senior leaders, or managers.
  - At least one full year of CHC employment.
  - Solid contributor to CHC with positive performance review.
  - Current role involving team or project leadership.
  - Demonstrated leadership abilities and team collaboration skills.
  - Good communication skills with interest in gaining new skills.
- **Role of CHC Coaches:**
  - Meet together with Senior QI Manager monthly to review progress, discuss issues, and review agency goals and objectives.
  - Ensure their work is aligned with agency goals and objectives.
  - Receive an annual performance assessment
    - Direct observation at least once per year by QI Department staff
    - Annual self- assessment
    - Team assessment
    - Submission of monthly progress update via Microsystem Tracker.

# Senior Leadership Role

- Identify new opportunities to improve quality.
- Participate in the annual development of performance improvement goals.
- Act as senior leader sponsor for specific QI projects, when appropriate, and actively support the team in the improvement initiative.
- Ensure that their department is fully informed about agency performance objectives and current QI projects.
- Support development of frontline staff skills in facilitation, quality improvement tools and teamwork.
- Identify potential new coaches.

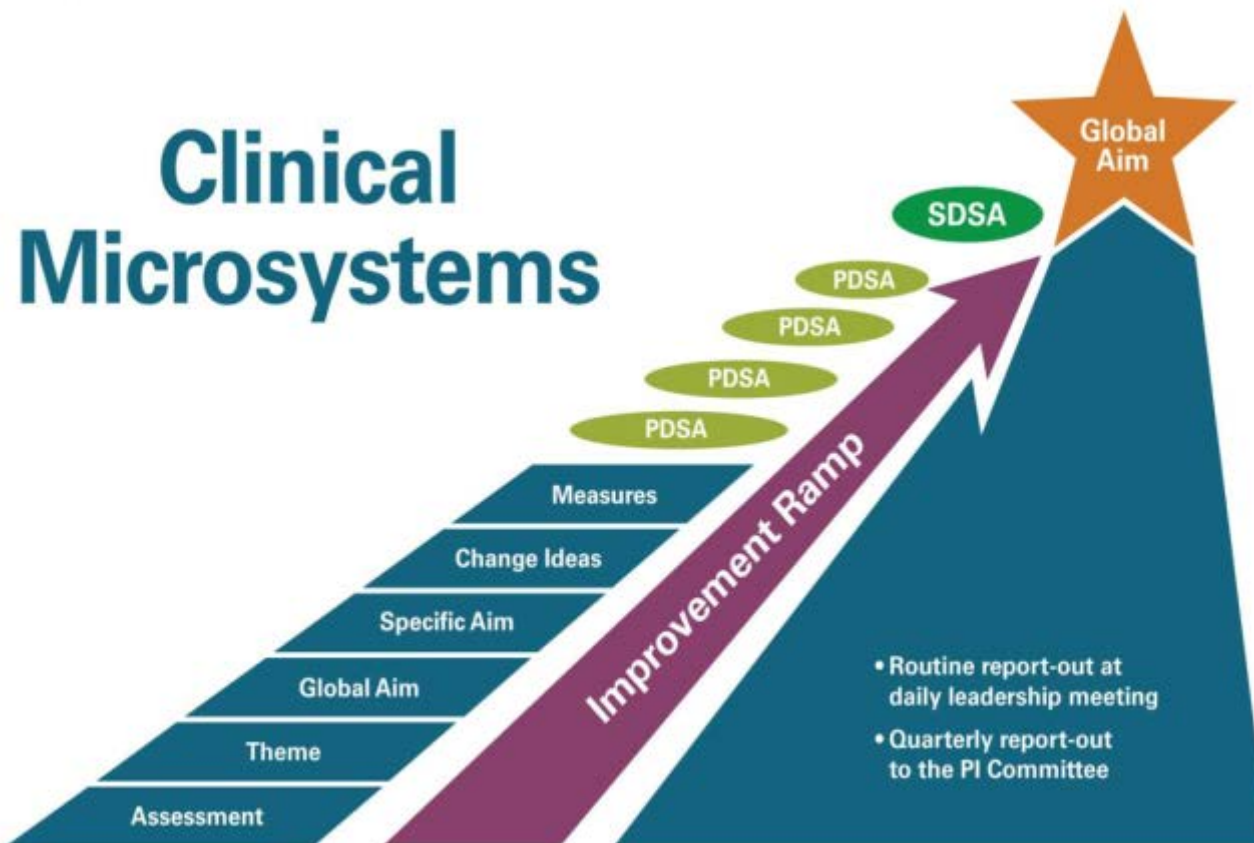
# Change Management Process



# High Performing Clinical Microsystems



# Quality Improvement Ramp



Improvement Ramp concept is from the book *Quality By Design* (by Eugene C. Nelson, Paul B. Batalden and Marjorie M. Godfrey) and the Dartmouth Institute.



# Quality Improvement Ramp Continued

- The Improvement Ramp provides a structured approach that emphasizes careful review and evaluation of data, global and specific goal setting, measurement of outcomes, and the use of rapid cycle tests of change.
- **Plan Do Study Act (PDSA) cycles** test and refine new ideas for improvement.



- All teams start at the bottom of the ramp with a comprehensive analysis of their site's performance and characteristics, which is referred to as the **5 Ps**.

# 5P Assessment

## 1. Professionals

- Team Members
- Providers that care for the patients

## 2. Patients

- Population cared for by the clinical microsystem professionals

## 3. Purpose

- Why the team comes together to focus on quality improvement

## 4. Processes

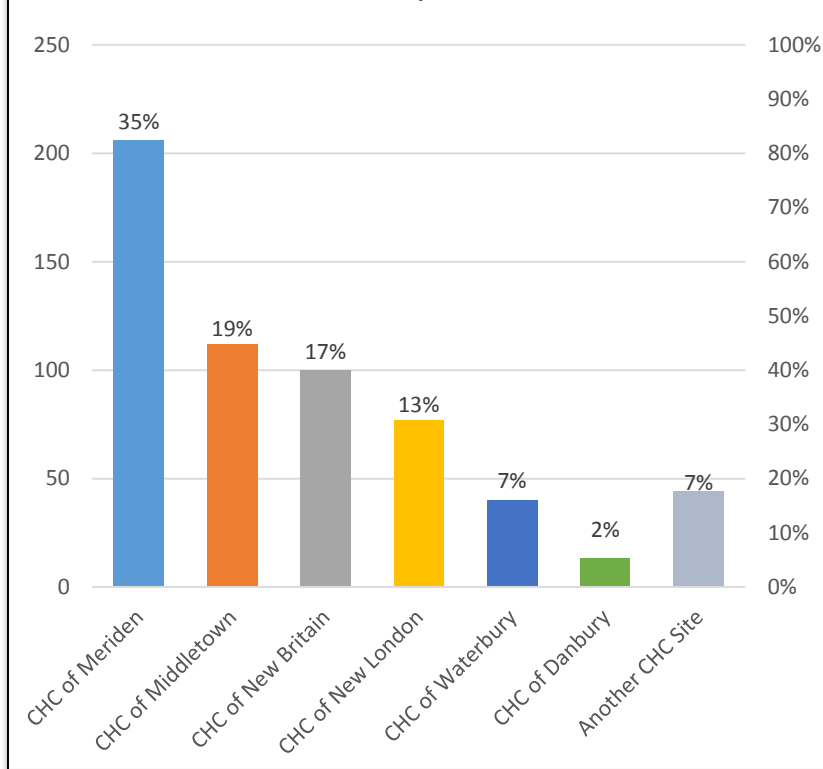
- What workflows are in place that help the team function?

## 5. Patterns

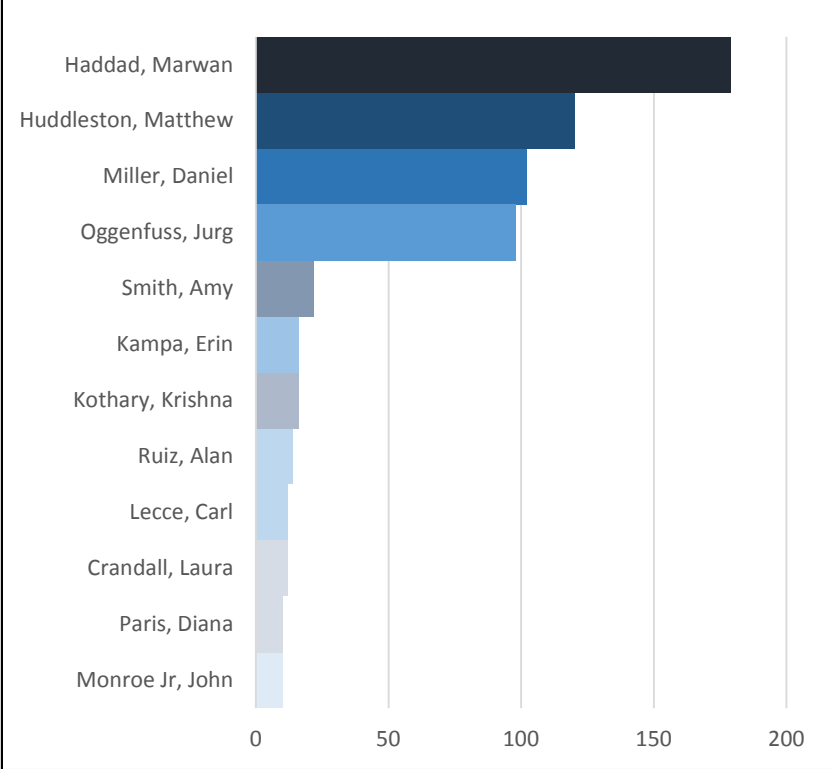
- What measures does the team collect and analyze data on? Where do they see improvements?

# 5P Data: Professionals

RW Patients by CHC Location

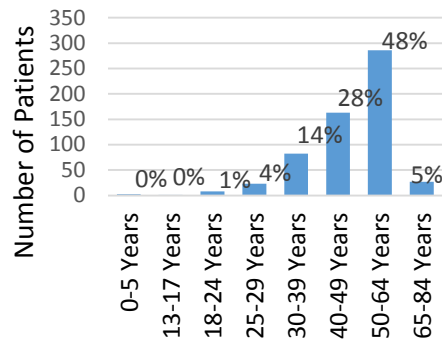


Providers of RW Patients

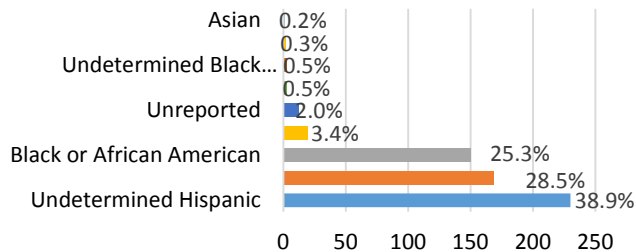


# 5P Data: Patients

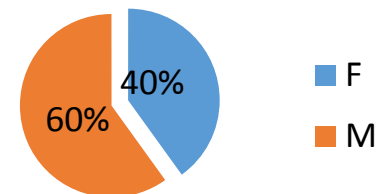
## RW Patients by Age



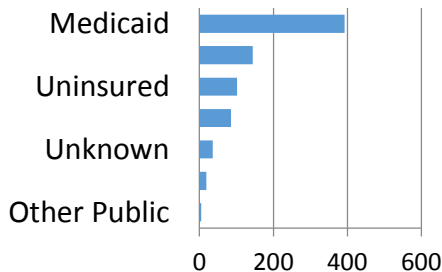
## Race/Ethnicity of RW Patients



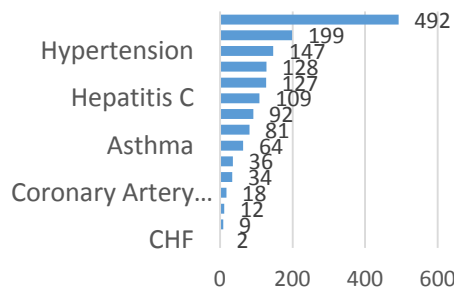
## RW Patients by Gender



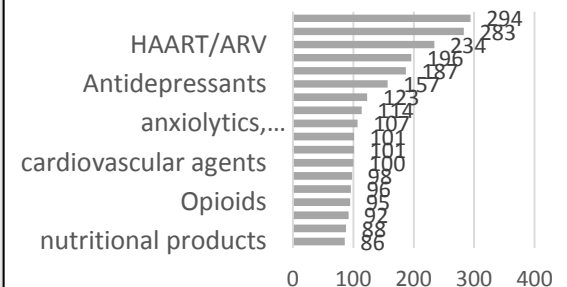
## Ryan White Patients by Insurance



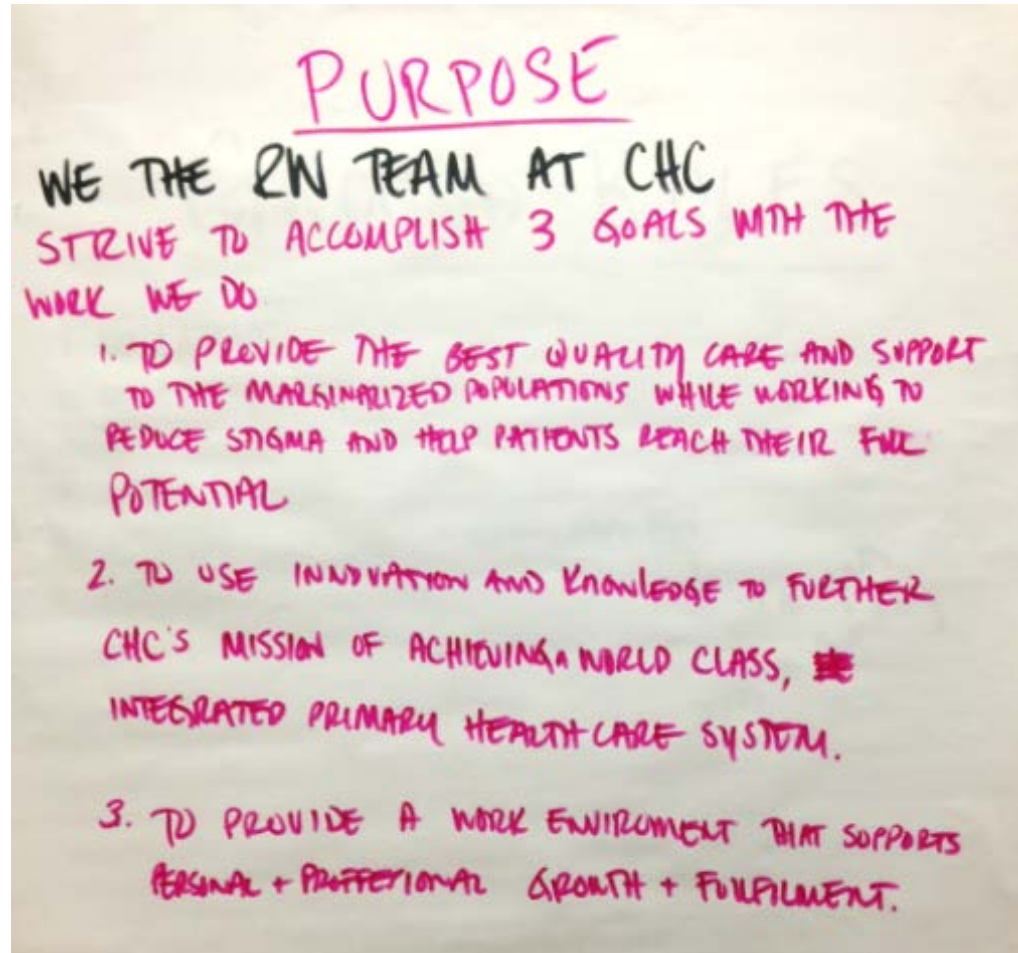
## Top Diagnoses among Ryan White Patients



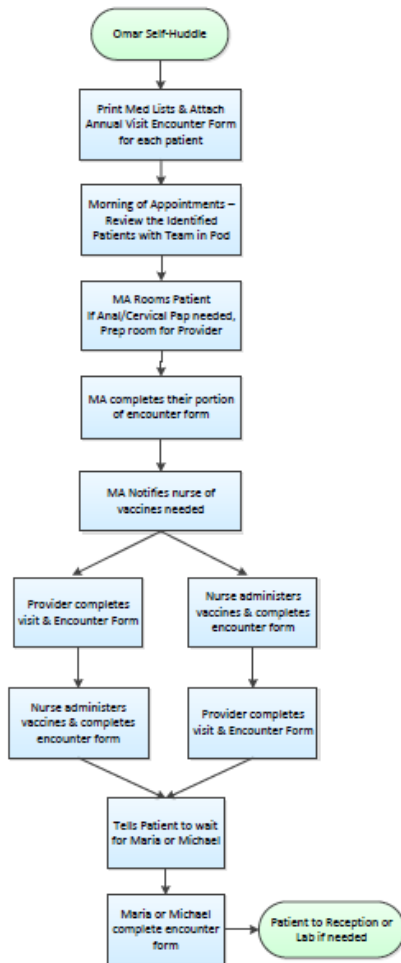
## Medications taken by RW Patients



# 5P Data: Purpose



# 5P Data: Processes & Patterns



- Process showing potential Annual Exam Workflow
- Patterns tracked through the HIV dashboard (image below), displaying which measures we are tracking for RW patients

| Provider                               | Controlno | First Diagnosis Date | Last Medical Encounter Date | Viral Load | HIV Medication | CD4 value | CD4 Prophylaxis | Last LDL Encounter | Last PPD Encounter | Last RPR Encounter | Last Chlamydia Encounter |
|--|-----------|----------------------|-----------------------------|------------|----------------|-----------|-----------------|--------------------|--------------------|--------------------|--------------------------|
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 20         | Yes            | 1163      |                 | 5/1/2015           | 10/31/2013         | 5/31/2013          | 3/8/2013                 |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 20         | Yes            | 181       | Yes             | 1/6/2016           | 12/11/2012         | 1/6/2016           | 7/3/2013                 |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 20         | Yes            | 533       |                 | 5/1/2015           | 5/31/2013          | 5/1/2015           | 5/30/2014                |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 20         | Yes            | 557       |                 | 9/23/2015          | 5/28/2014          | 9/23/2015          | 3/5/2013                 |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 244        | Yes            | 249       |                 | 1/7/2015           | 3/19/2014          | 1/2/2013           | 1/2/2013                 |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 20         | Yes            | 1366      |                 | 11/18/2015         | 2/13/2014          | 2/11/2015          | 2/13/2014                |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 113        | Yes            | 308       |                 | 11/11/2015         | 8/13/2013          | 11/11/2015         | 12/15/2015               |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 39         | Yes            | 325       |                 | 12/31/2014         | 12/9/2013          | 3/19/2013          | 3/19/2013                |
| Haddad MD, Marwan<br>SPECIALTY ONLY FP |           |                      |                             | 20         | Yes            | 752       |                 | 9/9/2015           | 6/18/2013          | 9/9/2015           | 12/12/2012               |



# PDSA Cycle

- The PDSA Cycle is a rapid test of change used for testing new ideas and potential solutions to identified problems.
  - Plan: identifying a goal or purpose, formulating a theory, defining success metrics and putting a plan into action.
  - Do: implementing the components of the plan.
  - Study: measuring and analyzing outcomes to test the impact of the plan for signs of progress and success, or problems and areas for improvement.
  - Act: integrating the learning generated by the entire process, which can be used to adjust the goal, change methods or even reformulate a theory altogether.
- These four steps are repeated in a continuous improvement cycle.



# Effective Meeting Skills

- Set a regular meeting day and time and stick to it.
- Set ground rules.
- Use meeting roles.
- Use 7 step meeting process and agenda.
- Encourage and facilitate participation in all processes.



# Meeting Roles

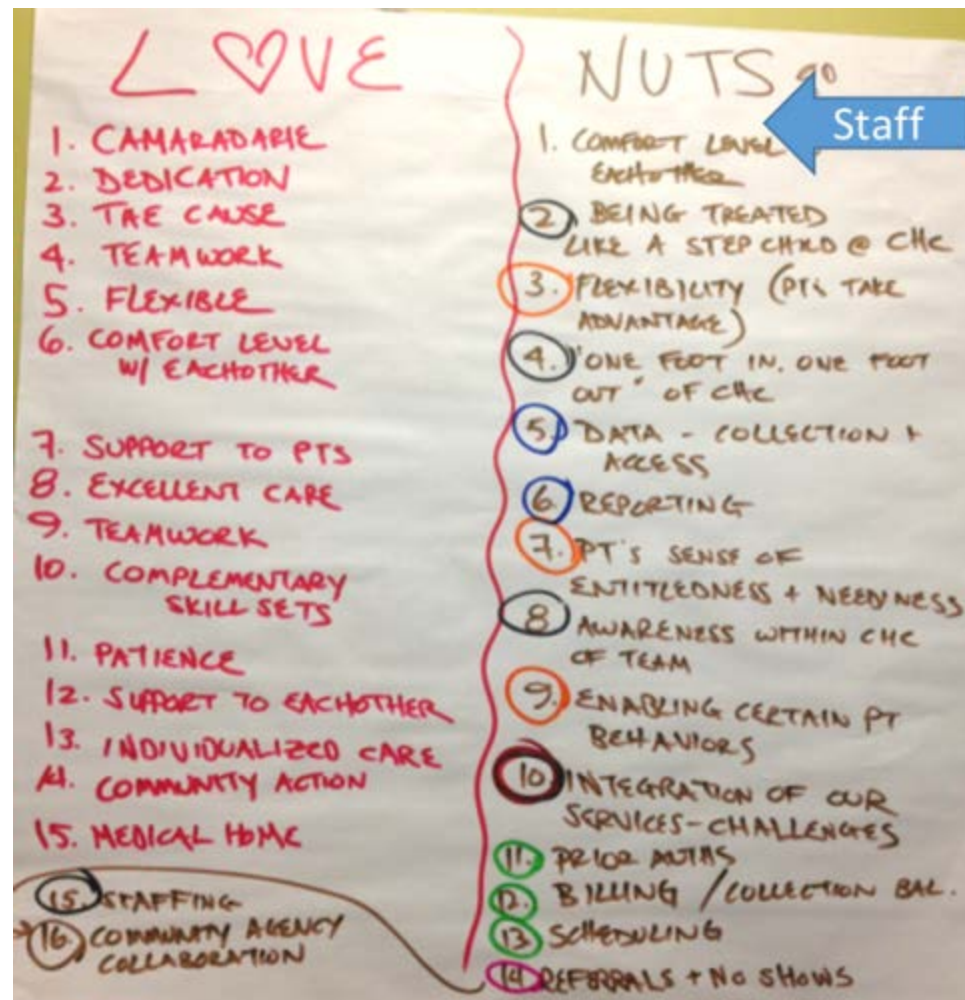
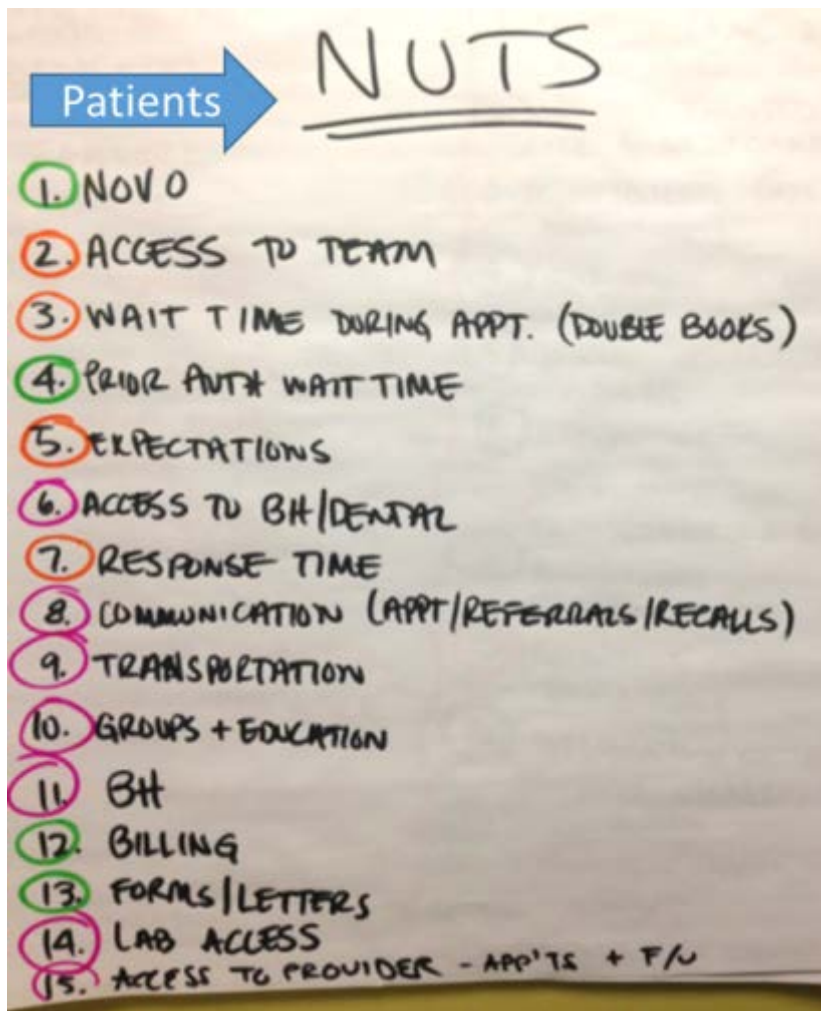
- **The Recorder** – Visually records for the group the work done and the next steps to be taken.
- **The Timekeeper** – Verbally announces the time remaining according to each agenda item.
- **The Leader** – Coordinates and directs the work of the team.
- **The Facilitator** – Responsible for making sure the meeting moves along and that everyone participates during meetings.

# Center for Key Populations Clinical Microsystem Example



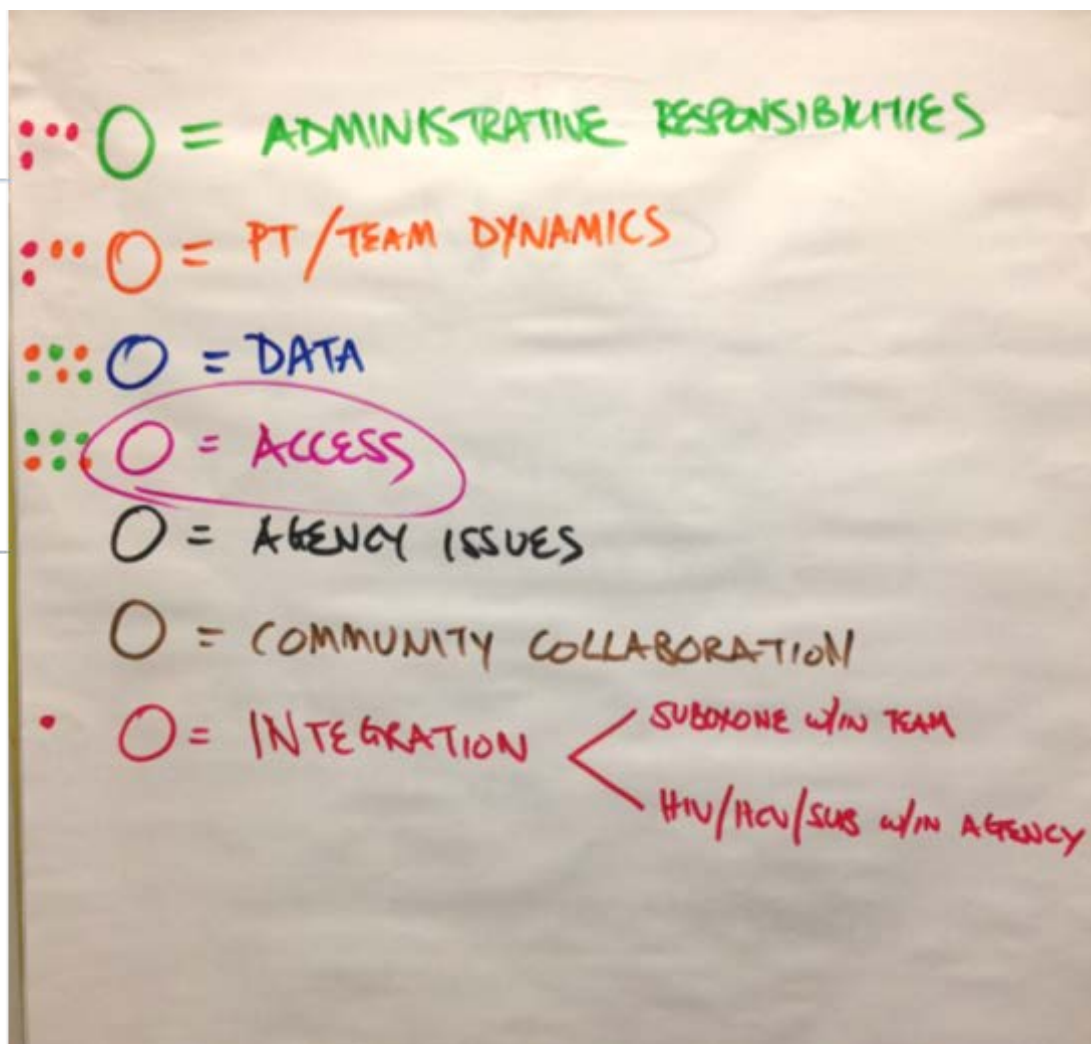


# LOVE AND NUTS



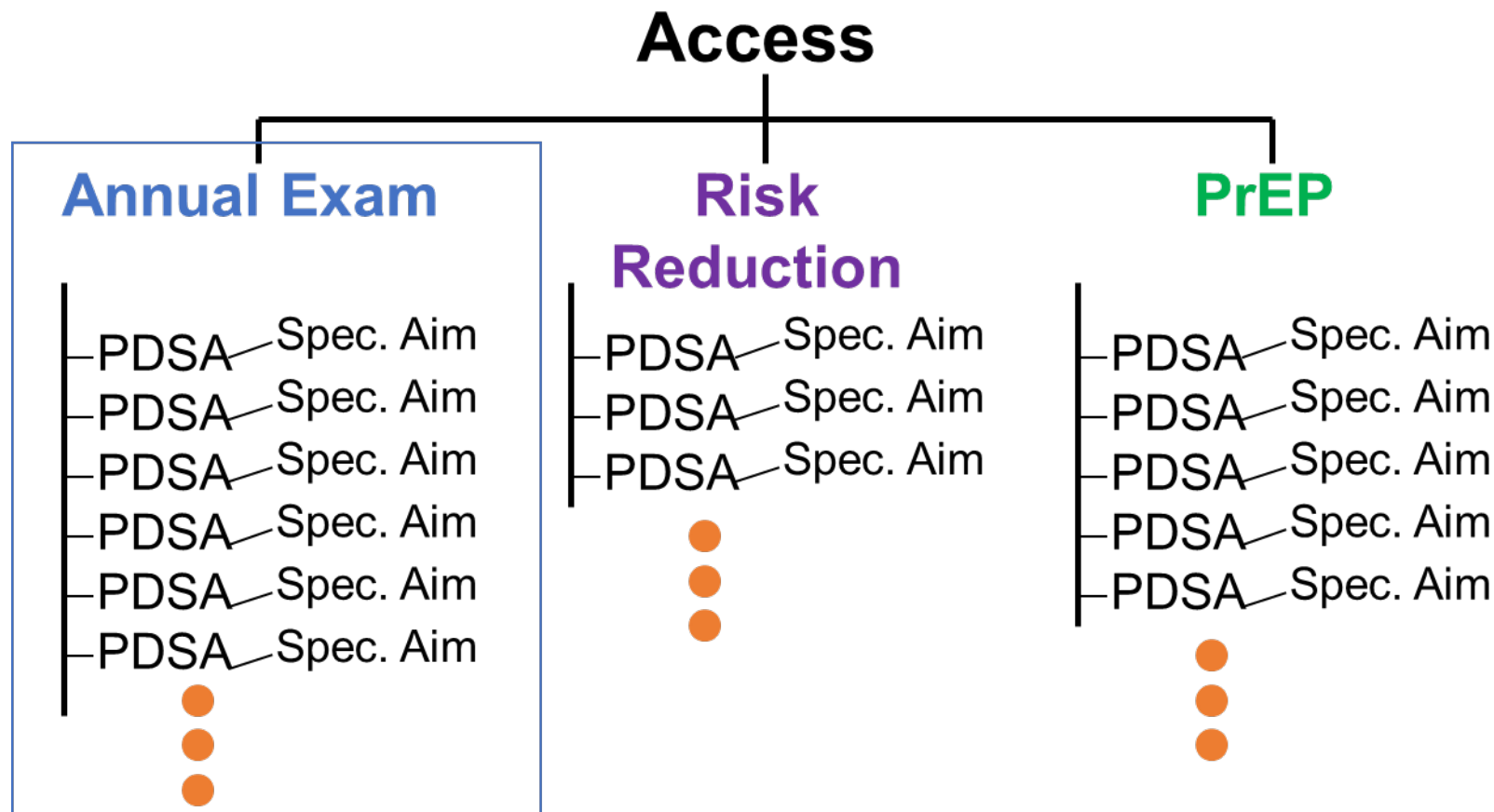
# Identified themes based on patient & team “Nuts”

Multi-Vote





# Themes, Processes, Aims, and PDSA Cycles



# Global Aim Statement

Write a Theme for Improvement: **Access**

## Global Aim Statement

Create an aim statement that will help keep your focus clear and your work productive:

We aim to improve: **The execution & documentation of ICSP clinical performance measures**  
(Name the process)

In: **New Britain**

(Clinical location in which process is embedded)

The process begins with: **An ICSP patient being scheduled for a visit with a provider**  
(Name where the process begins)

The process ends with: **The successful completion & documentation of the clinical performance measures**

(Name the ending point of the process)

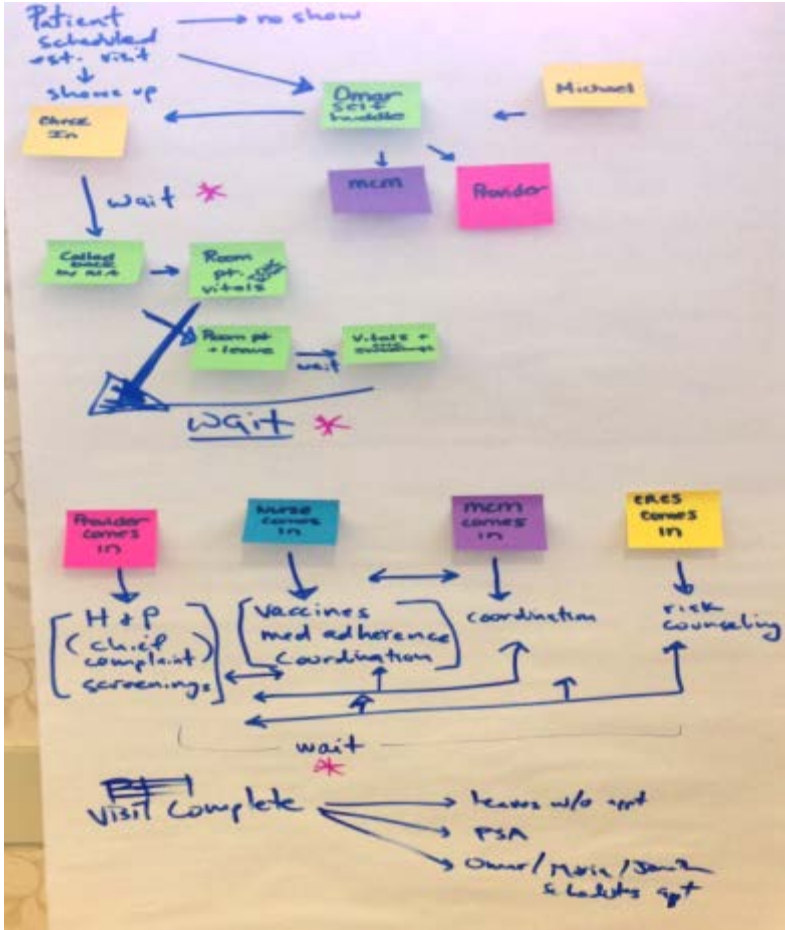
By working on the process, we expect: **To improve the quality of patient care, improve reporting, and improve efficiency of the team.**

(List benefits)

It is important to work on this now because: **The RSR is due in December, reporting/data benefits the patient, the patients feel more connected in times where access is limited, team needs to be more efficient in light of schedule changes.**

(List imperatives)

## Process Mapping – Current Process



- Process starts when patient calls to make the appointment
- Process ends with documentation of completed performance measures for patient.

# Specific Aim Statement

## Specific Aim Statement

We will: ☐ improve ☒ increase ☐ decrease

The: ☐ quality of ☒ number/amount of ☐ percentage of

ICSP Patients Attending an Annual Exam

(process)

From: 0 patients

(baseline state/number/amount/percentage)

To: 25 patients

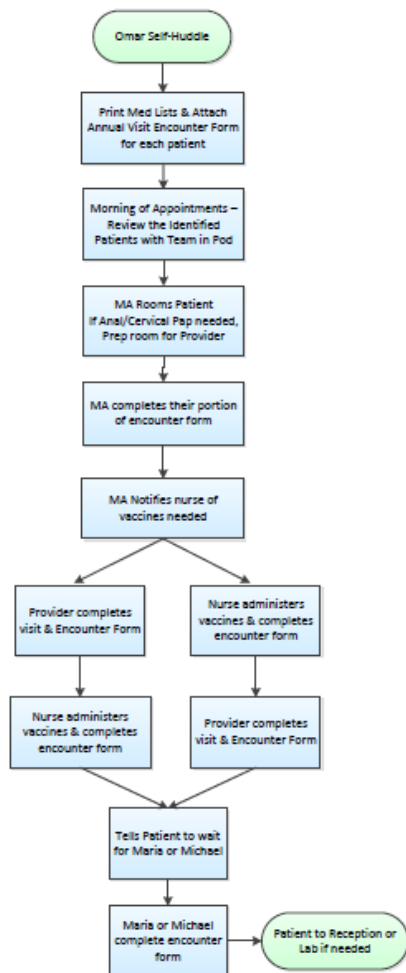
(describe the change in quality or state the number/amount/percentage)

By: September 1, 2014

(date)

- State aim clearly
- Use numerical goals
- Set stretch goals
- Avoid aim “drafts”
- Be prepared to fully shift aim if necessary.

# Mapping a new process



- Identify the areas of weakness that are creating the process breakdown.
- Strategize solutions to those steps in the process.
- Replace old steps with new ones.

**TEST THE NEW  
PROCESS!**

# Testing the Process with a PDSA Cycle

## Annual Exam PDSA Cycle

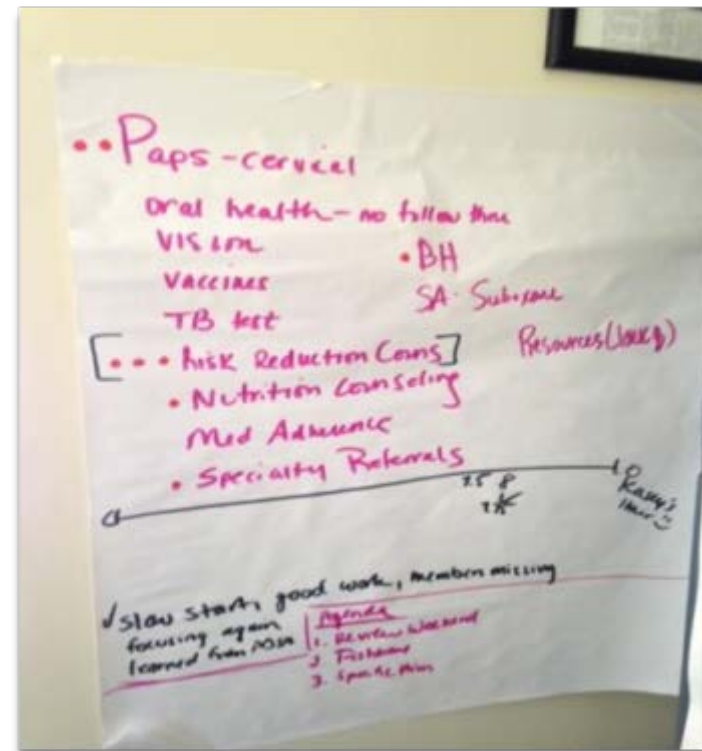
- **Plan:** Test the use of a pre-visit checklist that identifies patients in need of annual screenings. MA completes pre-visit checklist and hands to provider after rooming the patient. Provider completes necessary screenings, orders labs, and documents in the EHR
- **Do:** Measure the number of patients that received an annual exam. Measure the time it takes to complete the annual exam.
- **Study:** Time needed to complete the pre-visit huddle, checklist, and screenings in visit proved too burdensome on the team.
- **Act:** Place the idea of an annual exam on hold due to the time burden. Choose a new global aim for focus based on a piece of the annual exam.



# Don't be afraid to make changes!!

Our scope was too large to perform with the resources available!

- Identified pieces of Annual Exam
- Multi-Voting to select which to improve further



# Impact Versus Effort Grid

**High Impact  
Low Effort  
“Quick Wins”**

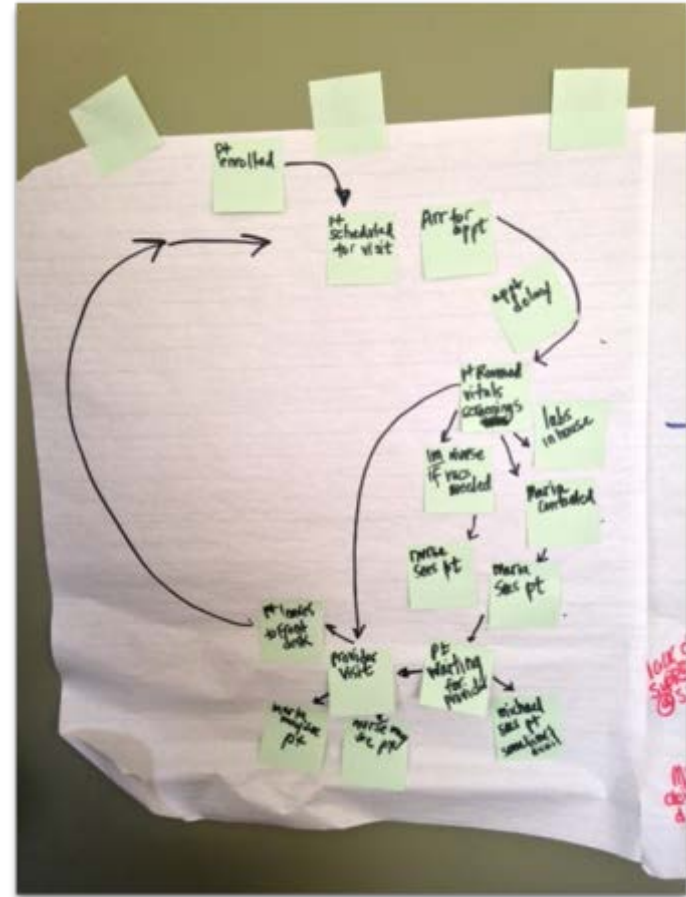
**High Impact  
High Effort**

**Low Impact  
Low Effort**

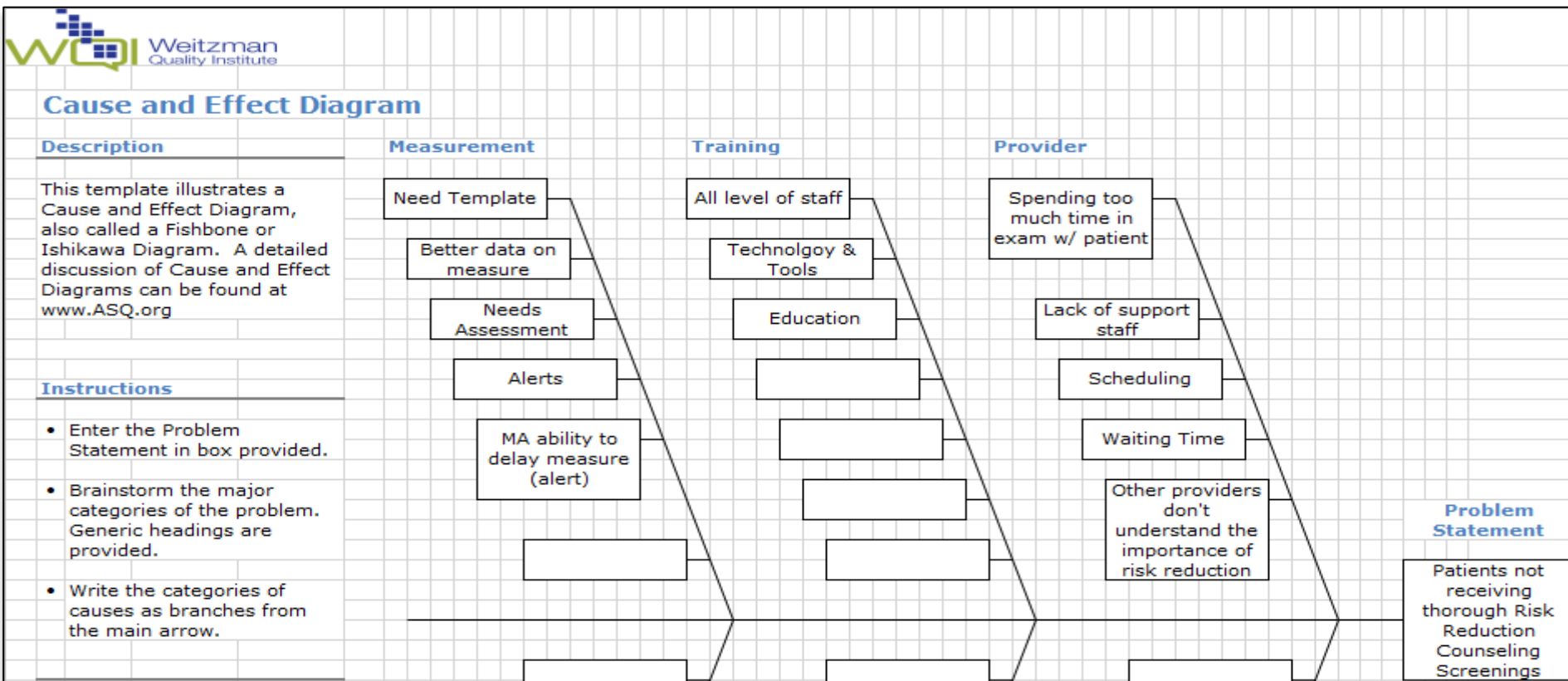
**Low Impact  
Low Effort**

# Annual Exam → Risk Reduction

- Mapped current process for performing Risk Reduction Screening



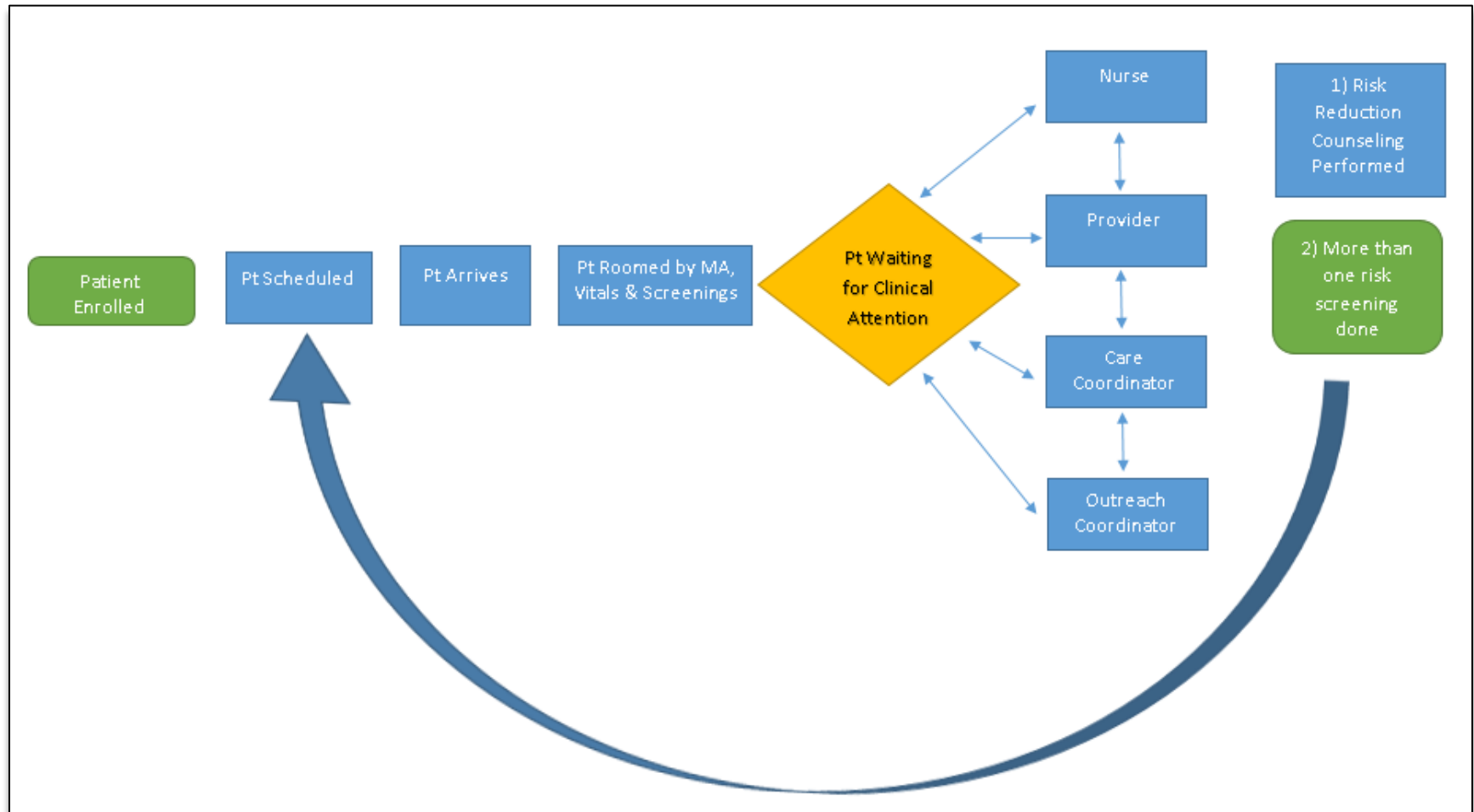
# Fishbone Diagram to assess Problem Statement



# Risk Reduction PDSA

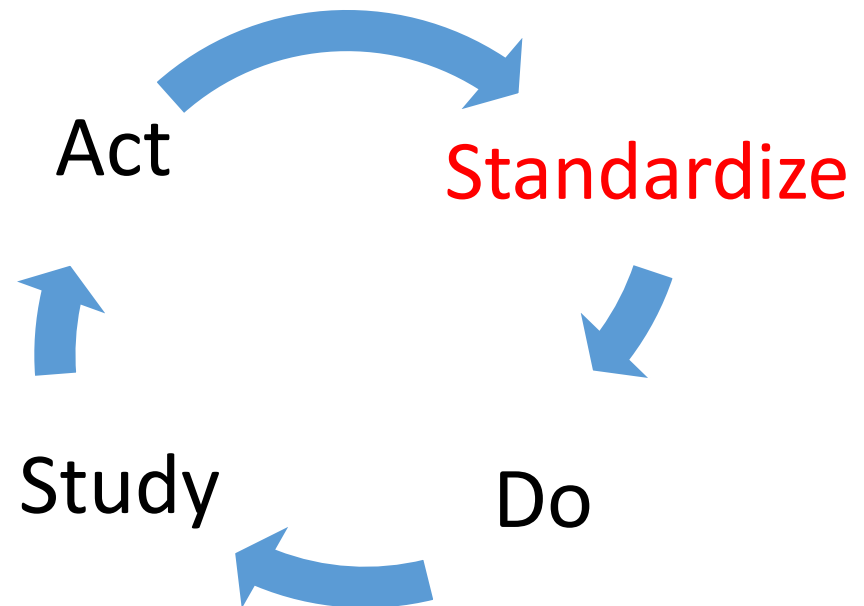
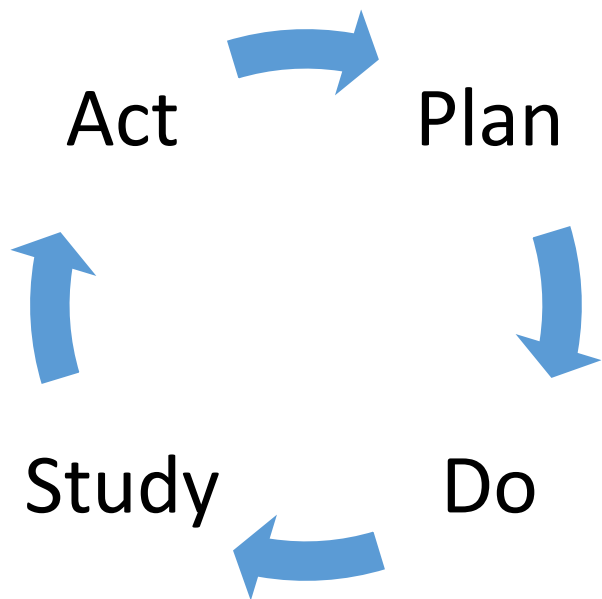
- **Plan:** Provide a more thorough risk reduction session with the patient during an office visit.
  - MA to determine clinical attention needs.
  - Provider to spend time reviewing impact of risks with patients.
  - Patient Education materials from the EHR
- **Do:** Measure time needed to complete thorough risk reduction session with patients. Does this session work in structure of regular office visit?
- **Study:** Time to complete thorough risk reduction session in a regular office visit was burdensome. The **patient load** throughout the day was too many. Not enough positive impact on the patient to outweigh negative effect on clinical team.
- **Act:** Need to re-evaluate methods of presenting risk reduction education to patients. Exploring new PDSAs on presenting patient education through technology (iPads, videos while waiting for clinical attention).

# New Risk Reduction Process





# PDSA to SDSA



# Thank You!



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