

Population Health for Front Line Providers: A data-driven approach to Quality Improvement

Jeff Hummel, MD, MPH
Carolyn Brill, CPHIMS, CHP
December 6, 2018

Healthier Washington Practice
Transformation Support Hub



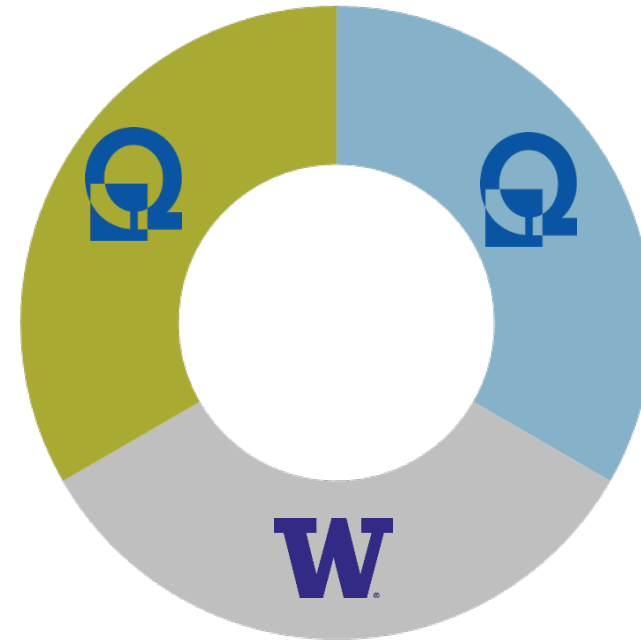
The Healthier Washington Practice Transformation Support Hub

- An investment of Healthier Washington managed by the Washington State Department of Health
- Helps practices successfully move to whole-person, patient-centered care



The Hub: A Four-year, State Innovation Model (SIM) Testing Grant

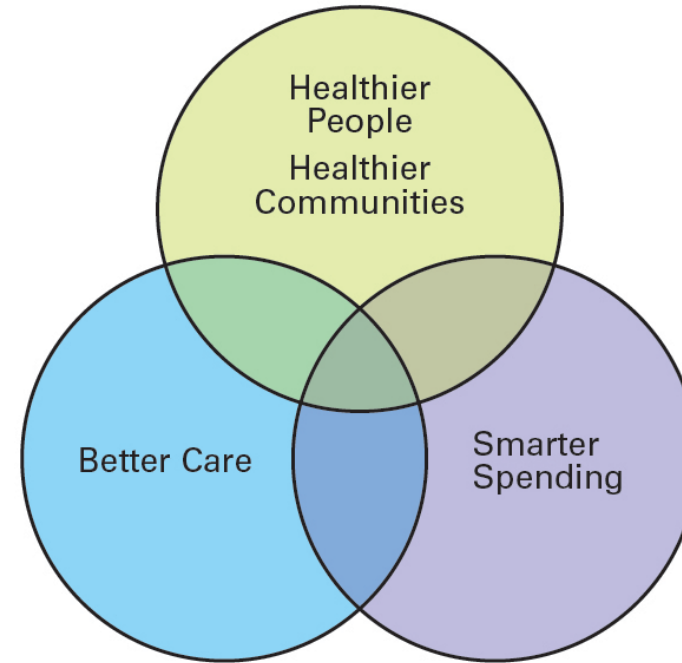
- Three separate contracts, funded by DOH
- Qualis Health provides Practice Coaches and Regional Connectors programs
- Web Resource Portal offered through partnership with UW Department of Family Medicine Primary Care Innovation Lab



Hub Goals

Help Providers to:

- Integrate physical and behavioral health
- Move from volume-based to value-based care
- Improve population health through clinical and community linkages



Triple Aim





Goals for this session

Understand how to use data to:

- Define a population and a quality aim for that population
- Measures gaps between current performance the goal for the population
- Design workflow changes to improve outcomes
- Evaluate whether those changes are actually working



The Happy Valley Clinic Clinicians are not Happy

- 3 MDs, 2 NPs, & 1 PA face penalties for below average glycemic control, BP, and eye exams in adults with diabetes
- Provider meeting to decide on action
 - MAs call patients not seen in 6 months
 - Report showing our patients are sicker
 - Address co-morbidities including depression
 - More 1-hour planned diabetes visits
- Follow up meeting focuses on depression in diabetes – but that makes it seem overwhelming
- What is going on?





Making Sense out of the Clinicians' Dilemma

- These are excellent clinicians providing high quality care in a difficult environment
 - Small-to-medium sized setting
 - Challenging patients
 - Changing incentive system
- They are “jumping to solutions”
- Each solution has arguments for & against
- The solutions tend to be provider-centric
- Although one could try any of the solutions it is unlikely that everyone would agree on whether it was a good idea or not

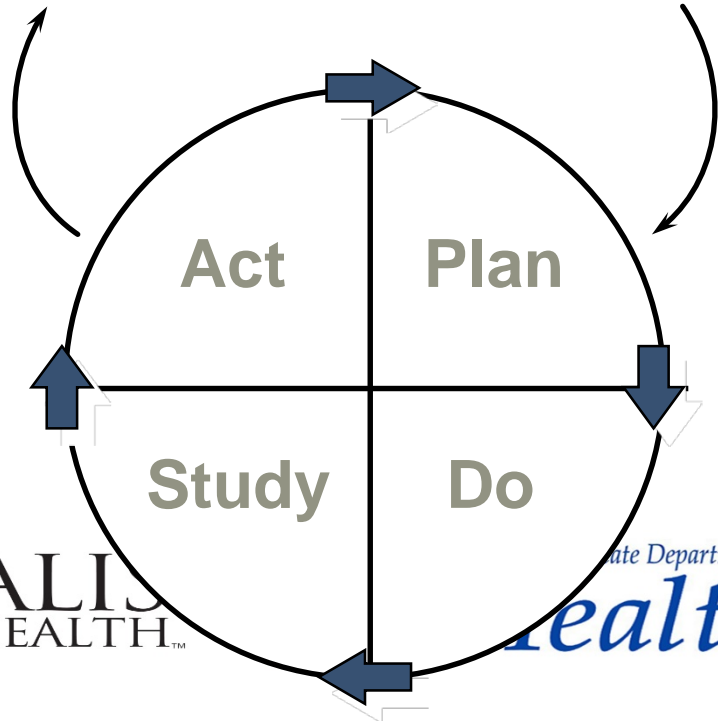
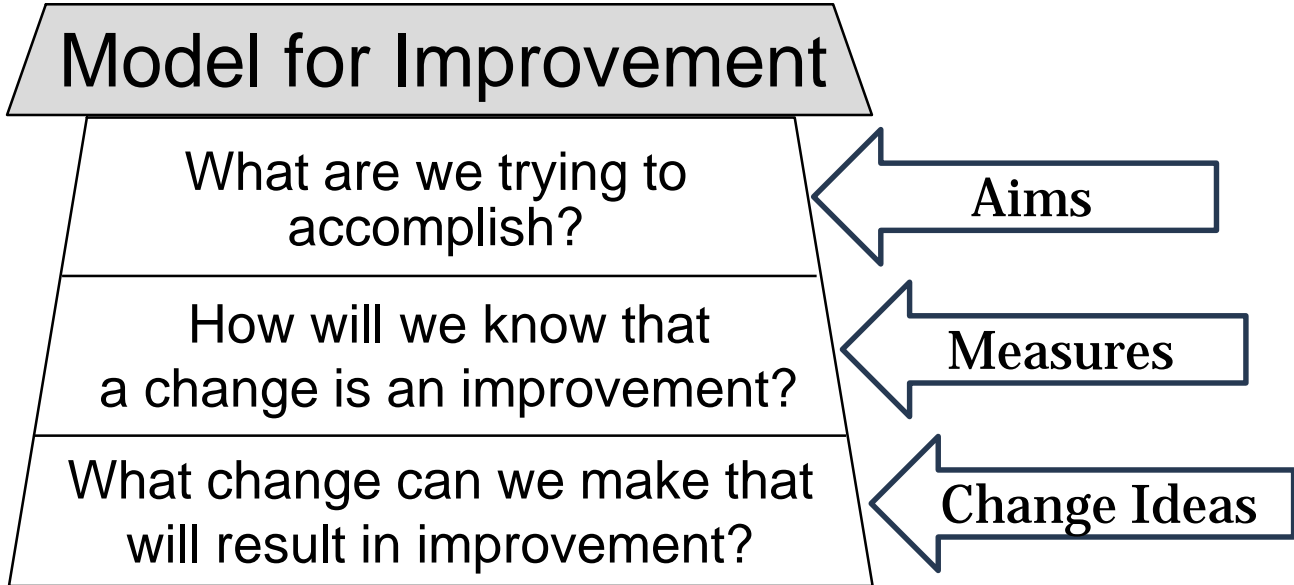




A practice coach offers a way forward

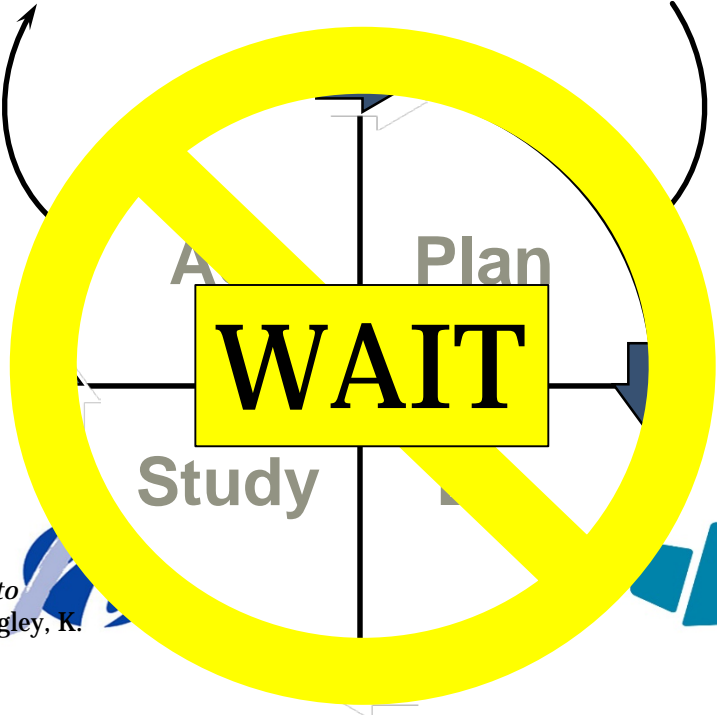
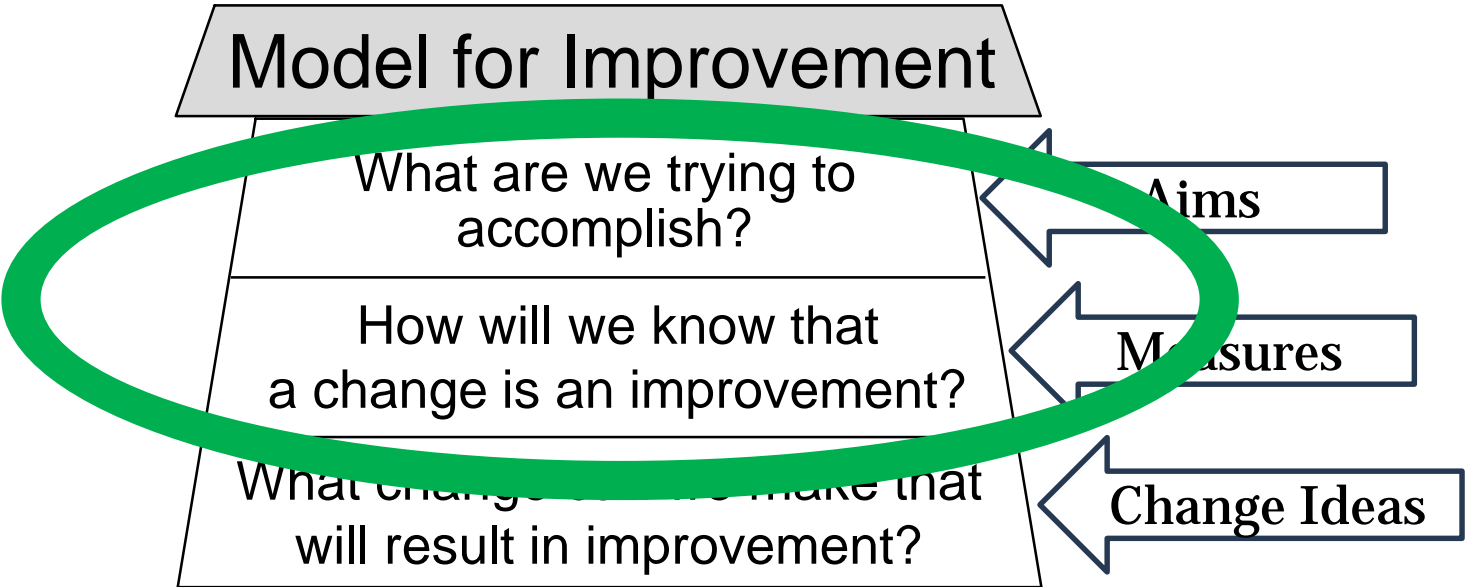
- The clinic chief brings a practice coach with QI experience to the next meeting
- She offers a data-driven way forward and guidance to navigate this new terrain
- The group decides that depression in people with diabetes is the barrier they want to tackle to improve diabetes care and avoid financial penalties for poor outcomes





The Improvement Guide: A Practical Approach to Enhancing Organizational Performance. G. Langley, K. Nolan, T. Nolan, C. Norman, L. Provost.





What are we trying to accomplish?

- All diabetes patients will be evaluated yearly & treated to target for depression
- 70% of diabetes patients will have a BP < 140/90, HbA1c < 8, dilated retinal exam
- Data definitions:
 - “Patients with diabetes” – a list of people with diabetes on the problem list
 - Evaluated for depression: PHQ-2/9
 - Target for for depression treatment: PHQ-9 < 5, or 50%
 - BP, HbA1c, Dilated Retinal Exam using results reporting





Wait, you say. What if we're a BHA?

The aim statement will be different

- All of our diabetes patients will be evaluated yearly to make sure
 - Every patient will have a primary care provider who is managing their diabetes
 - Every patient will have had a visit with their primary care provider in the past 6 months
 - > 70% will have a blood pressure < 140/90





How will we know a change is an improvement?

Agreeing on an aim statement using data definitions makes measurement easier

Metric for Medicine: Percent of population with:

- PHQ-2/9 done in past year
- PHQ-9 < 10, < 5
- BP checked in the past 6 months
- BP < 140/90
- HbA1c checked in the past 6 months
- HbA1c < 9, or < 8
- Dilated retinal exam in the past year





How will we know a change is an improvement?

Metric for Behavioral Health: Percent of population with:

- A primary care provider managing the diabetes
- A visit with the primary care provider within 6 months
- BP < 140/90





How do we do that?

Registry options: (They're all imperfect)

- An Excel spreadsheet
- Patient List functionality in EHR exported to Excel
- Canned Reports from EHR (from vendor)
- Custom queries from EHR data
- 3rd party registry/business intelligence software from vendor such as PrimeMD, i2i, Crimson, etc

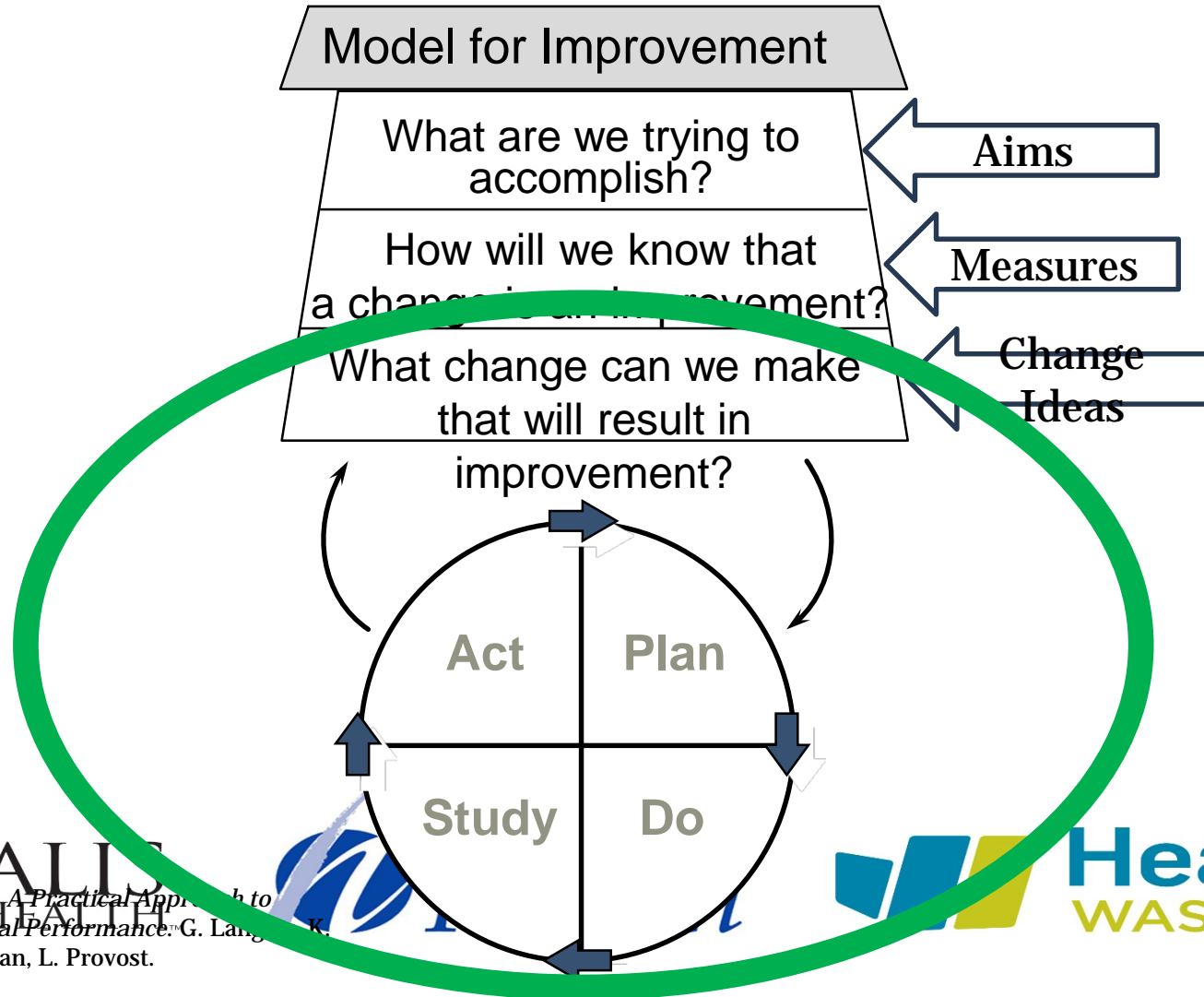


What Information Does the Registry Contain?

- For Medicine:
 - Name of Patient & other identifiers
 - Date and value of last PHQ-2/9, BP, HbA1c, Dilated Retinal Exam, other diabetes tests
- For Behavioral Health
 - Name of Patient & other identifiers
 - Name of PCP/Clinic and date of last visit
 - Date and value of last BP



Now we can turn our attention to all those great ideas for things that may result in improvement



Making changes that will result in improvement

- Workflow changes impact clinical decisions made for individual patients one at a time
- Data-driven workflow changes for improvement follow a set structure
 - Gathering data required to make a decision
 - Providing an evidence-based framework for the person making the decision
 - A standard approach to determine if the decision had the desired effect
- Notice we're not standardizing the decisions, just way they are made



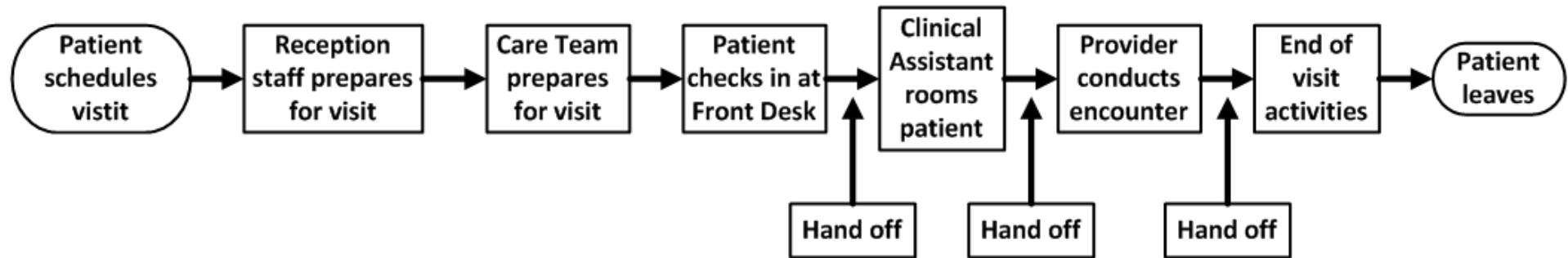


Adding Tasks to a Primary Care Workflow

- Step 1: Understand the current state workflow
- Step 2: Decide on the clinical decisions to be inserted into a future state
 - Necessary information for each decision
 - Necessary decision support for each decision
 - Follow up to gauge impact of individual decisions
- Step 3: Design future state to include
 - Who will gather/organize the necessary information
 - What the decision support needs are needed
 - How the follow up will be structured

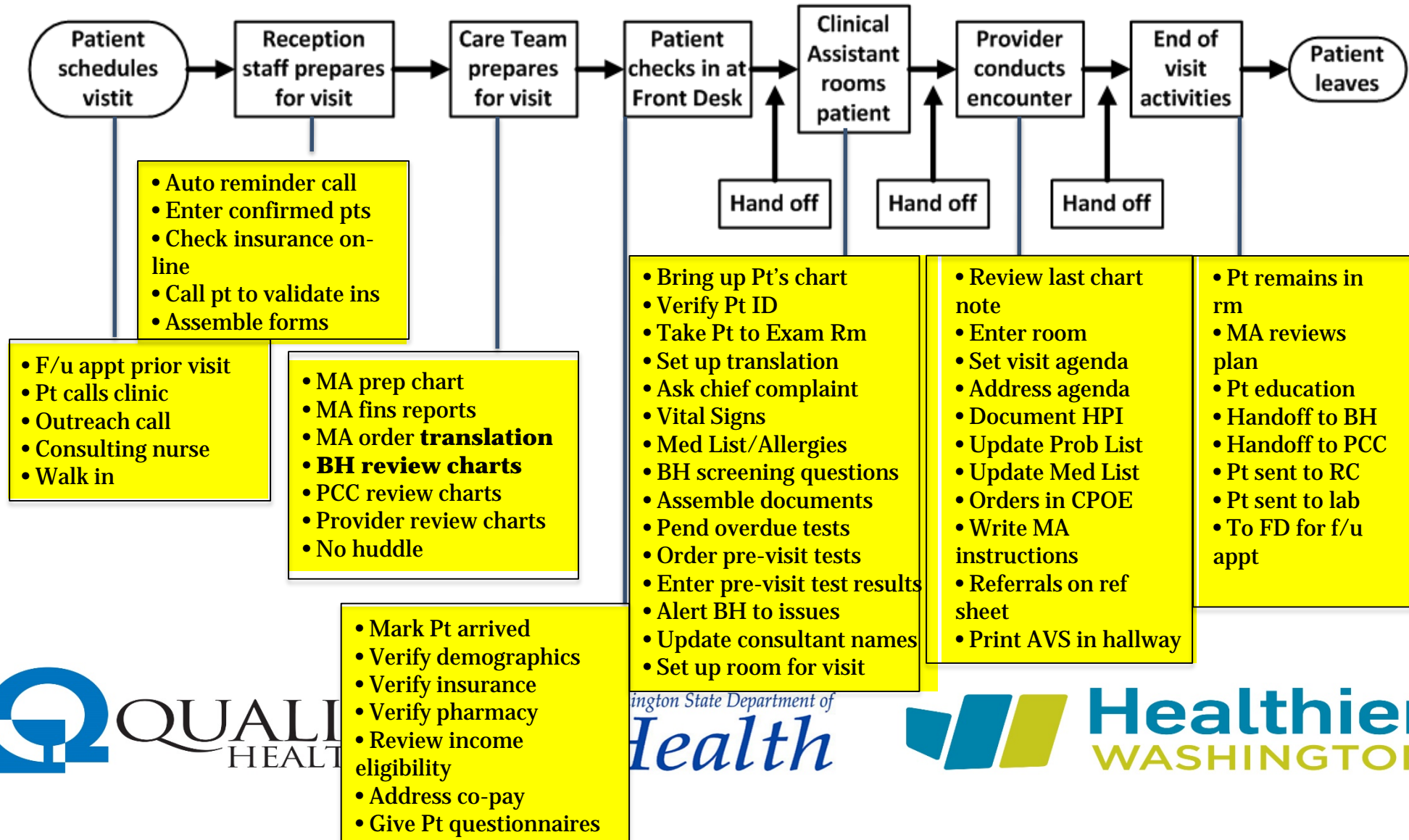


Current State



- All primary care visits follow this general framework
- There is a similar framework for behavioral health visits

Current State

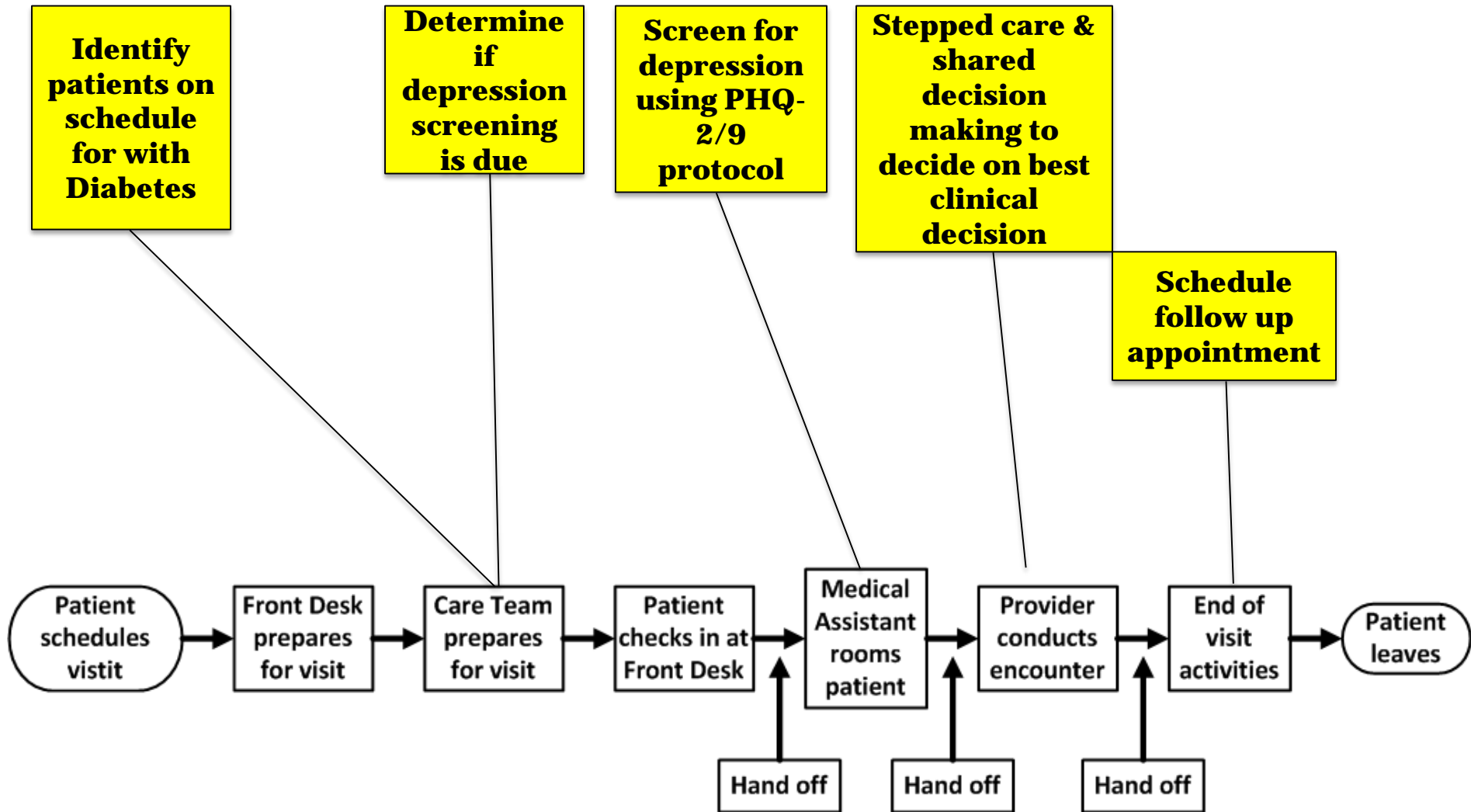




Managing Depression in Adults with Diabetes

- Gathering information:
 - Identify patients with diabetes
 - Determine date and value of last screen
 - Perform screening if due
- Making an evidence-based decision:
 - PHQ-9 score today
 - Current and past treatment
 - Patient preference
- Follow-up:
 - Algorithm for phone/in-person follow up
 - Referral and referral tracking





How do you PDSA that?

- Pick a segment of the future state
- Identify the information required for decisions
 - Review list of patients on tomorrow's schedule
 - Scan problem list, med list, & labs each patient
 - View data display of past PHQ-2/9 dates & scores
- Flag chart if past PHQ-9 > 10; no screen 1 yr
- Try that for 1 day, and at the end of the day
 - Review how many charts were successfully flagged
 - Find out what went smoothly and what didn't
- Modify, repeat

**Identify
patients on
schedule
for with
Diabetes**

**Determine
if
depression
screening
is due**



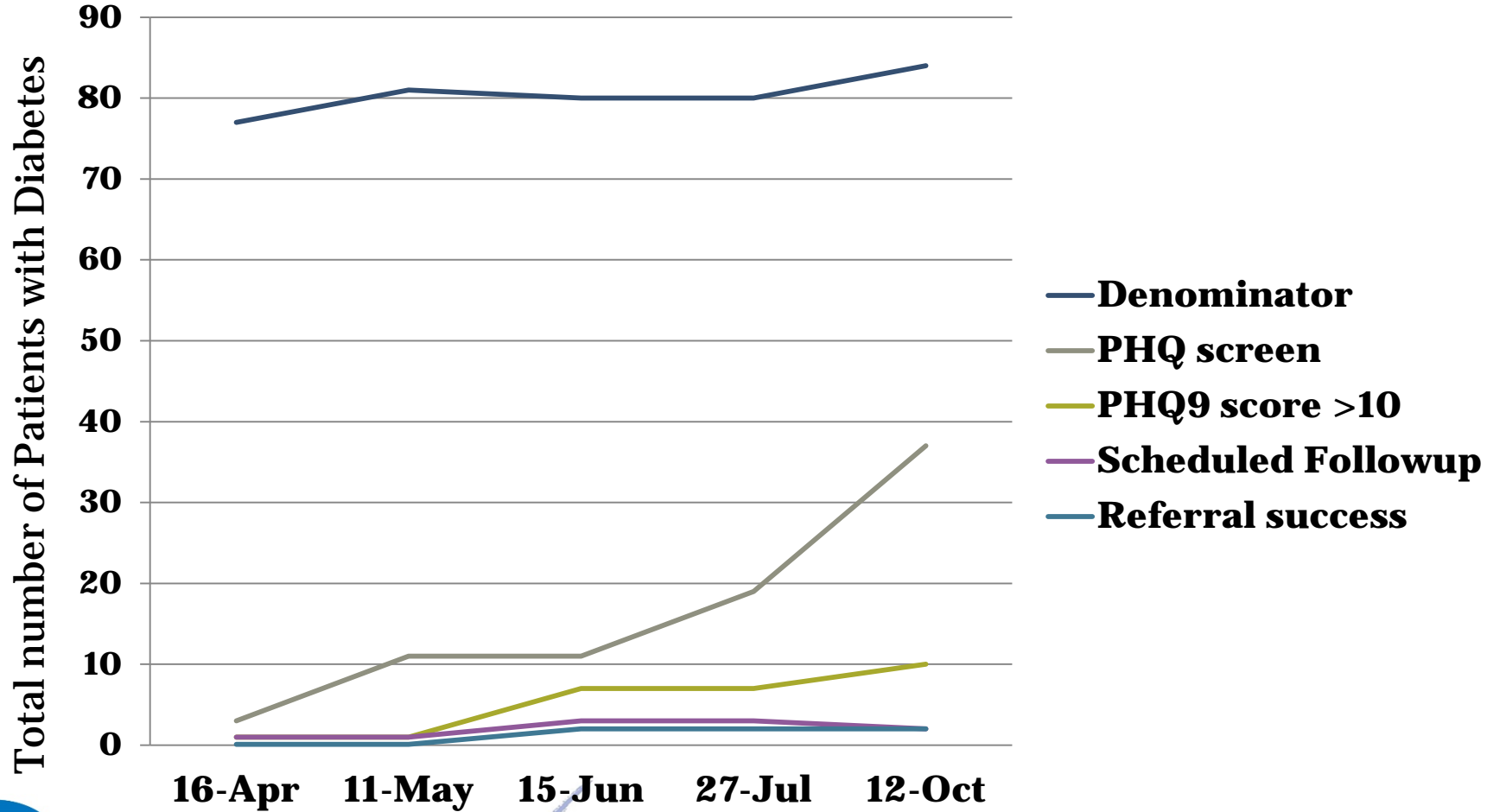


How did it go for the Clinicians at Happy Valley Clinic?

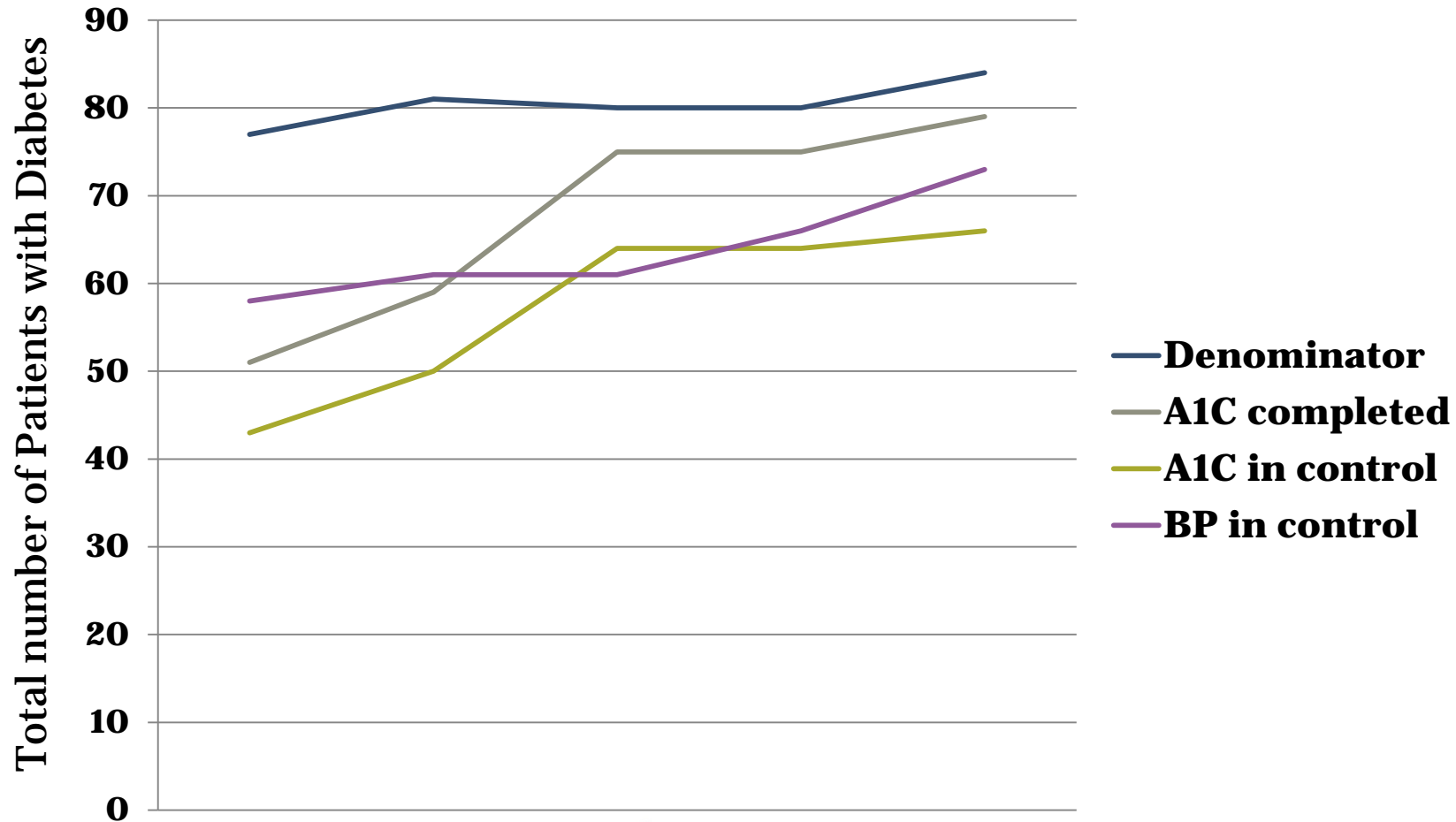
- They used a Patient List to dump into Excel every week
- They called patients who hadn't been in within 6 months and scheduled appointments
- They tested and adopted a future state workflow to screen all patients for depression
- Here is what happened over the next 6 months



Improved Management of Depression



Improved Outcomes for Diabetes



16-Apr 11-May
QUALIS
HEALTH™



15-Jun 27-Jul 12-Oct
Washington State Department of
Health



Healthier
WASHINGTON



For Behavioral Health

- The approach will be set up the same
- Number of patients with diabetes
- Percent of patients who have a primary care provider managing the diabetes
- Number of patients with BP checked at last BH visit
- Percent of patients with a visit to the primary care provider within 6 months
- Percent of patients with most recent BP < 140/90





Conclusion

- A structured data-driven approach to population health makes sense out of chaos
- The key components are:
 - A clear definition of the goal
 - Metrics that reflects things the care team can control
 - Workflow changes designed to support good decision-making process rather than specific decisions
 - Testing and modification to get it right



Questions and Discussion



For More Information

Hub Help Desk: (206) 288-2540 or (800) 949-7536
ext. 2540 or by email HubHelpDesk@qualishealth.org.



Transformation training links and tools on the **Hub Resource Portal** website: www.waportal.org

The project described was supported by Funding Opportunity Number CMS-1G1-14-001 from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents provided are solely the responsibility of the authors and do not necessarily represent the official views of HHS or any of its agencies.

