



# Leverage Health Information Technology for Improved Outcomes

Mountain-Pacific Quality Health

01/24/2019

# Mountain-Pacific Quality Health

A 501(c)(3) non-profit corporation partnering within our communities to provide solutions for better health:



## **Mountain-Pacific** *Quality Health*

### **Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO)**

Provides health care quality improvement, direct technical assistance, education and outreach for clinics and hospitals in Montana



## **HEALTH TECHNOLOGY SERVICES** **TS**

- Department within Mountain-Pacific
- Originally established as Regional Extension Center (REC)

Provides clinical transformation services, health information technology (HIT) consulting, privacy and security support and electronic clinical quality improvement services

# Presenters

## Erin Aklestad, Alaska

- 9 years experience supporting hospitals and physician practices with quality improvement, quality reporting and HIE connectivity



## Patty Kosednar, Montana

- 26 years experience in project management, quality improvement and technology.
- Last 9 years focusing on HIT and quality reporting



# Presentation Acronyms

- BHI - Behavioral Health Information
- BP - Blood Pressure
- CAHPS - Consumer Assessment of Healthcare Providers and Systems
- CDS - Clinical Decision Support
- CMM - Comprehensive Medication Management
- CMS - Centers for Medicare & Medicaid Services
- CPC+ - Comprehensive Primary Care Plus
- CQM - Clinical Quality Measure
- Dx - Diagnosis
- eCQI - Electronic Clinical Quality Improvement
- EDIE - Emergency Department Information Exchange
- EHR - Electronic Health Record
- GRPA - Government Performance and Results Act
- HCAHPS - Hospital Consumer Assessment of Healthcare Providers and Systems
- HIE - Health Information Exchange
- HIIN - Hospital Improvement Innovation Network
- HIT - Health Information Technology
- HRSA - Health Resources and Services Administration
- HTN – Hypertension
- IQR - Inpatient Quality Reporting
- MIPS - Merit-based Incentive Payment System
- MTM - Medication Therapy Management
- PCMH - Patient-Centered Medical Home
- PDSA - Plan, Do, Study, Act
- PI - Promoting Interoperability
- QI - Quality Improvement
- QPP - Quality Payment Program
- ROI - Return on Investment
- Rx – Prescription
- SMART - Specific, Measurable, Actionable, Relevant, and Timebound
- TCM - Transition of Care Management
- UDS - Uniform Data System

# Today's Learning Objectives

- 1) Discuss the current state of health information technology (HIT)/quality improvement (QI)
- 2) Learn the basics of the electronic clinical quality improvement (eCQI) methodology
- 3) Learn to use strategy to identify, manage and implement successful eCQI projects – improving outcomes/reducing burden
- 4) Be able to apply the eCQI methodology for facility, health system and community level improvement or engagement initiatives

# A Few Questions



What kind of organization do you represent?

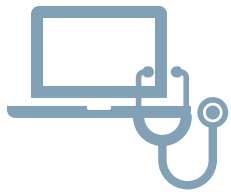
- Clinic or hospital
- Tribal Health clinic/hospital
- Nursing home or long term care
- Social services organization
- Government
- Other

Is your facility/organization required to do any quality or performance reporting?

# Current State



The introduction of HIT, EHRs, electronic data standards and value-based payment models have added to the complexity of the care delivery process, documentation and quality reporting.






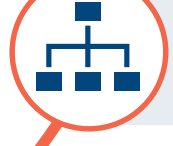


Clinical quality improvement and quality reporting now requires both clinical and HIT expertise and more standardized, documented and consistent workflows.



The complexity of technology and the quality reporting programs themselves, along with limited technology resources/expertise, have added a new level of burden to providers and their staff.

# Effective QI Efforts Need to:

-  Have significant return on investment (ROI); good use of resources
-  Be efficient and organized
-  Align with as many quality requirements or objectives as possible
-  Reduce overall cost, while improving outcomes and patient satisfaction
-  Include advanced concepts that move clinics toward practice transformation (value-based)
-  Establish practices or workflows that can apply to multiple chronic conditions or topics



# Electronic Clinical Quality Improvement (eCQI)



Optimizing HIT and standardized electronic data to achieve measurable improvement in quality of care

Incorporating the data and functionality of your EHR into your quality improvement (QI) projects



Utilizing evidence-based clinical best practices and proven QI practices for rapid improvement

Strategizing to maximize ROI and reduce burden





# ECQI: THE BASICS

# The Focus of Our eCQI Approach



Accurate and complete use of electronic health record (EHR) applications/health information technology (HIT)



Aligning clinical efforts and quality initiatives to reduce burden



Using strategy to maximize results and performance

# Our eCQI Approach Includes:

- 1 Using evidence-based clinical best practices
- 2 Leveraging and advancing EHR use
- 3 Standardizing workflows, data tracking and use of data analytics
- 4 Incorporating the Agile (SCRUM) iterative delivery model combined with proven quality improvement methodologies (PDSA)
- 5 Utilizing basic project management techniques
- 6 Focusing on achieving value-added changes quickly and efficiently using “sprints”

# eCQI Program Reporting

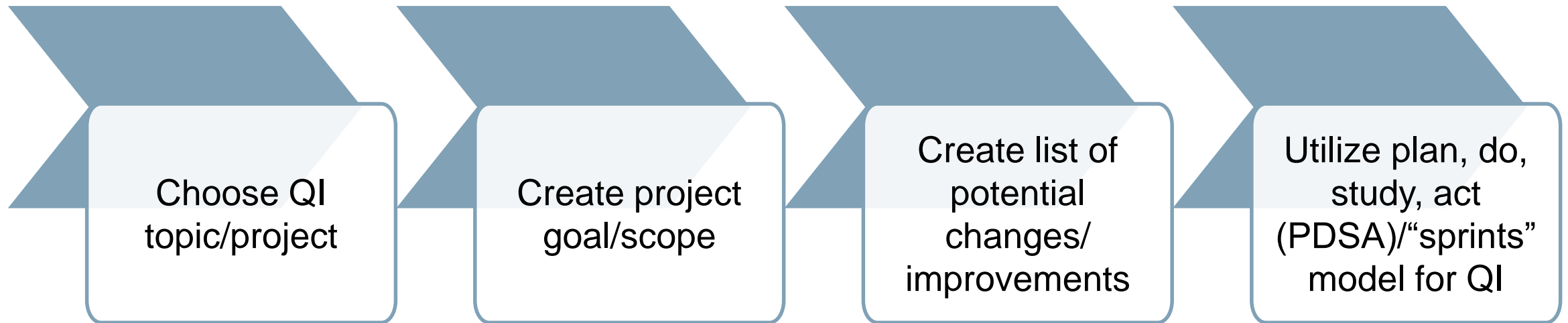
eCQI can improve tracking and performance quality reporting for:

- CMS quality reporting (QPP/MIPS, IQR, PI, etc.)
- Patient-Centered Medical Home (PCMH) certification
- Government Performance and Results Act (GPRA)
- HRSA Uniform Data Systems (UDS) clinical quality measures
- Hospital Improvement Innovation Network (HIIN)
- Commercial payer reporting requirements
- Health Information Exchange (HIE)/Emergency Department Information exchanges

# eCQI Benefits

- Increase patient safety, satisfaction and improve outcomes
- Improve care coordination
- Increase accuracy and effectiveness of data
- Standardize workflows and protocols
- Implement advanced care delivery concepts
- Reduce reporting burden
- Reduce costs and increase revenue opportunities

# High-Level Steps to eCQI



# eCQI Project Ideas

- Improvement of any clinical quality measure
- Reduce readmissions/improve transition of care
- Submit syndromic surveillance/population health data
- Connect and submit data to an HIE or registry
- Implement interventions, protocols, clinical pathways
- Coordinate or integrate behavioral health





# Getting Started with eCQI

# How to Choose Projects



## Use current data to identify improvement opportunities

- Clinical quality measure (CQM) data
- Performance feedback/utilization reports from gov't programs (GPRA, UDS, HIN, etc.)
- Patient satisfaction surveys
- Commercial payer feedback/data
- HIE, registry or statewide data
- Urgent community need or priority



## Actively strategize to maximize value of effort

- Be aware of all internal and external quality goals or requirements
- Know all “categories” of quality reporting (e.g., MIPS has Quality, Advancing Care Information, Improvement Activities and Cost)
- Identify any existing community resources to help meet or advance QI
- Could collaboration with another clinic/provider/specialist or community resource/partner enhance effort and create a win-win for all parties?

# Create a Project Scope


- Answer this question: “What are we trying to accomplish?”
- Establish a goal (make it a SMART goal)
  - S = specific
  - M = measurable
  - A = actionable
  - R = relevant
  - T = time bound
- Define evaluation measures
- Identify project constraints/boundaries

# Project Scope Example

- Improve blood pressure control for patients with hypertension; Improve clinical quality measure CMS 165 (HTN Blood Pressure Control) above 76% by 12/31/19
- For all payers, all patients, all clinic locations

Link to [Mountain-Pacific eCQI Scope/Change Backlog Template](#)

# Activity: Choose an eCQI project and create a project scope



**S – specific**  
**M – measurable**  
**A – actionable**  
**R – relevant**  
**T – time bound**

## IDEAS:

- Any clinical quality measure
- Reduce readmissions
- Transition of care management
- Submitting syndromic surveillance data
- Antibiotic stewardship intervention
- Behavioral health integration
- Implementing HTN protocol

# Create a Change Backlog

Create a list of possible changes to help meet project goal:



## **Answer this question:**

What changes can we make that will result in an improvement to the project goal selected?



Brainstorm ideas for possible changes that will ultimately improve the project goal/outcome measure.

# Brainstorming: Ideas to Consider



How accurate is your baseline data?

Is there EHR functionality that you can leverage?



Do you have consistent and standard workflows (physical, electronic, data entry)?

Are there standard clinical protocols in place?



Is there training that would help support staff?

Are there existing resources or possible partners to help support improvement?



# Identify Possible EHR Functionality Changes

## How can EHR support best practices/protocols?

- Computer Provider Order Entry (CPOE)
- Clinical Decision Support (CDS)
- Patient portal/engagement
- Patient panels/tracking/risk stratification
- Health information exchange (HIE) with patients/providers
- Interfaces and registries
- Report utilities/population analytics



# EHR Functionality for eCQI



## Clinical Decision Support (CDS): Target conditions and standardize treatments

- Data Display
  - Flow Sheets, patient data reports, graphic displays
- Workflow Assistance
  - Task lists, patient status lists, integrated clinical and financial tools
- Data Entry
  - Templates to guide documentation and structured data entry
- Decision Making
  - Access to clinical guidelines/pathways, rules-based alerts, patients/family preferences, diagnostic decision support

# EHR Functionality for eCQI (cont.)



## Computer Provider Order Entry (CPOE)

- Data points can be retrieved from CPOE to affect care improvement
- CPOE enhances use of clinical decision support rules or guidelines at point of care



## Patient education/discharge instructions

- Provide credible source of information
- Encourage patient engagement
- Assist with transition of care



## Patient reminders

- Proactive preventative care
- Follow-up and care coordination

# EHR Functionality for eCQI (cont.)



## Lab interfaces (or lab results as structured data)

- Data points retrieved from lab results
- Lab results (structured data) enhances use of clinical decision support rules or guidelines at the point of care



## Patient panels/risk stratification

- Track and monitor high-risk patients
- Use patient panels or risk scores to identify care coordination priorities
- Track performance based on panels/risk scores

# EHR Functionality for eCQI (cont.)



## Care coordination/care planning

- Track and follow up with high-risk patients, establish care goals, increase patient engagement



## HIE/transition of care/discharge info/public health registries

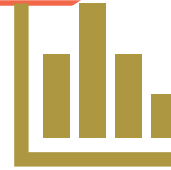
- Improve communication between providers and/or facilities
- Provide and enhance continuity of care delivery
- Data collection and analytics
- Population health data

# Focus on Structured Data



**Patient data must be documented in the correct discrete field in the EHR to:**

- Trigger clinical decision support, clinical guidelines, patient reminders, alerts, etc.
- Populate clinical quality measures and population data
- Improve patient safety and
- Reduce total cost of care



**Structured and standardized data is the foundation to interoperability.**

- Improve care coordination
- Assist with risk satisfaction and reduce cost per patient
- Improve population health data, analytics, reporting

# Change Backlog Example

- Train all staff on correct electronic workflow/data entry for CMS 165
- Train staff on accurate BP measurements
- Implement a HTN protocol
- Make sure HTN is addressed at each patient visit – (EHR CDS alert)
- Implement patient reminders in EHR
- See HTN patients with BP >140/90 every six months (implement patient reminders in EHR)

Link to [Mountain-Pacific eCQI Scope/Change Backlog Template](#)

# Activity: Create a Change Backlog



## Brainstorming Ideas:

- How accurate is your baseline data?
- Is there EHR functionality you can leverage?
- Are your workflows standardized?
- Any clinical guidelines to implement?
- Any staff training opportunities?
- Any possible partners or existing resources to access?

**All change ideas should lead to improvement of the overall project goal!**

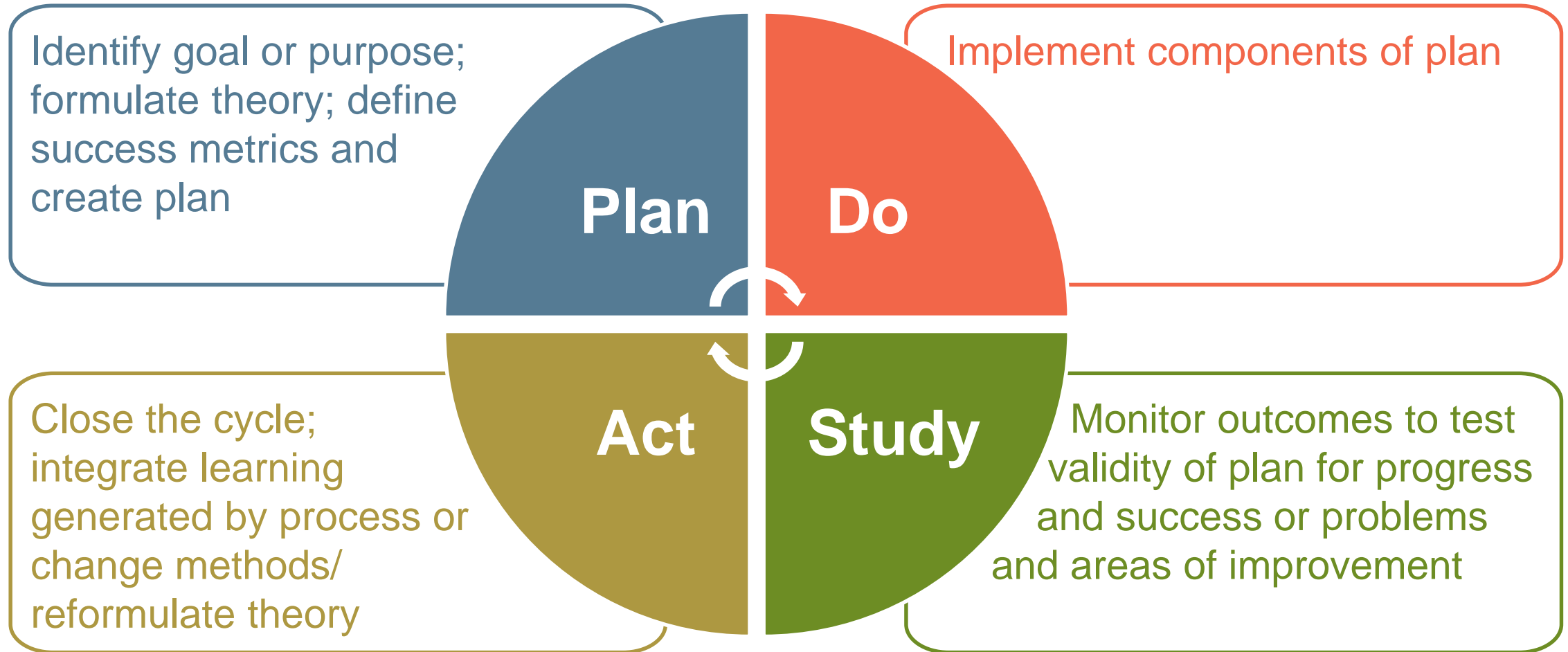
# Utilize PDSA QI Cycle

- Determine first Sprint/PDSA cycle
  - Prioritize the list of possible changes from your Change Backlog
  - Choose the first change/improvement you will focus on (if unsure of data – make this your first Sprint/PDSA)
  - Establish a Sprint/PDSA goal and plan out the tasks needed
    - [Link to Mountain-Pacific PDSA worksheet templates](#)

**You will create a goal for each individual Sprint/PDSA cycle which will help improve the overall project goal (from the project scope)**



# PDSA: Plan, Do, Study, Act



***SPRINT: Changes small enough to quickly and efficiently gain rapid, value-added improvements***

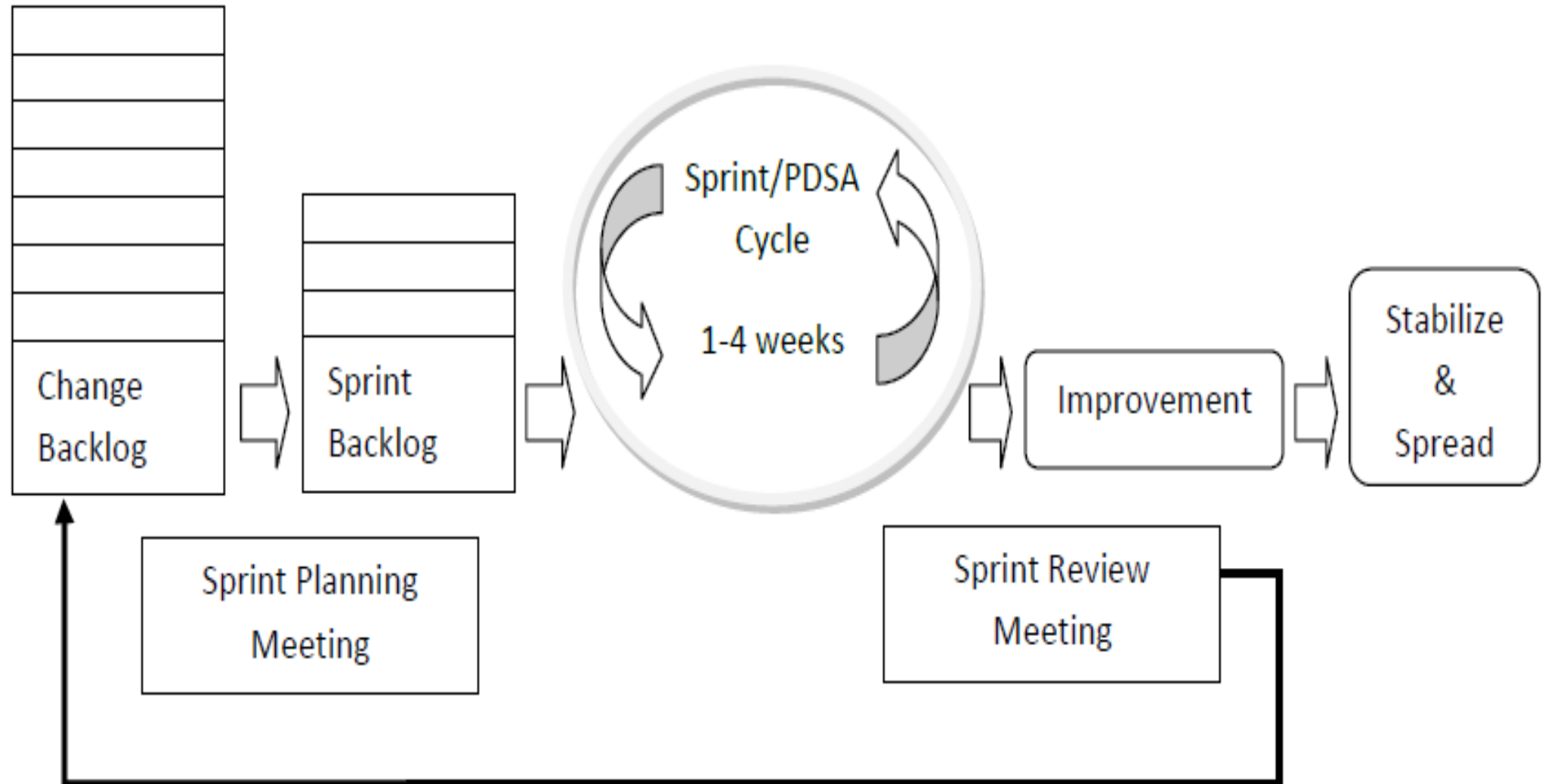
# Sprint/PDSA Cycle – Keep in Mind

- Establish a SMART goal for each cycle
- Use standard data measures, easily accessible and repeatable (if baseline data is not available/accurate – make this the first step in your plan)
- Ideas to keep in mind:
  - Establish realistic goals
  - Each sprints should be short/value added projects – 30 days
  - Use basic project management to keep project on task/schedule
    - Document the project (use the templates)
    - Regular team meetings and reporting
    - Adjust the plan as needed

# eCQI Tasks

- ① Identify project scope and team
  - ② Create (or update) and prioritize change backlog
  - ③ Create PDSA/sprint
  - ④ Perform/complete sprint = PDSA cycles(s)
  - ⑤ Perform sprint review and update change backlog
  - ⑥ Repeat
-

# Streamlined eCQI Process Model





# eCQI Results and Project Ideas

# Mountain-Pacific - Successful eCQI Projects

- **Improved clinical outcomes**
  - Improved clinical quality measures/reporting (MIPS, CPC+, UDS, GPRA, IQR, HIIN)
  - Implemented home blood pressure monitoring programs
  - Implemented disease specific clinical protocols/pathways
  - Implemented antibiotic stewardship programs
- **Improved care management and coordination**
  - Implemented risk stratification algorithms to identify high risk patients
  - Used risk scoring to focus advanced care management on high risk patients
  - Implemented transition of care management and care planning/goal setting

# Successful eCQI Projects, cont.

- Improved collaboration
  - Collaborated with community-based diabetes education classes to provide education to high-risk patients
  - Utilized community health workers to improve cancer screenings
  - Set up interfaces with the Montana Quit Line to improve tobacco cessation
  - Partnered with community pharmacists to implement community-based comprehensive medication management services
  - Collaborated with 5 programs to Implement a state wide antibiotic stewardship program strategy

# Other eCQI Benefits

- An efficient approach to QI; reduces time and resource use
- Rapid improvement gains on PDSA goals (PDSA cycles or “sprints” average time 30 days)
- Improves consistency on workflows and use of EHR, interoperability and data
- Improves alignment of QI projects and resources
- Trains staff on a repeatable QI process for ongoing use
- Improves staff’s success and satisfaction on QI projects



# eCQI Project Results

## Clinical Quality Measure (CQM) Projects

| Improvement Measure                  | Improvement   | Improvement Measure                      | Improvement  |
|--------------------------------------|---|--|--|
| HTN Blood pressure control           | Clinic 1 – Improved 35%<br>Clinic 2 – Improved 8%<br>Clinic 3 – Improved 5%   | DM eye exams<br>CMS 131                  | Clinic 1 – Improved 21%<br>Clinic 2 – Improved 44% |
| HTN Patient education                | Clinic 1 – Improved 20%<br>Clinic 2 – Improved 62%                            | DM urine/protein screening<br>CMS 134    | Clinic 1 – Improved 78%                            |
| Breast cancer screening<br>CMS 125   | Clinic 1 – Improved 29%<br>Clinic 2 – Improved 63%                            | Closing the referral loop<br>CMS 50      | Clinic 1 – Improved 48%<br>Clinic 2 – Improved 73% |
| Colon cancer screening<br>CMS 130    | Clinic 1 – Improved 45%<br>Clinic 2 – Improved 53%<br>Clinic 3 – Improved 40% | Clinical depression<br>CMS 2             | Clinic 1 – Improved 99%<br>Clinic 2 – Improved 19% |
| Cervical cancer screening<br>CMS 124 | Clinic 1 – Improved 55%<br>Clinic 2 – Improved 39%<br>Clinic 3 – Improved 22% | Cognitive assessments<br>CMS 149         | Clinic 1 – Improved 58%                            |
| DM foot exams<br>CMS 123             | Clinic 1 – Improved 52%<br>Clinic 2 – Improved 38%                            | Tobacco screening & cessation<br>CMS 138 | Clinic 1 – Improved 27%<br>Clinic 2 – Improved 7%  |

# eCQI Ideas – Facility-Based

- Improve clinical quality measures for CMS, commercial payer or other reporting
- Implement clinical protocols/guidelines
- Implement social needs assessment into workflow
- Implement care management for high-risk patients
- Provide diabetes education for patients
- Streamline workflows and improve quality of data
- Connect to HIE or registry

# eCQI Ideas – Community-Based

- Collaborate with community hospitals to implement transition of care management (TCM) workflows
- Collaborate with primary care/specialist to improve care coordination
- Partner with community pharmacies to implement medication therapy management (MTM)/comprehensive medication management (CMM)
- Community collaboration to implement behavioral health integration (BHI)
- Collaborate with existing programs/resources to improve outcomes (Department of Health, Community Health Workers, etc.)

# eCQI Ideas – Regional/State-Based

- Create a regional antibiogram for antimicrobial stewardship
- Identify and implement opioid protocol and reporting process
- Collaborate to improve immunization rates and associated documentation and outreach
- Collaborate to provide resources/expertise via telehealth
- Standardize data and interoperability (HIE, EDIE, etc.)

# eCQI Resources

- [Office of the National Coordinator \(ONC\) for HIT– eCQI Resource Center](#)
- [Mountain-Pacific's eCQI Resources and Toolkit](#)
- [Mountain-Pacific's Health Transformation Services website](#)
- [Mountain-Pacific's State of Alaska QIO website](#)

## Contact us:

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- Patty Kosednar, eCQI Consultant: [pkosednar@mpqhf.org](mailto:pkosednar@mpqhf.org)

# Questions or Comments?



# Take Away

Share one thing you learned that you could incorporate into your organization?

THANK YOU