

Rural HIT Workshop  
March 15<sup>th</sup>, 2016

***EHRs—The Future is NOW! Are you ready?  
Part 1***

Presented by:

Patty Kosednar, PMP, HTS Account Manager

Mary Erickson, RN, HTS Account Manager

HTS, a department of Mountain–Pacific  
Quality Health Foundation

# Welcome!!!

- ▶ Thank you for spending your valuable time with us today!
- ▶ Presentation materials are available at our website and have also been sent to registered attendees.
- ▶ Please let us know if you did not receive them!
- ▶ Hardcopies are available if needed.
- ▶ Your feedback is greatly appreciated and can be provided via the post-session survey that will be emailed after the workshop.



thank  
you!

# Workshop Funding Sponsor!



Special Thanks to Cindra Stahl and the Montana Rural Health Workforce Development Grant Advisory Board for coming up with the workshop idea and putting their money where their mouth is – again!





- ▶ Health Technology Services (HTS) is a division of Mountain-Pacific Quality Health (MP). M-P is the QIN/QIO for MT/WY/AK/HI
- ▶ We can help to:
  - Simplify and streamline quality reporting requirements
  - Stay current on changing regulations for Meaningful Use, PQRS, MACRA, etc.
  - Simplify HIPAA compliance
  - Advance and leverage your EHR usage to advance care delivery
  - Enhance patient engagement and satisfaction
  - Improve health outcomes to maximize value based performance payments

# Introduction of educators

- ▶ Mary Erickson, BSN, MSM (Montana):
  - Fellow student in the MT Tech HCI post-grad certificate program – almost done!
  - RN for 18 years with the last 10 years spent in risk management, performance improvement and operations/administration. Works with hospital and clinic organizations on various improvement projects from EMR implementations to CMS survey readiness.
  - Email: [merickson@mpqhf.org](mailto:merickson@mpqhf.org)
  - Phone: (406) 521 – 0488



# Introduction of educators

- ▶ Patty Kosednar, PMP, CPEHR (Montana):
  - Based in MT, 20+ years of Information Technology consulting experience. Her primary focus is business optimization, including process improvement, efficiency and improved outcomes and IT project management.
  - Email: [pkosednar@mpqhf.org](mailto:pkosednar@mpqhf.org)
  - Phone: (406) 461 – 4410



# HTS/QIO Staff Facilitators!

- ▶ Sarah Leake (Montana)
  - Sarah has a B.S. in Industrial Engineering from Montana State, MBA from University of San Diego and Healthcare IT certification from UC San Diego.
- ▶ Allison Bruner (Montana)
  - HCI intern at MT Tech and full time CNA at PMC Nursing Home
- ▶ Sharon Phelps, RN (QIO, Population Health Management Task Lead – Wyoming)
  - 30 years with 16 years involved with health information technology as both a clinical analyst and IT Director



# Introduction of Students

- ▶ Your name – or what you LIKE to be called...
- ▶ Your role at your facility or where you are an HCI certificate student
- ▶ What EHR are you on?
- ▶ Briefly, why are you attending the workshop today?





# Goals for today

- ▶ To share knowledge about Health Information Technology, identify and discuss requirements, challenges and potential solutions.
- ▶ Provide practical information for you to apply in the advancement of utilizing your EHR to improve efficiency and patient outcomes.
- ▶ The future of paper:  
[https://www.youtube.com/watch?v=RRDSj62tlvQ&feature=player\\_embedded](https://www.youtube.com/watch?v=RRDSj62tlvQ&feature=player_embedded)

# Workshop Outline

**Basic EHR Functionality and CEHRT**



**CQM and General Reporting Concepts**



**eCQI Concepts and Tools**



**Application of eCQI Concepts and Tools**

# Workshop Layout

## ▶ Activities

1. Understanding electronic improvement measures
2. Identifying EHR changes for improvement
3. Workflow evaluation and changes
4. Table packets

## ▶ End of day wrap up

- **What are you taking home with you?**
- HIT Network needs survey

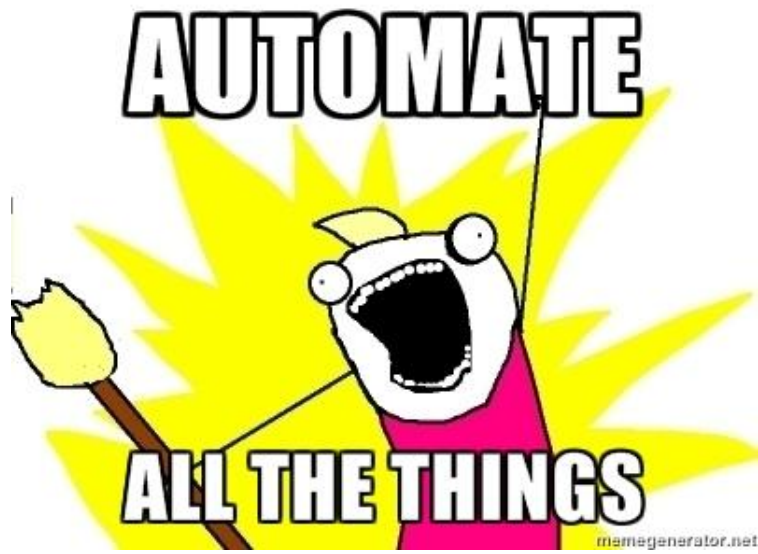
## ▶ DO NOT GET HUNG UP on:

- ▶ What system you're on, focus on the process we're trying to teach you, it can be applied to any system!
- ▶ Details....weeds....

# Attendee expectations



- ▶ Interaction is *not optional*
- ▶ **Please** ask questions, add constructive comments or provide your experience related information throughout the day.
- ▶ There is a lot that can be learned from each other – share your experiences & ask questions!
- ▶ Snacks at 2:30
- ▶ Restroom is located.....
- ▶ Cell phones in the “off” or vibrate position so we can all focus.



# EHR Functionality and CEHRT Overview

# The Basic EHR Components

1. Practice Management System
2. Clinical Management System
3. Patient Portal
4. Health Information Exchange
5. Reporting System

# EHRs and why they are important (HealthIT.gov)

- ▶ EHRs are, at their simplest, digital (computerized) versions of patients' paper charts. But EHRs, when fully up and running, are much more:
  - EHRs are real-time, patient-centered records. They make information available instantly, "whenever and wherever it is needed". And they bring together in one place everything about a patient's health.
  - Contain information about a patient's medical history, diagnoses, medications, immunization dates, allergies, radiology images, and lab and test results



**Why are EHRs important?**

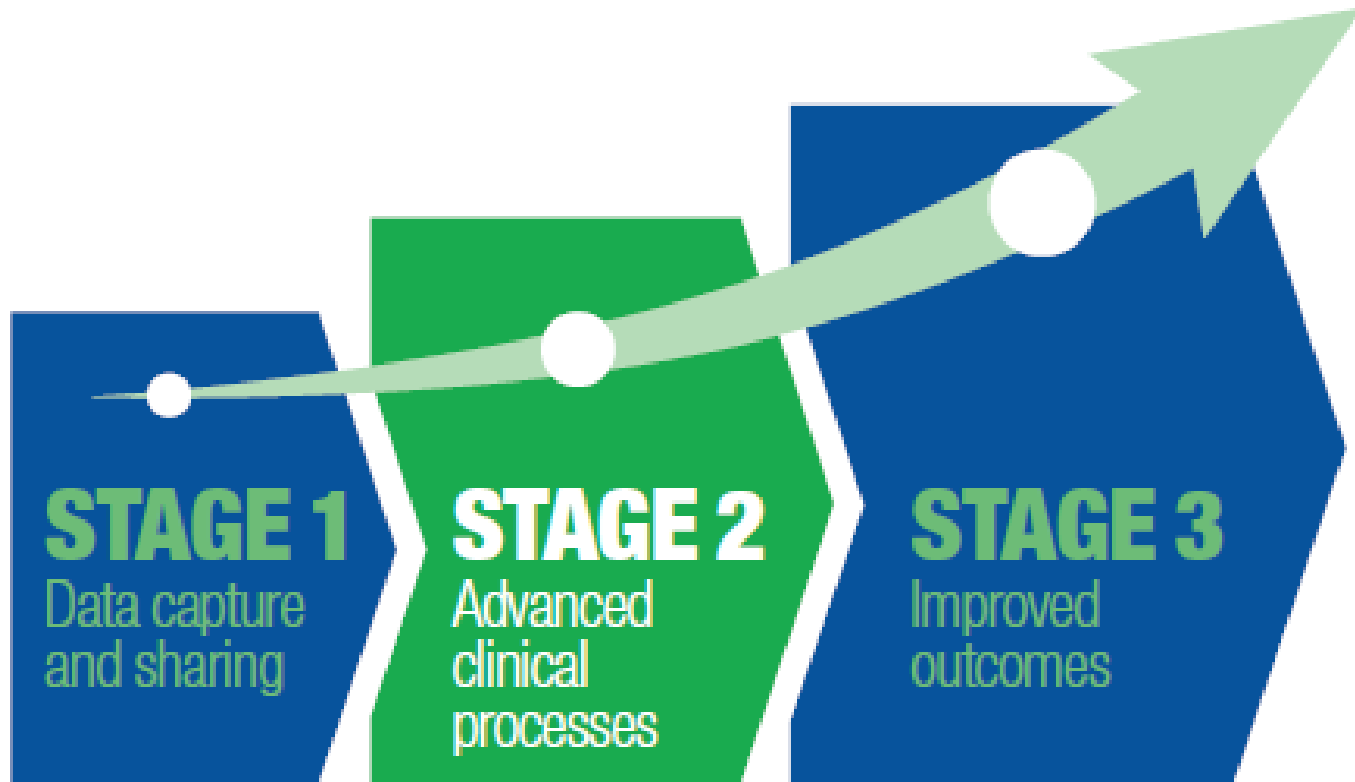


**EHRs – one of the most important reasons we have them:**

**Provide a foundation to further advance quality improvement and improve patient outcomes on a larger scale.**



# EHRs as a foundation – stages toward “meaningful” use of EHR



# The Evolution of Meaningful Use is –

Alternate Payment Models  
Value Based Purchasing

# CEHRT Standards????

- ▶ Certified
- ▶ Electronic
- ▶ Health
- ▶ Record
- ▶ Technology



# CEHRT Standards



- ▶ Criteria by which a EHR Software is accredited too which indicates their software has met the **functional requirements** necessary to assist a facility or provider in meeting Meaningful Use.

# CEHRT Standards



- ▶ Use of standardized language for certain functions:
  - LOINC (Logical Observation Identifiers Names & Codes)
  - ICD 9 or ICD 10
  - SNOMED CT (Systematized Nomenclature of Medicine – Clinical Terms)
  - HL7 (Health Language Seven)
  - NCPDP SCRIPT Standards (National Council for Prescription Drug Programs)



# CEHRT Standards



- ▶ Certification does not equal standardized workflows or accessibility.
- ▶ Certification simply indicates that software has met the basic necessary criteria for achieving meaningful use.
- ▶ The outcome is that software differs greatly in workflow between companies.

# EHR CEHRT: Key Point(s)

- ▶ Even for standardized programs like Meaningful Use, PQRS, IQR, etc, EHR vendors handle functionality & reporting in different ways.
- ▶ Even the **SAME** EHR Vendor can have different installations at different sites. Differences could include:
  - Not all functionality may be active for all sites
  - Different access or permissions may be set
  - Customization may be added or limited
  - Different reporting access or data collection



# General and eCQM Reporting Concepts

# Standard Reports

- ▶ Basic level of reporting that allows generation of required or commonly used reports:
  - Meaningful Use, Clinical Quality Measures and Physician Quality Reporting
  - Department reports – pharmacy, payroll, lab, accounting, nursing (ie, census)
  - Executive reports – revenue cycle/operations
- ▶ May be generated by a 3<sup>rd</sup> party software
- ▶ May **not** be able to get to patient level data, or only limited patient level data
- ▶ Access defined by user role

# Standard Reports (cont)

- ▶ Requires vendor specific training to use & understand!
- ▶ The “mapping” of these reports cannot be changed!
  - The fields they pull data from are programmed into the code of the EHR. You literally must change the software to change the report.
  - Will not typically pull data from customized templates/forms



# Types of Reports: Customized

- ▶ Vendor controlled customization:
  - May need to be specifically requested from the vendor via ticket system
  - May be a cost associated with them
  - Turn around time may >48 hrs
  - May also be 3<sup>rd</sup> party generated
- ▶ Internal customized reports:
  - Only certain user roles will have access, determined by facility
  - Not all fields are available to pull from
  - **Very specific training required!**


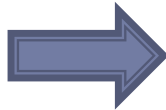
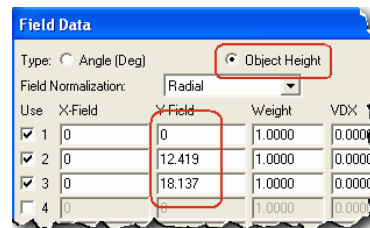


# Key Points to ANY Report

- ▶ Understand where the data comes from (exactly what field)
- ▶ Validate the input field is the field the report is mapped to generate data from AND the one **staff are using!**
- ▶ Understand what you are really asking for
- ▶ Spec sheets can give you all of these answers!
  - CMS / NQF measure spec sheets
  - EHR system measure spec sheets



## A 3D white figure is running to the right, holding a magnifying glass over a trail of coins. The figure is in a dynamic, forward-leaning pose, suggesting a search or pursuit. The magnifying glass is held in the figure's right hand, and its lens is focused on the coins on the ground. The coins are arranged in a line that recedes into the distance, creating a sense of depth. The background is a plain, light gray, which emphasizes the figure and the coins.

[illegible]

document there?

# Electronic Clinical Quality Measure Reporting

- ▶ Standard report the vendor must certify
- ▶ Used for reporting data to CMS
- ▶ Nationally recognized improvement measures (NQF, CMS, CDC, NHSN, etc)
- ▶ Clinical Quality Measures are **defined by CMS** and called – electronic clinical quality measures
- ▶ Software vendor reports are built to CMS specifications

# eCQM Library/Spec Sheets

- ▶ Handout
- ▶ eCQM Library Start page:  
[https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM\\_Library.html](https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html)
  - Electronic Clinical Quality Measure Logic and Implementation Guidance
  - QRDA Implementation guides
- ▶ AHRQ Health Information Knowledge base:
  - <https://us.hik.ahrq.gov/mdr/portals?system=mdr&enableAsynchronousLoading=true>

# Spec Sheet Overview

- ▶ Measure description
- ▶ Reporting instructions/timing (annual, quarter, etc)
- ▶ Denominator definition
  - Principle diagnosis
  - Principle procedure
  - Encounter type
- ▶ Numerator definition
  - Coding related to provider documentation (CPTs and modifiers)
  - Medication administration/ordering
- ▶ Rationale
- ▶ Clinical Recommendations (standard of care)

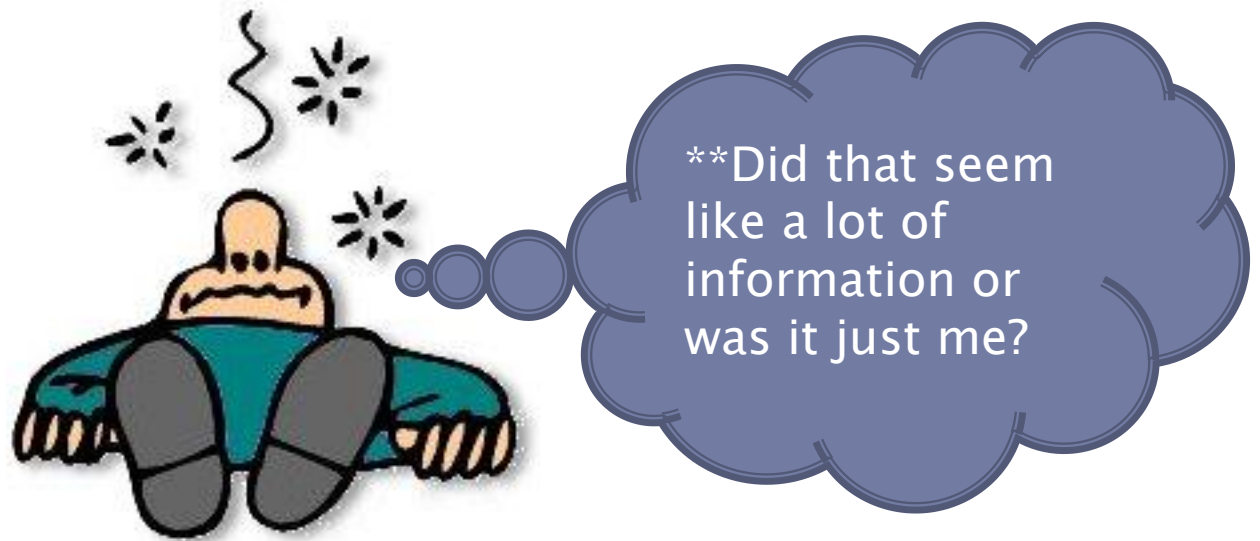
# Spec Sheet Overview (cont)

- ▶ Measure type
  - Process
  - Outcome
- ▶ Included populations
- ▶ Excluded populations
  - Age parameters
  - Length Of Stay parameters
  - Procedure exclusions
  - Pre-existing condition exclusions
- ▶ Data Elements

# Spec Sheet Overview (cont)

- ▶ Sampling
- ▶ Improvement Notation
  - Does a higher or lower result indicate better performance?
- ▶ Data reporting method
  - Aggregate
  - Patient level
- ▶ Collection approach
  - Retrospective

# And after you have all of that down...





# eCQM Reporting file format

- ▶ Quality Reporting Data Architecture (QRDA):
  - Category 1
    - Patient level data
  - Category 3
    - Aggregate level data
- ▶ Yes, your software can do this if certified to 2014 standards. However, they may need to update eCQM's to 2015 file specifications.
- ▶ You CANNOT use a different, customized report to do eCQM reporting – MUST use the vendor certified report.

# eCQM Reporting Requirements

- ▶ New MU rule released October 2015:
- ▶ For the **IQR Program** for **CY 2016** reporting, a hospital will be required to:
  - Report a minimum of 4 of the 28 available eCQMs
  - Report for only one quarter (Q3 or Q4) of CY 2016
  - Submit between October 2016 and February 2017
  - All data must be submitted by **February 28, 2017**
- ▶ Meeting this requirement also satisfies the Clinical Quality Measure (CQM) electronic reporting option requirement of the Medicare EHR Incentive Program
- ▶ Possibly require by **2018** for all hospitals!

**\*\*Information obtained from CMS Presentation on 2/16/16 by Stephanie Wilson, "Hospital Inpatient Value, Incentives, and Quality Reporting (VIQR)"**

# eCQM Reporting for MU

- ▶ **Option 1: Electronic submission of data for four eCQMs through the *QualityNet Secure Portal***
  - Satisfies the CQM requirement of the Medicare EHR Incentive Program and aligns with IQR Program requirements
- ▶ **Option 2: Aggregate reporting of 16 eCQMs for a full year through the CMS Registration and Attestation System**
  - Available for facilities that do not participate in the Hospital IQR program
  - Satisfies the CQM requirement of the Medicare EHR Incentive Program

# Hospital Based eCQMs

## Available eCQMs

ED-1	STK-5	AMI-8a	VTE-5	SCIP-INF-2a
ED-2	STK-6	AMI-10	VTE-6	SCIP-INF-9
ED-3*	STK-8	VTE-1	PC-01	EHDI-1a
STK-2	STK-10	VTE-2	PC-05	HTN
STK-3	AMI-2	VTE-3	CAC-3	PN-6
STK-4	AMI-7a	VTE-4	SCIP-INF-1a	

\*ED-3 is an outpatient measure and not applicable for IQR.

# Eligible Professional eCQMS

- ▶ Table available at:  
<https://ecqi.healthit.gov/system/files/ecqm/2015/EP/EPMeasuresTableMay2015.pdf>
- ▶ 64 available measures, updated annually
- ▶ Get credit for MU if report PQRS measures using EHR and will not need to manually attest to CQMs during MU attestation.

# eCQM Reporting Process (Facility Level)

1. Generate eCQM report and review regularly
2. Validate data
3. Extract into QRDA xml (non human readable) format
4. Use Testing tool to test data file for errors
5. Work through errors with vendor
6. Login to Quality Net portal
7. Upload/submit QRDA files
8. Save submission reports

# eCQM Reporting Process (CMS Level)

- ▶ Completed through quality net or PQRS portal.
- ▶ Must have appropriate “submitter role” or “data upload role” in Quality Net
- ▶ Set up EIDMS for login if do not already have Quality Net account or appropriate role.
- ▶ Can authorize vendor to complete process on their behalf, if the service is offered by the vendor.

# eCQM Reporting Homework Assignment

- ▶ What eCQMs are your vendor certified to?  
They are not required to be certified to all of them.
- ▶ What is the QRDA data extraction process?
- ▶ Where is a resource document that explains the data mapping for your eCQMs?
- ▶ When did they last update the eCQM programming in your software?

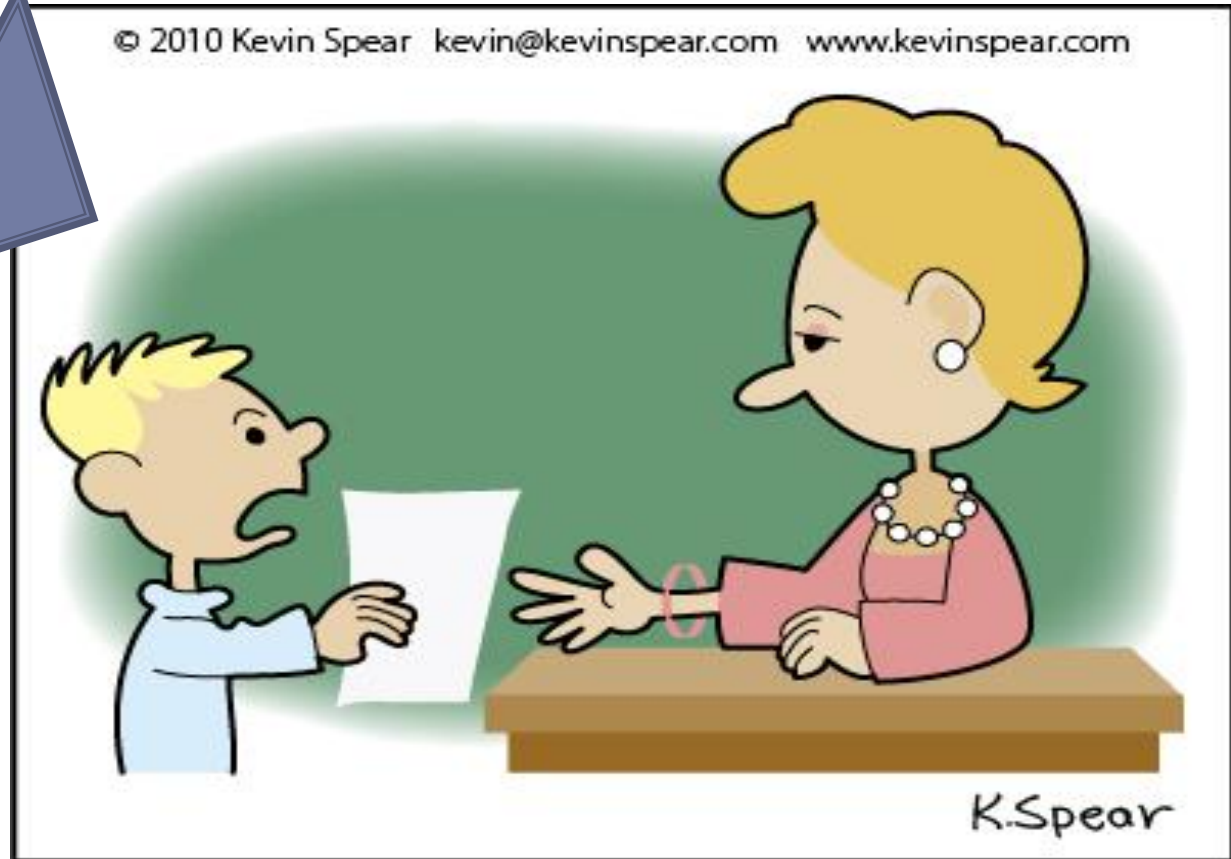
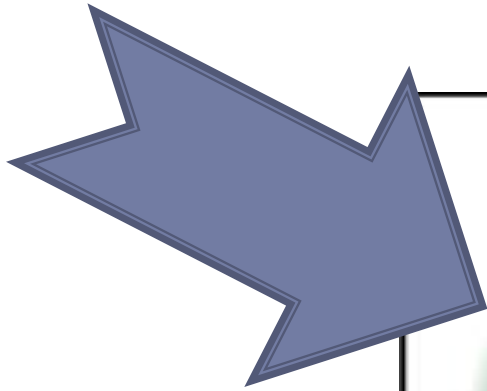




# Electronic Clinical Quality Improvement

Concepts, Tools and Process

This is **NOT** electronic quality improvement!



"I found this coupon online.  
It entitles me to a 25% improvement on my grade."

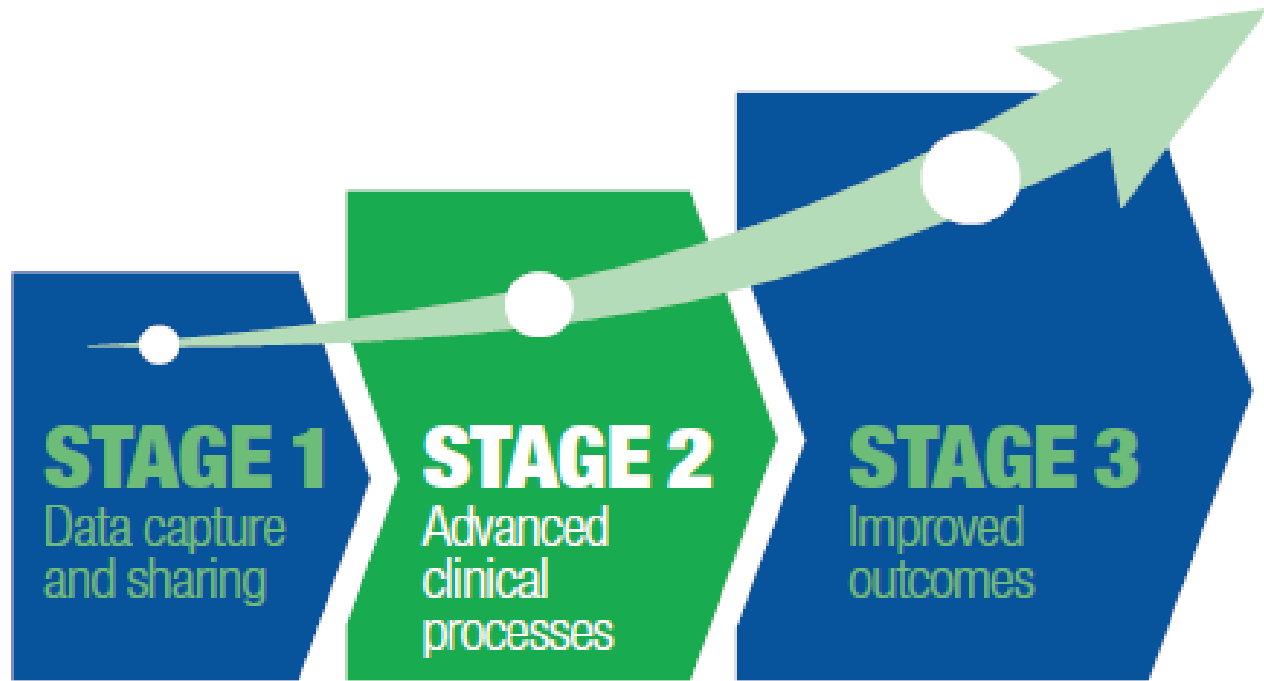
# eCQI – electronic clinical quality improvement;

- ▶ Optimizing health information technology (HIT) and standardized electronic data to achieve measureable improvement in quality of care
- ▶ Incorporating the data and functionality of your EHR into your quality improvement projects.
- ▶ Health IT enabled Clinical QI
  - Additional resources available at -
  - <https://ecqi.healthit.gov/>



# Remember this???

- ▶ eCQI is how you get there



# New Informatics Focus: Role of IT

- ▶ **Medical Definition of *informatics***
  - the collection, classification, storage, retrieval, and dissemination of recorded knowledge
- ▶ QI knows what information is needed
- ▶ IT or Vendor knows where/how to get it
- ▶ Working together IT and QI can ensure accurate and correct collection, classification storage and retrieval of data contained in EHR (field mapping, workflows, functionality, etc)

# eCQI Methodology

- ▶ Funded by DPHHS HTS created an approach to assist clinics and hospitals learn the elements of and incorporate the electronic components/data into their quality improvement projects

# Tools of eCQI

- ▶ SMART Goals
- ▶ Plan Do Study Act cycles
- ▶ Change Management and tracking (change backlog)
- ▶ Workflow definition, analysis and change

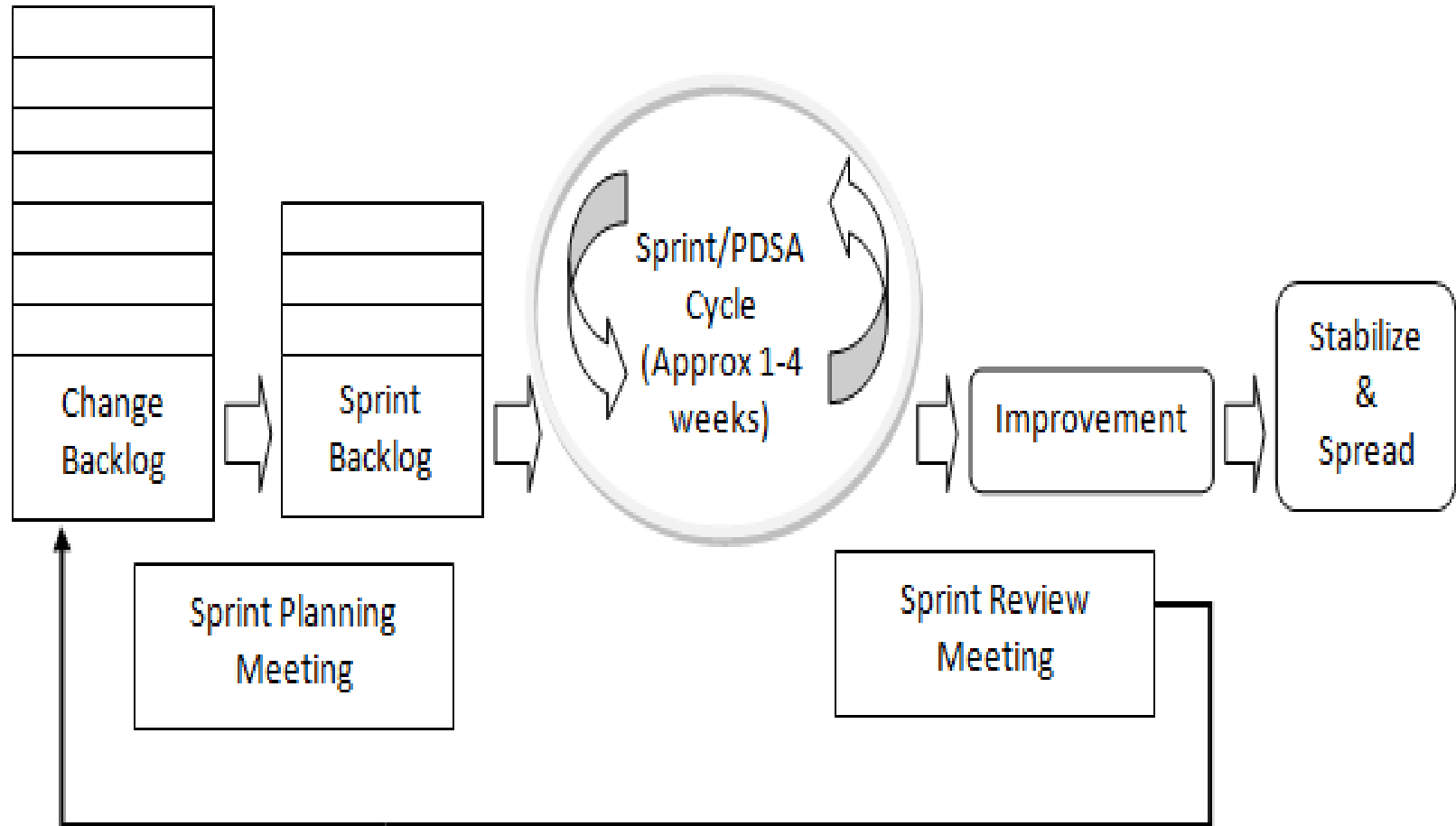


# eCQI Process

1. Identify Project Scope (Outcome Measure – top level item you want to change)
2. Choose a project team
3. Create Change Backlog (a list of possible changes/process measures that will help improve the outcome measure)
4. Prioritize Change Backlog based on “value” of each change
5. Create Sprint Backlog (identify item(s) to be included in first “sprint” or PDSA Cycle)
6. Plan “Sprint”/PDSA Cycle, perform workflow analysis
7. Complete PDSA Cycle
8. Perform a Sprint Review
9. Review, update and reprioritize Change Backlog
10. Begin new Sprint

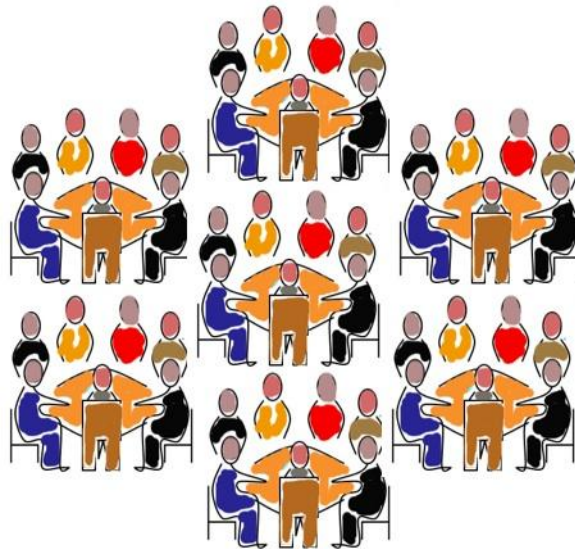


## eCQI Process Cycle Diagram



# Break into groups!

- ▶ Go to your respective corner – if there is not one that applies directly to you, go where you feel most closely applies.
- ▶ One person from each group go to a table so we have each group represented at each table.





# eCQI Process: Choosing Measures & Setting Goals

# Choosing Measures

- ▶ Determining what measures are available in EHR and align as often as possible with QI projects
- ▶ **Process Measures:**
  - Specific steps in a process that lead — either positively or negatively — to an outcome measure.
- ▶ **Outcome Measures:**
  - High-level outcome targets that you are aiming to improve, represent a true effect or outcome and unquestionable value for your organization and patients.

# SMART Goals

## ▶ Specific

- Stresses the need for a specific goal rather than a general one. The goal is clear and unambiguous; easy to determine if goal is met or not met.

## ▶ Answer the five 'W' questions:

- What: What do I want to accomplish?
- Why: Specific reasons, purpose or benefits of accomplishing the goal
- Who: Who is involved?
- Where: Identify a location
- Which: Identify requirements and constraints

# SMART Goals

## ▶ Measurable

- Concrete criteria for measuring progress toward the attainment of the goal. If a goal is not measurable, you will not know whether a team is making progress toward successful completion.
- ▶ A measurable goal will usually answer:
  - How much?
  - How many?
  - How will I know when it is accomplished?
  - Indicators should be quantifiable



# SMART Goals

## ▶ **Attainable**

- Stresses the importance of goals that are realistic and also attainable. While an attainable goal may stretch a team in order to achieve it, the goal is not extreme.
- ▶ An achievable goal will usually answer the question “How”?
  - How can the goal be accomplished?
  - How realistic is the goal based on other constraints?

# SMART Goals

## ▶ Relevant

- Choose goals that matter. Relevant goals (when met) drive the team, department and organization forward. A goal that supports or is in alignment with other goals would be considered a relevant goal.
- ▶ A relevant goal can answer yes to these questions:
  - Does this seem worthwhile?
  - Is this the right time?
  - Does this match our other efforts/needs?
  - Are you the right person?
  - Is it applicable in the current socio– economic environment?



# SMART Goals

## ▶ Time-bound

- Set goals within a time-frame, giving them a target date. A commitment to a deadline helps a team focus their efforts on completion of the goal on or before the due date.
- ▶ A time-bound goal will usually answer the question
  - When?
  - What can I do six months from now?
  - What can I do six weeks from now?
  - What can I do today?

# Project Scope

- ▶ Answer this question: What are we trying to accomplish?
- ▶ Establish a goal (make it a SMART Goal)
  - S – specific
  - M – measureable
  - A – actionable
  - R – relevant
  - T – time bound
- ▶ Define evaluation measures (use standard eCQM/PQRS/IQR, etc data)
- ▶ Identify project constraints



# Project Scope

- ▶ Single most important thing you will do for a project
  - Keeping your “eye on the prize” will help with correct decision making throughout project
  - Reduces confusion and ambiguity
  - Allows you to manage “Scope Creep”
- ▶ Does not need to be all inclusive or exhaustive, just enough to guide you and your team

## eCQI PROJECT SCOPE/ CHANGE BACKLOG - Template

<b>Project Aim:</b> (what are we trying to accomplish)
<b>Goal:</b> (make sure goal is SMART)

<b>Project Constraints:</b> (what are the boundaries for this project)
Budget: Schedule: Quality: Other: (Policies, Regulations, Senior Management requirements)

<b>Evaluation Measure</b> (use standardized data, easily obtainable if possible - examples include PQRS, NQF, CMS, IQR and or UDS measures)					
Measure	Description	Data Source	Target Performance	Current Performance	Current Performance Date

Project Team			
Name	Title/Department	Role	Responsibilities

# Activity One: Setting Goals

- ▶ **Use Project Scope Change Backlog Template**
- ▶ Review measure with the team
- ▶ Determine Project Scope
- ▶ Define a SMART Goal on your flipchart that will affect the outcome of your measure:
  - Specific
  - Measurable
  - Attainable
  - Relevant
  - Time-bound

# Post-Activity Discussion

- ▶ Questions that came up during the activity?
- ▶ What was the most difficult part?
- ▶ What was the easy part?
- ▶ Round Robin review of Scope and SMART Goals

