Developing a Quality Measurement Roadmap

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What Do We Need?

What information needs, data sources and measures do providers need to improve quality and increase accountability?

Accountable and measurable health care organizations

Improving Quality of Health Care

Core need for health care to be:

- *Safe*: avoiding injuries to patients from the care that is intended to help them.
- *Effective*: providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit.
- *Patient-centered*: providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.
- *Timely*: reducing waits and sometimes harmful delays for both those who receive and those who give care.
- *Efficient*: avoiding waste, including waste of equipment, supplies, ideas, and energy.
- *Equitable*: providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status

Traditional HIT Perspective

- HIT is historically and currently driven by visit or episodic based care, billing and reimbursement
- This HIT view ensures that information is provided and displayed to benefit the provider and reimbursement in a visit centric health care system
- Emphasis is on data obtained and recorded within the ‘traditional’ SOAP format
  - Measures reflect data contained and obtained from this format

What We Have- Quality Measures

- Currently measures are developed with particular disease areas in mind and use evidence base or statistical stability to support each measure
  - Reflect current health care delivery model
  - Not developed as full portfolio to complement targeted or changing model of health care delivery
  - Selection bias based upon evidence base and available standards

What We Need- Systems (and measures) that are malleable enough to respond to redesign

- Well-designed healthcare systems
  - Are learning health care system
  - improve population as well as individual health
  - Incent properly
  - Integrate quality measures that encourage optimal allocation of healthcare dollars as a key element in defining these incentives
  - Keep their eye on the ball

What We Need- System Approach

- Design needs
  - Architectural redesign of HIT solutions to facilitate and measure business process re-engineering as well as a longitudinal view of patient care
    - Design HIT paradigm that can reflect changes in the care delivery model
  - Identification and interoperability of essential domains consistent with health information exchange /measure needs
    - does this data need to be shared
    - SOA architecture
  - Relook at SOAP format and data domains

What We Need- System Approach

- Data sources
  - Integrated and inclusive
  - Semantic interoperability
  - Standards to include additional domains (behavioral health, adverse childhood events, narrative medicine, etc
- Address and Measure Impact on Communication Needs
  - Efficient and effective communication tool
    - Care team / provider and patient/family
    - Primary care and specialty care or ancillary care services
    - Clinic and community-based programs
    - Among care team members.

What We Need- Quality Measures

- Outcome and process measures that can be dynamically designed and sampled to support an overall goal of better healthcare delivery and outcomes in accountable care systems
  - Extensible and longitudinal
  - Requires decision makers to include different data sets (e.g. YPLL versus mortality data) that reflect outcomes
  - Extension of standards work
  - Include framework of specific models of care
    - Traditional patient-centric care
    - Medical homes
    - Community oriented primary care

What We Need- Community based Quality Measures

- Measures to assess impact and improvements to entire communities/populations as well as individual patients
  - Data that includes non-clinical and population/public health oriented factors
  - Impact of population health improvement programs that benefit classes of patients who are in the "catchment" area of an accountable care organization
  - Primary and secondary prevention/early detection and intervention that focusing on quality measures that impact healthy and nearly-healthy patients

Incorporate Safety

- Measure
  - Clinical decision support for diagnostic decision making
  - Longitudinal data view
  - Ability to ‘tag’ patients with appropriate risk assessment on the fly
  - Rapid integration of safety alerts
  - Early sentinel awareness
    - Ability to quickly identify patients at risk due to….

Incorporate Effectiveness

- Measures
  - Easy to obtain on a frequent basis so that the provider can see the impact of the changes they make in their practices as near to real time as possible (and with no additional fiscal cost)
  - Patient's confidence in self-care
  - Utilization and impact of care coordination
  - Improved care planning and care coordination (so called ‘process’ measures versus outcome measures—but process measures of ‘process improvement’)
  - Fundamental or cross-cutting changes in practice
    - The burden of measurement is high on all practices, especially those that commit to using data to guide improvement.

Incorporate Patient Centered

- Measure
  - Access to care
  - Patient controlled data access
    - mHealth implementation
    - appropriate patient knowledge /understanding of controls on privacy and security
  - Longitudinal patient satisfaction/ patient initiated goal setting
  - Extension to include additional ‘views’ including
    - Family (ability to populate parental/ children/sibling charts)
    - Community/ Population

Incorporate Timely

- Guidelines for what is timely care
  - Access
  - Diagnostic
  - Intervention
- ‘Reasonable’ assessment of timely care

Efficient

- Measure
  - Group notes/group order entry
    - Shared decision making with health care team
  - Maximize use of standing orders
  - Resource utilization
    - Appropriate use of guidelines in intervention decisions (e.g. did you follow the Ottawa rules to order ankle x-rays?)
    - Financial forecasting of disease burden
  - Regional differences in utilization
    - Support for group practice model to determine denominator
    - Individual versus group/population delivered care

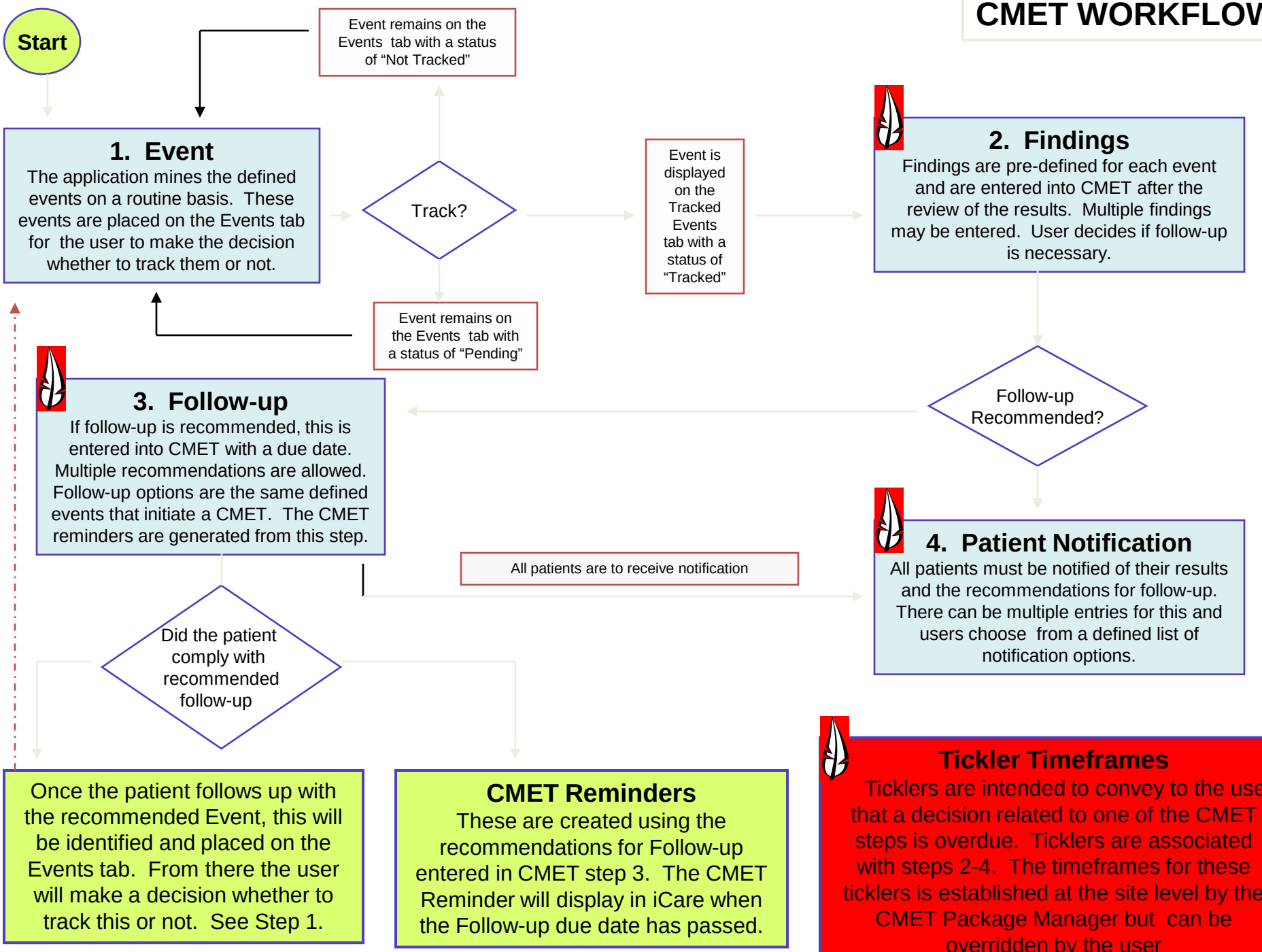
Equitable

- Measure
  - Access to care
  - Patient attributes
    - evaluate factors known to contribute to disparities on x measure
      - Literacy/ economic status/ disability/ readiness to learn/insurance status/ etc
      - Evaluate within a practice as well as within a region

Is this enough to improve quality and accountability?

- Probably not
- Need to relook at architectural model for HIT
- Unintended consequences of HIT expansion
- Lack of true ‘disruptive’ technology
  - HIT needs to foster and support the new paradigm of health care delivery

CMET WORKFLOW



The Indian Health Service

- The Indian Health Service (IHS) provides a comprehensive health service delivery system for approximately 1.9 million American Indians and Alaska Natives who belong to 564 federally recognized tribes in 35 states.
- The patient population faces high rates of illness, disability, and death from chronic and preventable diseases.

Using Data

- At the IHS, we have used health information systems to capture, store, and use data for clinical and administrative decisions for over 25 years in a distributed remote environment.
- The Resource and Patient Management System (RPMS) provides the means to document patient encounters, study population health both statically and on the fly, develop and implement reminders, access clinical decision support, and analyze administrative and billing data.

IHS Information Systems

- RPMS is our real-time, transaction-based health information system
- In addition, the IHS uses a data repository to study disease interventions, population health trends, resource management, and reporting necessary for the Joint Commission
- The IHS deployed a paper based patient wellness summary in 2006; IHS is currently deploying a web based Personal Health Record to enable patients to manage their healthcare more actively

Measuring Quality

- The IHS Federal sites and any Tribal and Urban sites utilizing RPMS depend upon the Clinical Reporting System, a module of RPMS that measures improvements in quality
- Quality measurement is integrated in the IHS health care delivery process
- The IHS reports on quality measures for governmental requirements, improving outcomes, and sharing data with patients, families and communities

Quality of Care

- The IHS posts measures of quality on its "Quality of Care" website for federally operated facilities.
- Quality measurement by health condition, facility, and overall IHS standings encourage accountability and promote patient participation.

What Does IHS Measure?

- Meaningful Use Measures
- Diabetes
- Dental
- Immunizations
- Cancer Screening
- Behavioral Health
- Cardiovascular Disease
- Prenatal HIV Screening
- Composite measures, including
  - Diabetes care
  - CVD care
  - Cancer screening
  - HIV quality of care

Improving Patient Care

- Since 2006, the IHS has been integrating the Improving Patient Care (IPC) process into selected sites
- The IPC uses the quality measures available from the RPMS in methodical ways to make real and measurable improvements to care
- RPMS query management tools facilitate reporting and quality evaluation of any on the fly defined population

Ten Rules for Redesign

- *Care is based on continuous healing relationships*
- *Care is customized according to patient needs and values*
- *The patient is the source of control*
- *Knowledge is shared and information flows freely*
- *Decision making is evidence-based*

Ten Rules for Redesign

- *Safety is a system property*
- *Transparency is necessary*
- *Needs are anticipated*.
- *Waste is continuously decreased*.
- *Cooperation among clinicians is a priority*