



Developing and using clinical quality measures to drive improvement

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- The measurement landscape
- Cycle of measurement activities
 - Principles of measure conceptualization and design
 - Measure specification and testing
 - Implementation and integration
- Emerging trends
- Wrap up and close



A Few Caveats

- Clinician level measure developer, primarily in the ambulatory setting
- The measurement field uses acronyms that are likely foreign to most outside our world
- We love our catch phrases, most notably
 - “If you can't measure it, you can't improve it”
 - “Not everything that can be counted counts, and not everything that counts can be counted.”



PCPI's Leadership in Measurement

- Nationally recognized as a leader in measure development, specification, and testing
- Measure development portfolio includes:
 - 47 measurement sets; >300 individual measures
 - ~90 NQF-endorsed™ measures
 - Many measures in federal programs including CMS PQRS and EHR incentive program
 - (many in collaboration with PCPI member societies and/or NCQA)
- www.thepcpi.org

Key Developers



Key Uses

Pay for Reporting

- Hospital Inpatient Quality Reporting
- HEDIS
- CMS' Physician Quality Reporting System

Public Reporting

- Hospital Compare



Measurement Landscape: Present

Key Developers

- TJC
- NCQA
- PCPI
- Government (CMS, ONC, AHRQ, CDC) or its contractors
- State or local organizations
- Health Insurers
- Health Systems
- Specialty Societies

Key Uses

Pay for Reporting/Performance

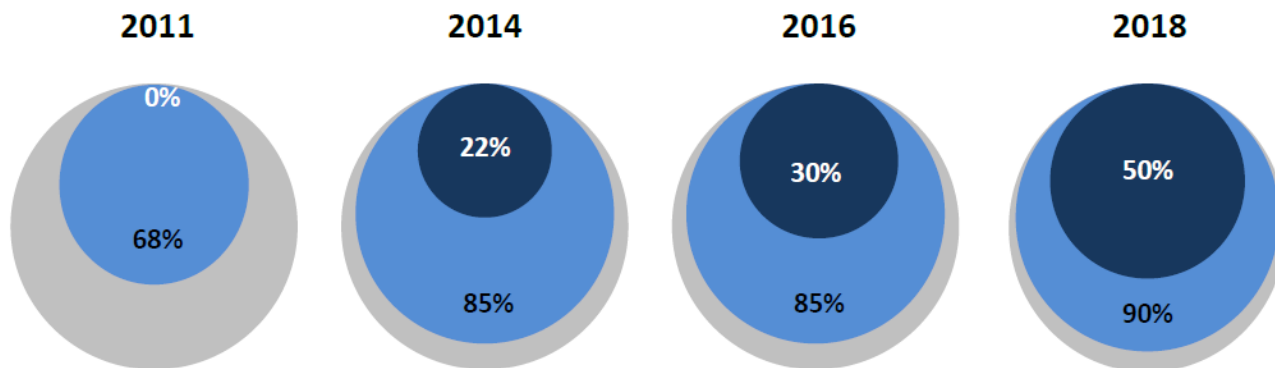
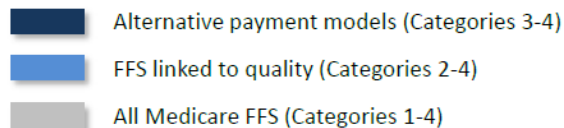
- Hospital Inpatient Quality Reporting
- Hospital Outpatient Quality Reporting
- HEDIS
- Quality Payment Program

Public Reporting

- Hospital Compare, Physician Compare, Qualified Clinical Data Registries

Measurement Landscape: Future

- Target percentage of payments in fee for service (FFS) linked to quality and alternative payment models





Measurement by the Numbers

- >2500 measures in the National Quality Measures Clearinghouse
- >700 measures endorsed by National Quality Forum
- 271 measures in Merit-based Incentive Payment System
- 1000+ measures in Qualified Clinical Data Registries



And Yet...

- 63% of physicians say that current measures do not capture the quality of care they provide
- Physician practices are spending \$15.4 billion each year — about \$40,000 per physician — to report on performance

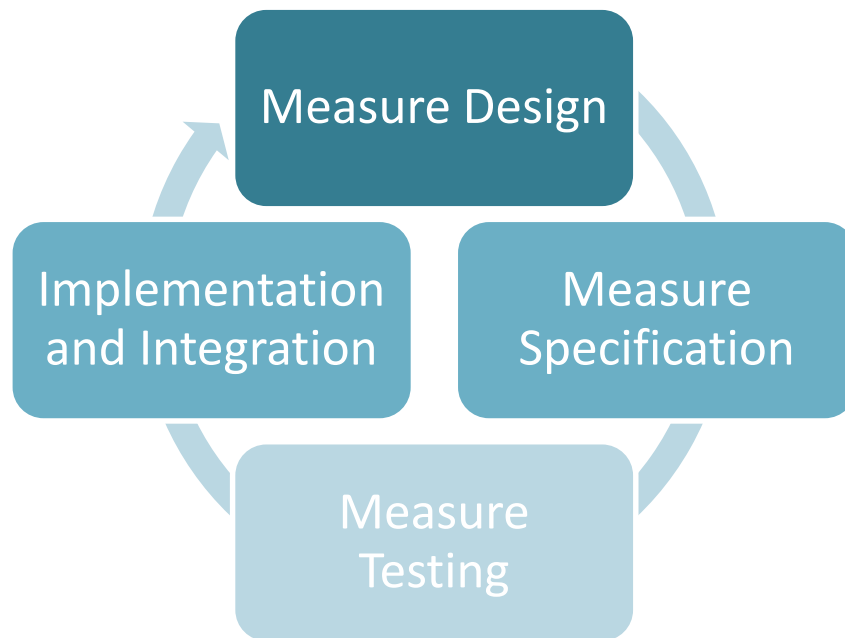
Citation: Casalino LP et al. Health Aff (Millwood) 2016; 35: 401-6.



There is Hope

- Intent is good: Goal to drive improvement in patient health outcomes
- Many developers follow a rigorous measure development process
- Push for parsimony, wherever possible, and harmony

Measurement Cycle of Activities





Measure Development Process

Initial Preparation



Measure Conceptualization



Measure Consensus



Public Comment



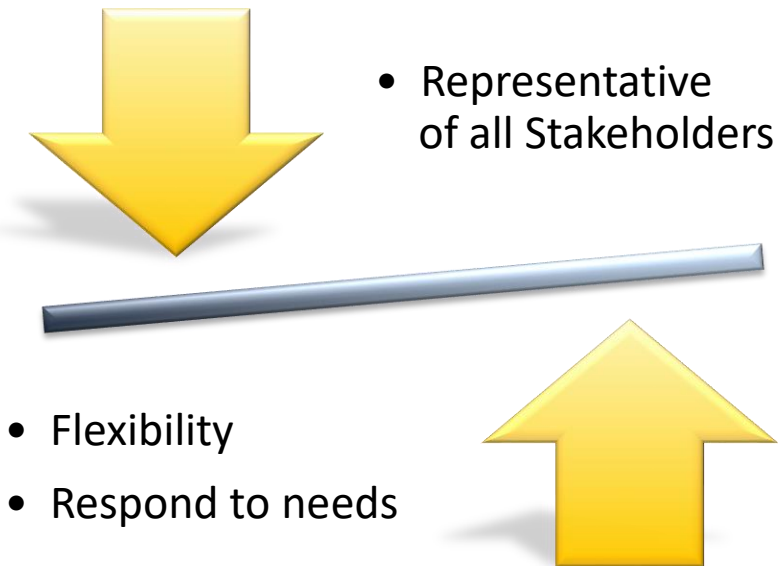
Measure Finalization



Organizational Approval

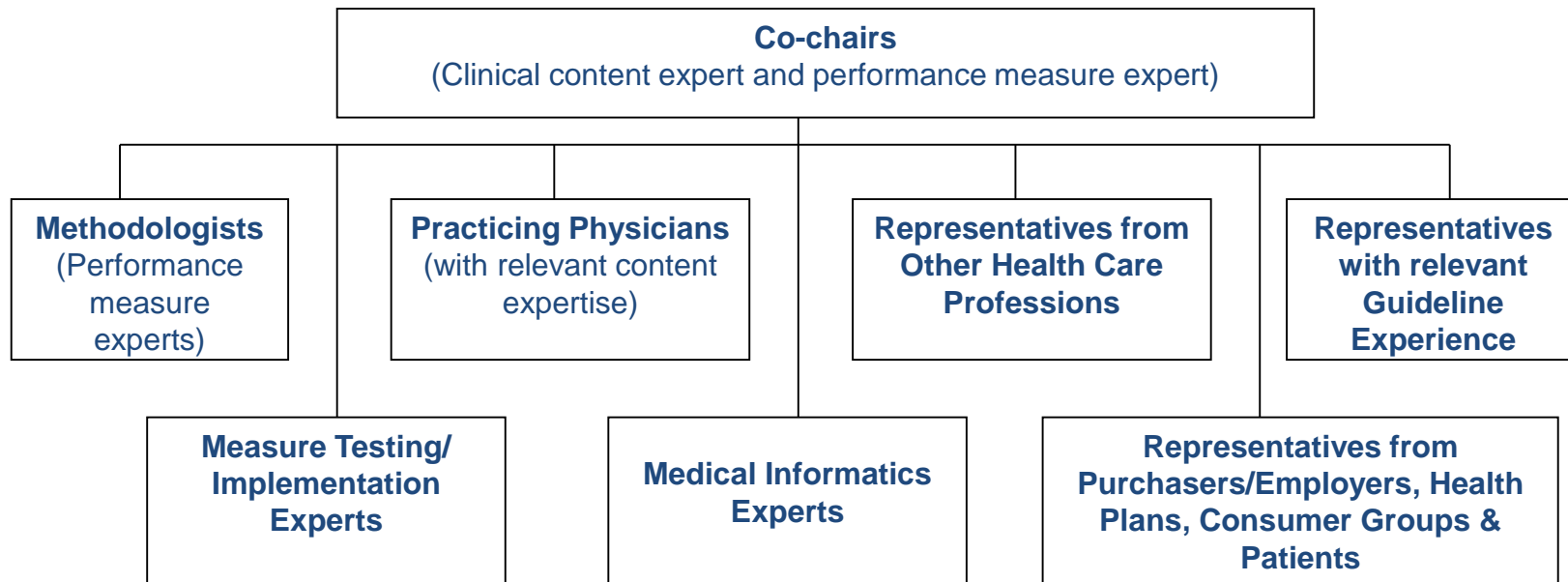
Form TEP

The composition of the Technical Expert Panel (TEP) is critical to the success of a measure

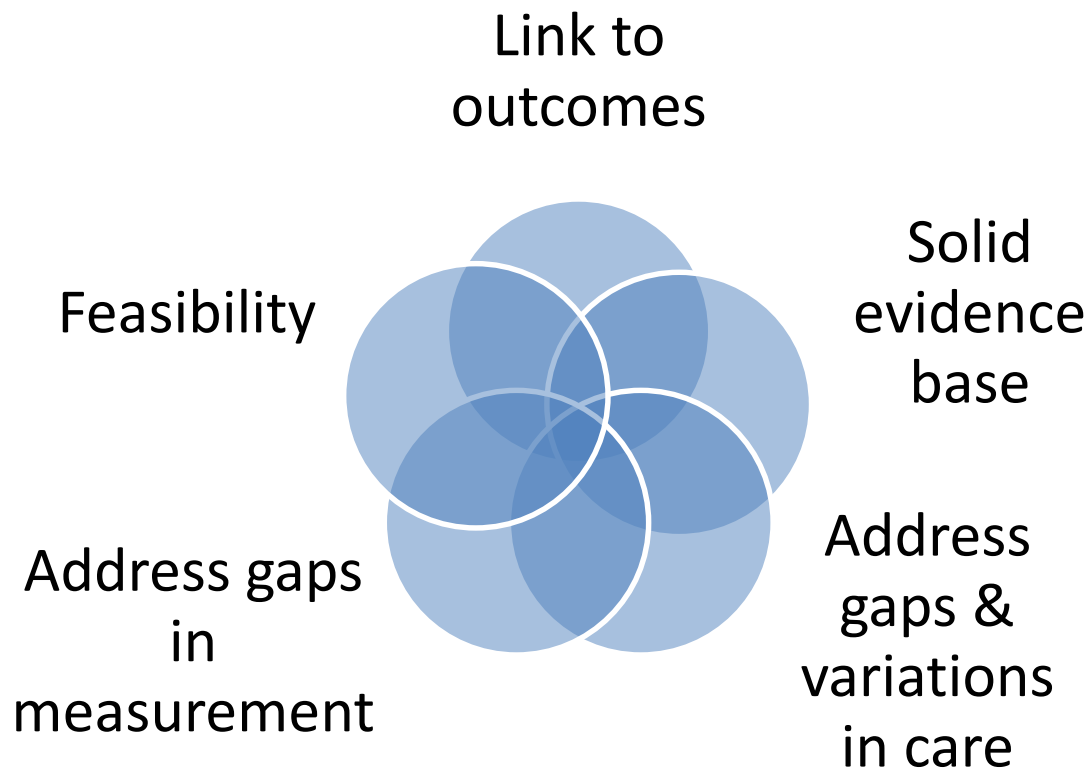




TEP Composition

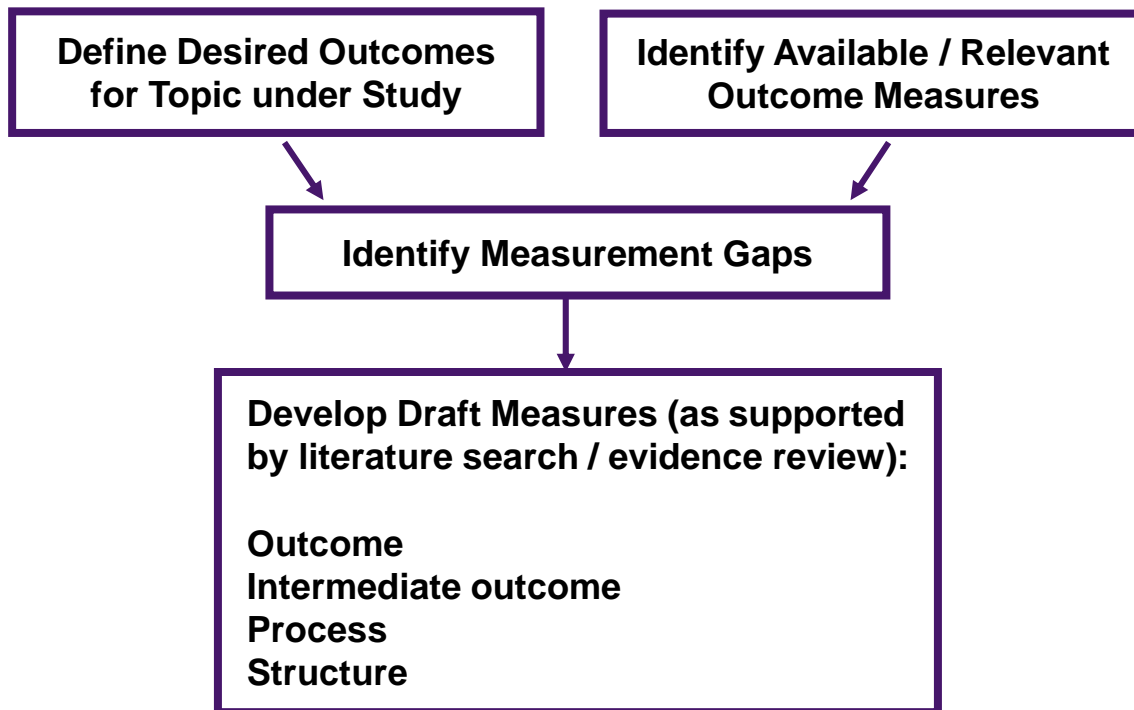


Key Concepts in Measure Design

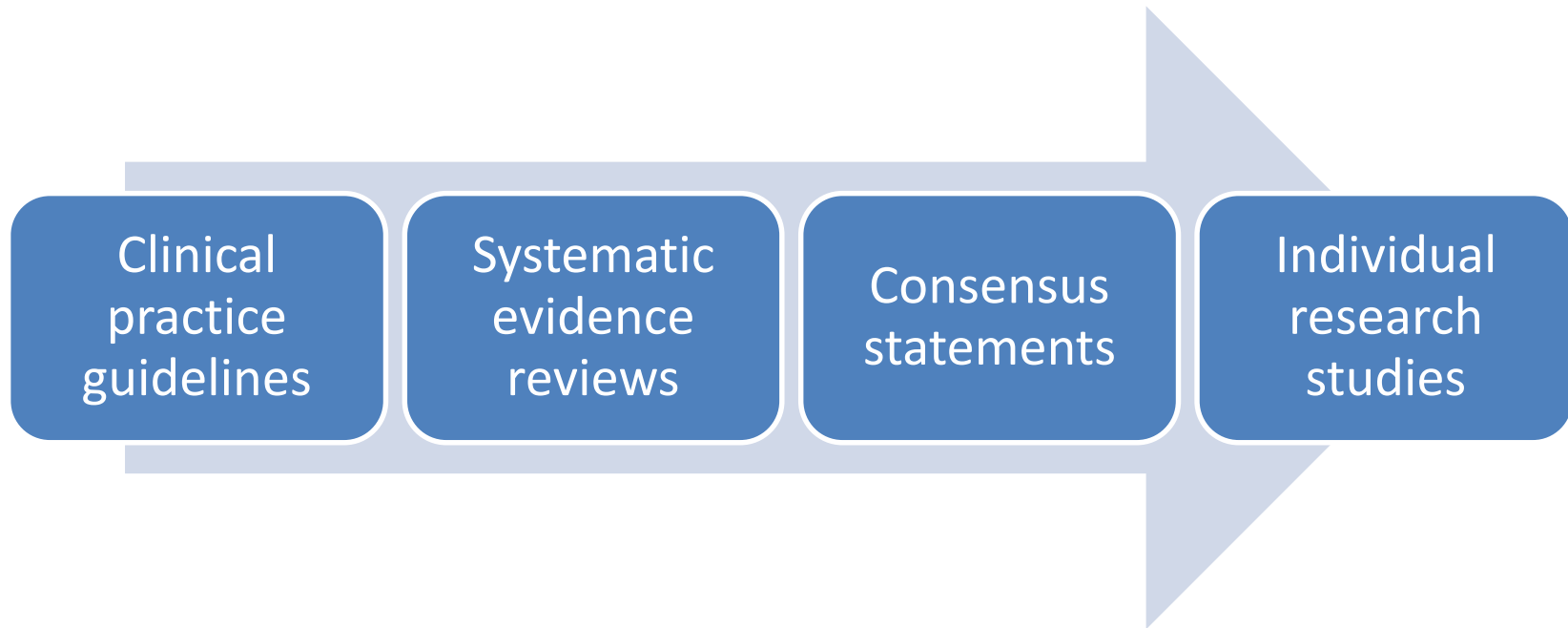




Focusing Measure Development on Desired Outcomes



Evidence Base





Opportunities for Improvement

- Ensure that there is a need to improve performance for the concept of interest
- Opportunities for improvement can include:
 - Overall less than optimal performance
 - Variation in performance across patient populations
 - Variation in performance across providers
 - Inconsistent performance
- No absolute threshold for gap in care, measure-specific



Existing Measures

- Scan the existing measure landscape to ensure proposed measure concepts address a gap in measurement
- Harmonize concepts with existing measures where possible
- Search for existing measures related to both the overall measure topic and the specific concepts of interest



Feasibility Considerations

In thinking about measure components, we need to consider:

- Is the necessary measure data captured in the intended data source?
- Can each data element be abstracted (i.e., in a structured, standardized format) from the intended data source?
- Will it be captured by the physician or health professional as part of the routine course of care?



Types of Measures

Outcome measure:

A measure that assesses the results of healthcare that are experienced by patients: clinical events, recovery and health status, experiences in the health system, and efficiency/cost.

- Postoperative stroke following CABG surgery
- Patient-reported functional status, HRQoL, and symptoms following elective PCI

Process measure:

A measure that focuses on steps that should be followed (*or avoided*) to provide good care.

- Heart failure patients with LVSD receiving beta-blocker therapy
- Routine preoperative cardiac stress imaging in low risk surgery patients

Structural/Management measure:

A measure that assesses features of a healthcare organization or clinician relevant to its capacity to provide healthcare.

- Heart team approach to revascularization decisions for patients with unprotected left main or complex CAD

Source: CMS Measures Management System Blueprint



Types of Measures

Additional types of measures include:

- Access
- Efficiency/Cost
- Patient Experience
- Population Health
- Utilization of Services
- Composite



Anatomy of a Quality Measure

A quality measure numerator could be a clinical action or an outcome of interest

$$\text{Quality Measure} = \frac{\text{Numerator}}{\text{Eligible Population} - \text{Denominator Exceptions}}$$

Eligible Population = (Initial Population + Denominator) – Denominator Exclusions *

Denominator Exceptions are removed from the Eligible Population after the Numerator clinical action is evaluated

* Denominator Exclusions are removed from the IP/D before the Numerator is ever evaluated; the Numerator clinical action is never appropriate for this group of patients.



Exclusions and Exceptions

- Exclusions
 - Applied uniformly across a patient population to remove an entire group of patients
 - Removed from denominator before considering numerator action
 - Applied to patients for whom the measure focus would not be appropriate
- Exceptions
 - Patients included in denominator for whom a particular numerator action may not apply
 - Only apply to denominator patients who fail to meet the numerator
 - Allows clinical judgment & individual patient characteristics to be factored into quality measurement
 - Applied on a case-by-case basis



Anatomy of a Measure: Example

Numerator

Patients with patient reported functional status assessment results (eg, VR-12; VR-36; MLHF-Q; KCCQ; PROMIS-10 Global Health, PROMIS-29) present in the EHR within two weeks before or during the initial encounter and the follow-up encounter during the measurement year

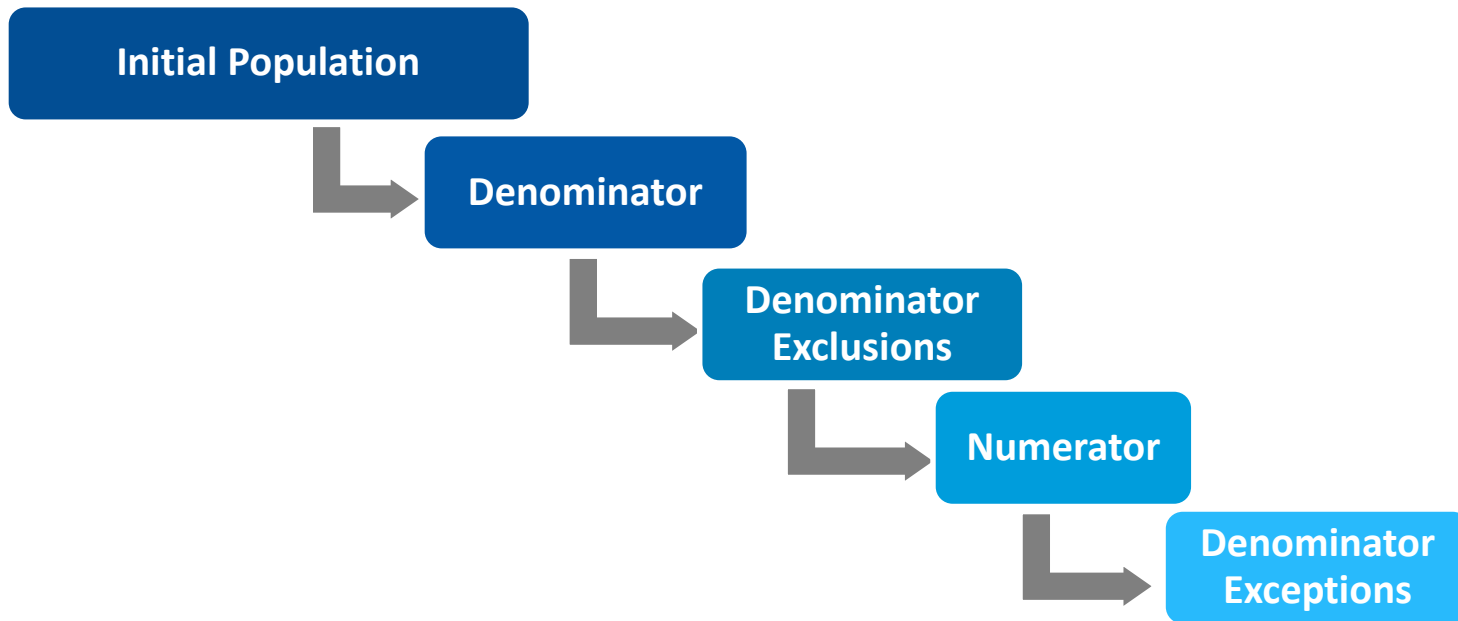
Measure =

Patients 65 years of age and older who had two outpatient encounters during the measurement year and a diagnosis of congestive heart failure

Denominator

Exclusions: Patients with severe cognitive impairment or patients with a diagnosis of cancer

Measure Calculation





Measure Narrative to Specification

- Focus on electronic clinical quality measure (eCQM) health quality measures format (HQMF)
- Create a framework
 - Identify data elements
 - QDM
 - Identify metadata of data elements
 - Map out attributes, functions, timings, and relationships between data elements
 - Vocabularies to capture data elements and metadata
- Development of specification
- Building of value sets

Measure Testing

- Why test measures?
 - Have confidence that the measures are able to reliably capture the data they are intended to capture
 - Ensure that there is no significant difference in the way data is being captured in registries
 - Increase provider confidence in measures and measure results





Alpha Testing: Feasibility Testing

- Provides an opportunity to identify the following:
 - Necessary refinements to measure concepts and technical specifications
 - Data sources
 - Potential barriers to implementation
 - Strategy for data collection and analysis
 - Unintended consequences





Beta Testing: Reliability and Validity Testing

- Opportunity to evaluate the scientific acceptability of measures, using empirical data
- Reliability Testing
 - Enhanced evaluation of a measure's importance, including evaluation of performance thresholds and outcome variation
- Validity Testing
 - Evaluates the extent to which a measure truly measures that which was intended





Measure Implementation and Integration

Long path to use in a federal program:

1. CMS annual call for measures
2. CMS review and creation of Measure Under Consideration (MUC) list
3. Review by Measure Applications Partnership – convened by the National Quality Forum (NQF)

Measures submitted by 6/30/2018, not eligible for inclusion until 2020!

Measure Endorsement

National Quality Forum(NQF) Endorsement

- Stakeholder Input
- Build Consensus

Assessment Criteria

- Importance to Measure
- Scientific Acceptability
- Usability
- Feasibility





NQF Measure Review Process

1. Intent to Submit
2. Call for Nominations
3. Measure Review
4. Public Commenting with Member Support
5. Measure Endorsement
6. Measure Appeals





CMS and Meaningful Measures

- Meaningful measures:
 - Address high impact measure areas that safeguard public health
 - Patient-centered and meaningful to patients
 - Outcome based where possible
 - Relevant for and meaningful to patients
 - Minimize level of burden for providers
 - Significant opportunity for improvement
 - Address measure needs for population based payment through alternative payment models
 - Align across programs and/or with other payers

Source: CMS, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/index.html>

Meaningful Measures

Promote Effective Communication & Coordination of Care

Meaningful Measure Areas:

- Medication Management
- Admissions and Readmissions to Hospitals
- Transfer of Health Information and Interoperability

Strengthen Person & Family Engagement as Partners in their Care

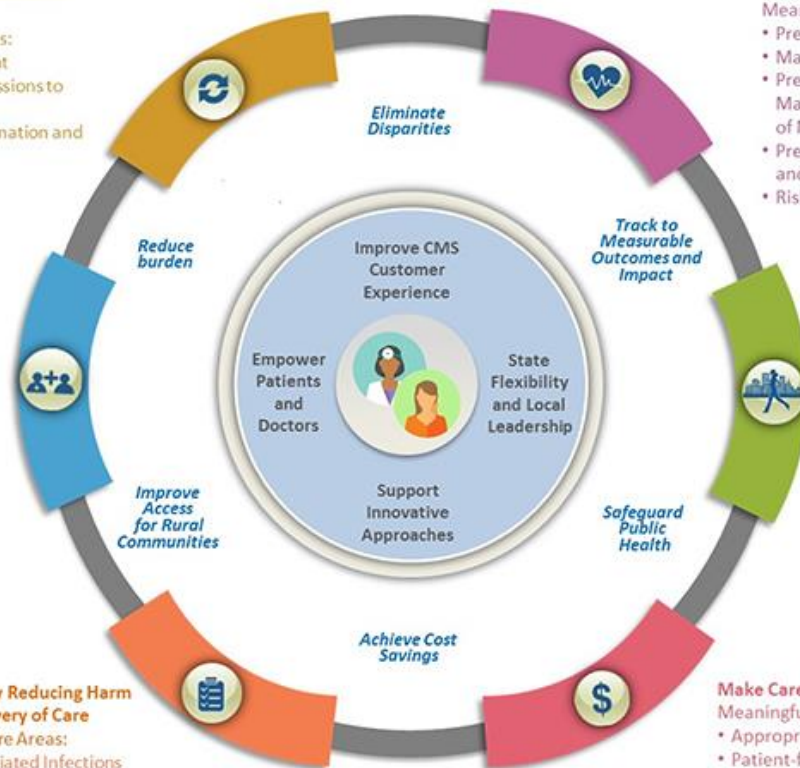
Meaningful Measure Areas:

- Care is Personalized and Aligned with Patient's Goals
- End of Life Care according to Preferences
- Patient's Experience of Care
- Patient Reported Functional Outcomes

Make Care Safer by Reducing Harm Caused in the Delivery of Care

Meaningful Measure Areas:

- Healthcare-Associated Infections
- Preventable Healthcare Harm



Promote Effective Prevention & Treatment of Chronic Disease

Meaningful Measure Areas:

- Preventive Care
- Management of Chronic Conditions
- Prevention, Treatment, and Management of Mental Health
- Prevention and Treatment of Opioid and Substance Use Disorders
- Risk Adjusted Mortality

Work with Communities to Promote Best Practices of Healthy Living

Meaningful Measure Areas:

- Equity of Care
- Community Engagement

Make Care Affordable

Meaningful Measure Areas:

- Appropriate Use of Healthcare
- Patient-focused Episode of Care
- Risk Adjusted Total Cost of Care

Source: CMS



CMS Measure Development Plan and Measurement Gap Areas

Clinical Care

- Measures incorporating patient preferences and shared decision-making
- Cross-cutting measures that may apply to more than one specialty
- Focused measures for specialties that have clear gaps
- Outcome measures

Safety

- Measures of diagnostic accuracy
- Medication safety related to important drug classes

Care Coordination

- Assessing team-based care (e.g., timely exchange of clinical information)
- Effective use of new technologies, such as telehealth



CMS Measure Development Plan and Measurement Gap Areas

Patient and Caregiver Experience

- Patient-reported outcome measures (PROMs)
- Additional topics that are important to patients and families/caregivers (e.g., knowledge, skill, and confidence for self-management)

Population Health and Prevention

- Developing or adapting outcome measures at a population level to assess the effectiveness of the health promotion and preventive services delivered by professionals
- IOM Vital Signs topics (e.g., life expectancy, well-being, addictive behavior)
- Detection or prevention of chronic disease (e.g., chronic kidney disease)

Affordable Care

- Overuse measures (e.g., overuse of clinical tests/procedures)



Outcome Measures – Why Now?

- Patients want results
- More closely reflects the quality of care
- Potentially have the greatest impact on improving care



Outcome Measures – Why Now?



Strategic Approach – CMS will collaborate with specialty groups and associations to develop measures that are important to both patients and providers and that represent important performance gaps in the targeted quality domains. When considering measures, CMS will prioritize outcomes, person and caregiver experience, communication and care coordination, and appropriate use/resource use.

What Is Value in Health Care?

Michael E. Porter, Ph.D.

Achieving high value for patients must become the overarching goal of health care delivery, with value defined as the health outcomes achieved per dollar spent.¹ This goal is what



NATIONAL
QUALITY FORUM

Person-Centered Care and Outcomes

Considering measures that are most important to patients—particularly patient-reported outcomes—and opportunities to advance them through the use of health information technology



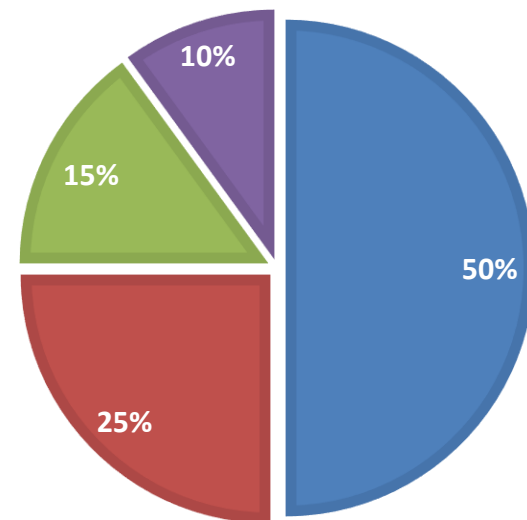
Outcome Measures – Why Now?

- Merit-Based Incentive Payment System - Quality component:

Requires reporting on 6 measures, at least one outcome measure (or *another high priority measure*)

2018 MIPS PERFORMANCE SCORING

■ Quality ■ ACI ■ Improvement ■ Cost

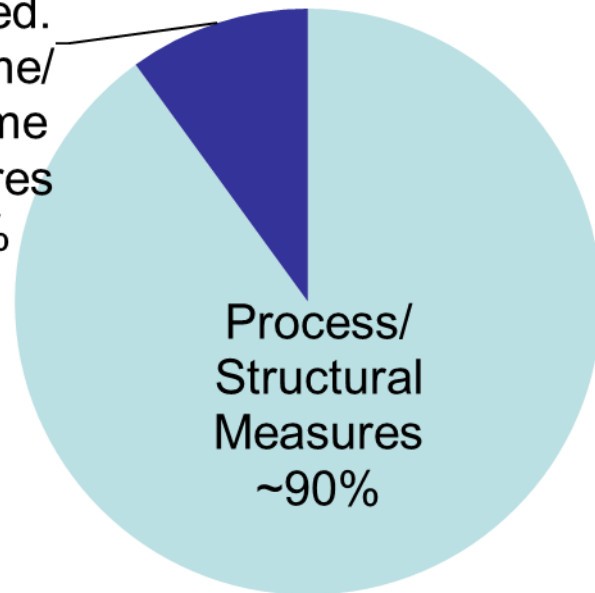




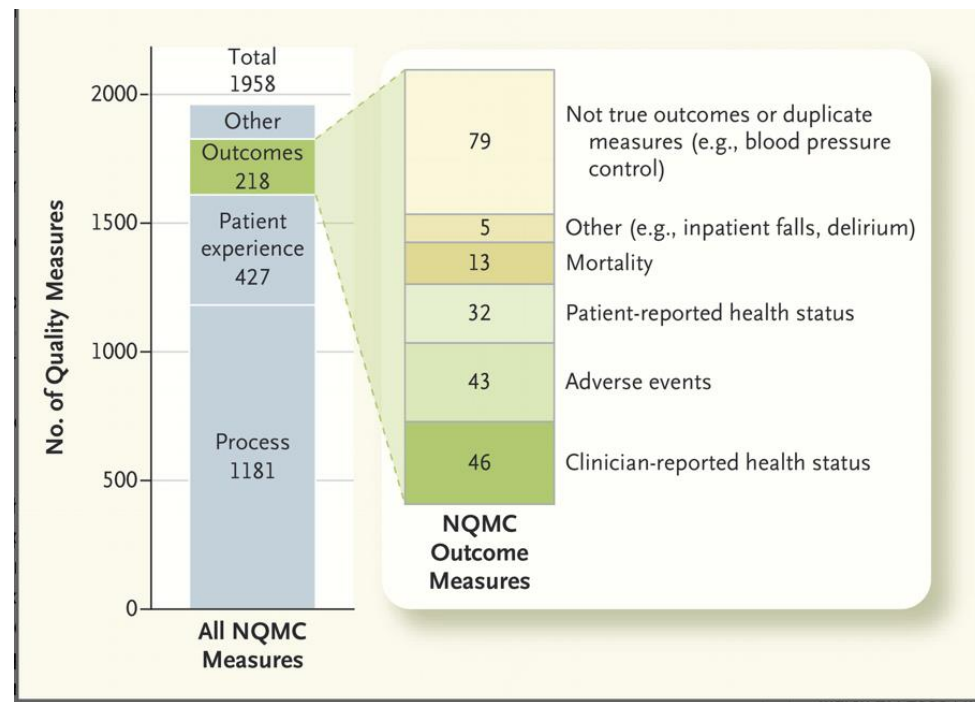
How are we doing at meeting the demand?

PCPI:

Intermed.
Outcome/
Outcome
Measures
~10%



NQMC:



Tackling the Trends

- Special considerations:
 - Require collaboration across a broad range of stakeholders; patient input on measurement is more important than ever
 - Unique feasibility challenges
 - Challenges in establishing an evidence base, traditional RCTs are often not available



How can you get involved?

Influencing measure design

- Technical expert panel calls for nomination
- Sharing your opinion via public comment

Improving measures post implementation

- Communicating with measure stewards directly
- JIRA
- Commenting during NQF review process



Wrap-Up

Thank you!

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