

Measure Conceptualization

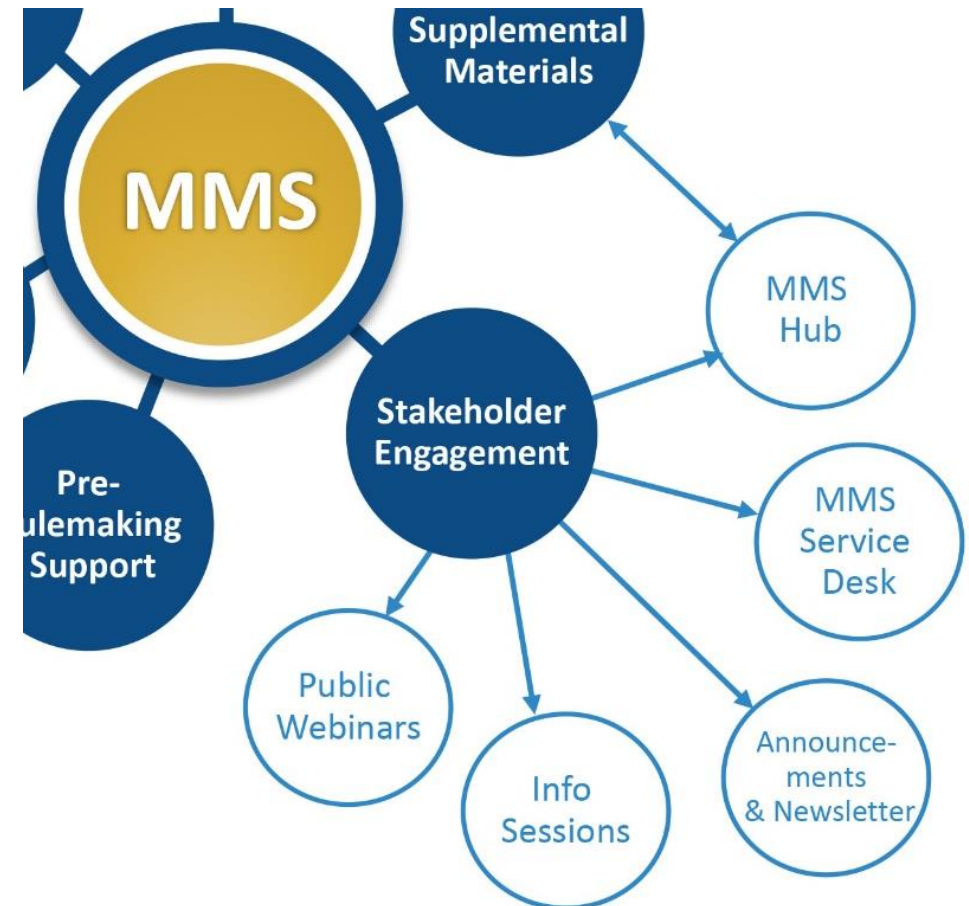
From Ideas to Action



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Welcome

- These Info Sessions are stakeholder outreach and education activities to engage those interested in CMS measure development.
- Info Sessions are an activity of the Measures Management System (MMS) contract



Presentation Objectives

- Review common steps taken during measure conceptualization
- Present case study of information gathering to illustrate some of the steps taken during this phase of the lifecycle

***Business Case development will not be covered in the case study. For more information on Business Case development, please visit the MMS Hub (mmshub.cms.gov).**

Measure Conceptualization



Measure Conceptualization Activities



**Identify
condition or
treatment of
interest**



**Gather
information via
environmental
scan**



**Build
preliminary
business case**



**Define
measure(s)
for further
specification**

Step 1: Identify Condition or Treatment of Interest



- **Determining topics for measurement is project-specific; may be triggered by:**
 - Known gaps in CMS programs identified by expert panels or via public comment
 - Publication of new or updated clinical guidelines
 - Emergence of high priority healthcare challenges (e.g., Covid-19, opioid epidemic)

Step 2a: Information Gathering



- **Collection of data and information to narrow down the list of potential measure concepts. Typically involves an environmental scan that includes:**
 - Search for clinical practice guidelines
 - Search for existing measures
 - Review of literature
 - Input from experts
 - And other related activities

Step 2b: Business Case



- Documents anticipated impacts of a quality measure, including health and healthcare outcomes, financial outcomes, and resources required for measure development and use
- Aids decision-making about which measure concepts to fully develop
- During conceptualization, may be a simple description of pros and cons associated with each potential concept

Step 3: Define Measure(s) for Further Specification

- Define numerator, denominator, and target population for most promising measure concepts
- Prioritize high-likelihood healthcare activities (numerators) that are sensitive to measurement

		Impact (of measurement)	
		Low	High
Likelihood (of measure focus)	Low	Do not measure (accept the risk of low quality)	Quality improvement (transfer the risk of low quality)
	High	Communication or monitoring (control the risk of low quality)	Measure (avoid the risk of low quality)

Case Study: Heart Failure (HF)



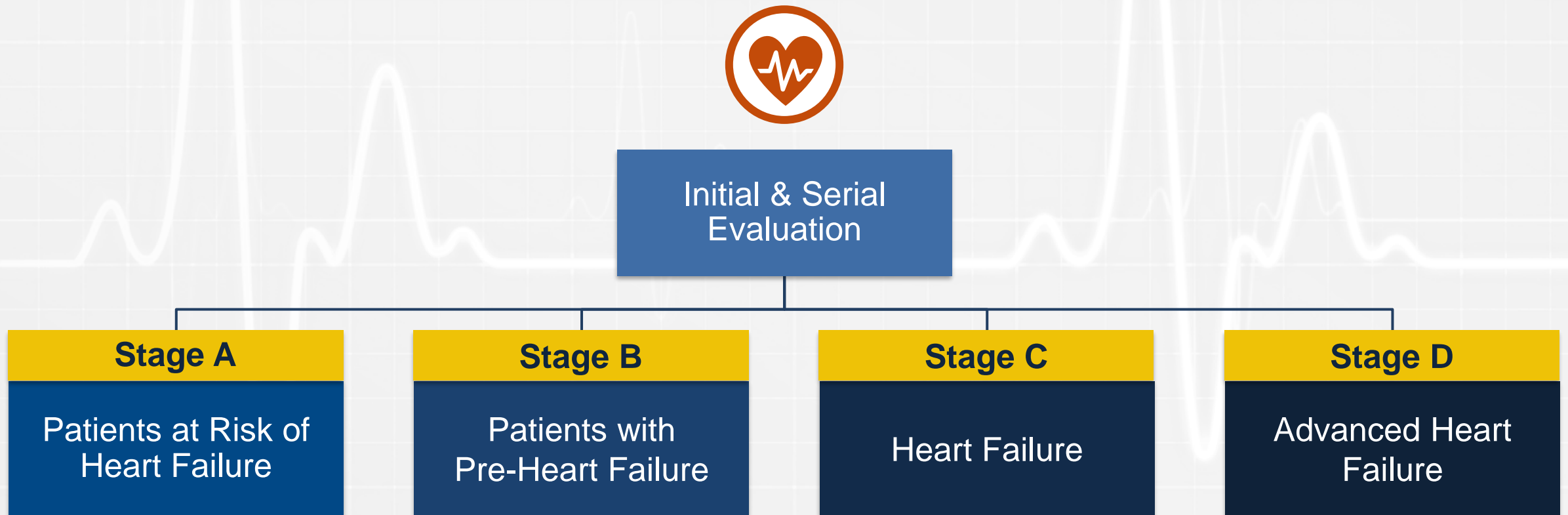
- Our goal is to identify potential measure concepts to:
 - **Address gap(s)** in the measurement landscape
 - **Promote high quality care** consistent with current clinical guidelines
- *This is only an exercise and does not necessarily reflect current measures in development or use

Step 1: Identify Topic of Interest



- In 2022 the American Hospital Association/American College of Cardiology/Heart Failure Society of America updated their HF guidelines
- Review the guidelines for information about aspects of HF prevention and treatment that might benefit from quality measurement

Step 1 (cont'd): Review of Stage-Specific Guidelines for HF



Step 2: Environmental Scan



- **Search for related clinical practice guidelines**
 - American College of Cardiology’s 2022 Heart Failure guidelines on patients at risk for health failure are an update from an earlier version
- **Search for existing measures in databases such as**
 - CMS Measures Inventory Tool (CMIT)
 - CMS Consensus-Based Entity (CBE) Quality Positioning System (QPS)
 - Quality Payment Program (QPP) Quality Measures: Traditional MIPS Requirement

Environmental Scan Resources



- **CMS developed two resources housed on the CMIT platform to help developers conduct an environmental scan**

- **Environmental Scanning Support Tool (ESST)**, a tool that uses a natural language processing to rapidly scan literature in PubMed, PubMed Central, and CINAHL related to the measure focus, target population, and evidence for an existing measure
- **De Novo Measure Scan (DNMS)** is a feature of the ESST that scans the literature for measure concepts related to the measure developer's work*

Relevance	Verified	Source	Publication Date	Source Document Title	Associated Measures	Links
		PubMed	2007	Enhancing work flow to reduce crowding		View List View Full Text
		PubMed Central	2015-12-16	Association of Emergency Department Length of Stay and Crowding for Patients with ST-Elevation Myocardial Infarction		View List View Full Text
		Endnote	2007	Prolonged emergency department stays of non-ST-segment-elevation myocardial infarction patients are associated with worse adherence to the American College of Chest Physicians/Novel Association		View List

How Does DNMS Work?

How is DNMS Used?

Getting Started

Findings: Current Guidelines



- The “[2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure](#)” replaces the 2013 Guideline and the 2017 update.
- The 2022 guideline is intended to provide patient-centric recommendations for clinicians to prevent, diagnose, and manage patients with heart failure
- The guideline includes new clinical recommendations for all stages of HF, including prevention

Findings: Existing Measures

~33 measures related to Heart Failure in CMIT, covering the following aspects of HF care:

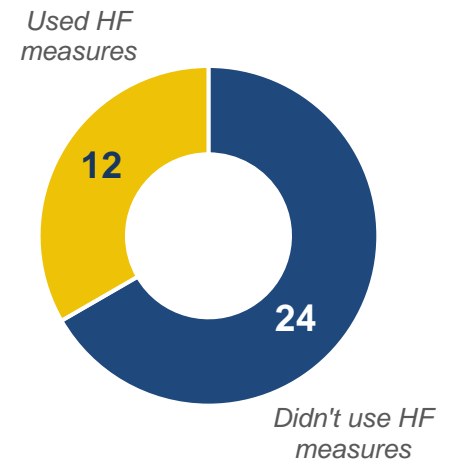


	Stage A	Stage B	Stage C	Stage D
Initial and Serial Evaluation	Patients at Risk of HF	Patients with Pre-HF	HF	Advanced HF
<ul style="list-style-type: none"> Comprehensive evaluation 	<ul style="list-style-type: none"> Functional status assessment Multiple chronic conditions management 	<ul style="list-style-type: none"> Medication therapy Functional status assessment Multiple chronic conditions management 	<ul style="list-style-type: none"> Unplanned admissions Medication therapy Functional status assessment 	<ul style="list-style-type: none"> Hospital readmissions Excess hospital day Mortality Medication therapy Cost Functional status assessments

Findings: Programs Using HF Measures



- To identify gaps and opportunities in HF measures we reviewed [CMS Quality Reporting and Value-Based Programs](#)
- Of the 36 programs reviewed we identified 12 programs that use HF measures and 24 that did not use HF measures
- Alternatively, measure developers could use the [Needs and Priorities Report](#) published on the pre-rulemaking website.



Technical Expert Panel (TEP)



- After you identify several measure concepts of pre- heart failure prevention convene a TEP, a diverse group of stakeholders, to provide feedback and refine the measure concepts
 - Given the topic, the TEP should include individuals with clinical expertise and lived experience related to heart failure and cardiology
- More information on TEPs is available [here](#).

Questions for the TEP



- Do the existing medication management measures align with current guidelines?
- Potential gap: harm reduction related to medications that can worsen HF. Worth exploring further?
- Are there other outcomes, besides readmissions, that we should consider measuring?
- Are there aspects of the 2022 clinical guidelines that are controversial or not widely accepted?

Step 3: Measure Concept Development



- Based on information gathering, ask yourself:
 - Is measurement the best option for addressing HF?
 - What aspects of HF care would benefit most from quality measurement?
Consider the prevalence of the problem and the potential impact of measuring it
 - What is the target population for HF measures?
 - What care setting will the data be captured in?
- Develop several measure concepts that include target population, denominator, and numerator

Step 3: Draft Measure Components



- Based on Information Gathering and TEP input, the measure development team has identified a need for harm reduction measures among late-stage HF patients
 - **Target population:** Patients 65 and older
 - **Numerator:** Medications known to worsen HF symptoms (e.g., NSAIDs, thiazolidinediones)
 - **Denominator:** Patients 65+ with Heart Failure with Reduced Ejection Fraction (HFrEF)
- Note: This may be contingent on findings from the initial business case

Summary and Next Steps

- Measure conceptualization encompasses all the preliminary steps needed to identify promising measure concepts for further development (including business case development)
- In this example, next steps would include creation of detailed measure specifications to enable preliminary testing
 - Defining data elements comprising measure numerator, exceptions, exclusions, and denominator
 - Identifying data source(s)
 - Detailing measure logic
 - Establishing research questions to be addressed in testing

Questions



We Want to Hear from You!

- What topics and/or speakers would you like to hear from in 2023?

Announcements

- January 25 Info Session from 2-3pm ET
 - What's in a Name? Terminology in Measure Specification



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