# QIP-NJ Chart-Based Measure Specification Guidance Transcript
## M7: Treatment of Severe Hypertension
Updated July 2021

## Introduction (Slide 1)

Welcome to the Measure Specification Webinar for Maternal Health Measure 7 – Treatment of Severe Hypertension (SHTN) given by the New Jersey Department of Health, DOH, to support hospitals participating in the Quality Improvement Program – New Jersey, or QIP-NJ. The purpose of this webinar is to define the components of Maternal Health Measure 7, as well as to describe the workflow for determining a hospital's performance on this measure.

The full specification for this measure can be found on pages 93-95 of version 1.1 of the QIP-NJ Measure Specifications and Submission Guidelines document, also referred to as the Databook. This Databook is available for download via the QIP-NJ website.

M7 is a chart-based measure, which means participating hospitals will be submitting data on attributed individuals via a flat file or via the excel-based standard reporting template as described on the Participants and Stakeholders webpage of the QIP-NJ website. Hospitals will run a query of their Electronic Health Record, or EHR, system for records of attributed individuals after receiving attribution lists. The query will look for measure-specific denominator eligibility criteria as outlined in the measure specification.

All data components will be reviewed for completeness and DOH will independently determine whether they qualify. Hospitals may estimate their performance, however this will be independently calculated and ultimately determined by DOH. Hospitals should note that incentive payments will be contingent on fully executing all program submission guidelines. For more information on data submission procedures of non-claims-based measures, please refer to the "Non-Claims-Based Measures" section on page 7 of the latest version of the Databook.

## Agenda (Slide 2)

The agenda for this presentation is as follows: First, DOH will discuss the learning objectives of this presentation and provide viewers with links to the resource materials that inform this content in section one, "Presentation Information". Then, in "M7 Overview" and "M7 Flowchart" DOH will provide viewers with a description of the measure, looking at the workflow developed to codify measure criteria. In the "Standard Reporting Template" and "Understanding Measure Criteria" sections, DOH will explain how to report each of the measure components by examining the required data elements for the numerator, denominator, and exclusions. Next, in "Examples with Sample Data" DOH will provide individual examples of how a hospital might perform on this measure with individual-level sample data. Finally, in section six of this presentation, "How to Calculate Performance" DOH will discuss the intricacies of performance calculation, taking into account the special considerations of this measure. Finally, to close the presentation under "Conclusion", the Department will provide useful resources and contact information for questions not addressed in this presentation.

## Acronyms Used in this Presentation (Slide 3)

This slide provides a list of acronyms and their definitions as they will be used in this PowerPoint. Please refer to this slide throughout the presentation.

## Presentation Information (Slide 4)

By the end of this presentation, hospital viewers should be able to articulate how numerator compliance will be calculated for M7 and begin to plan for how the data submission process for this measure will be formalized by individual hospitals. This presentation aims to prepare hospitals for data submission activities by familiarizing them with the measure specifications and the corresponding value sets for M7, as well as the variables within the standard reporting template that will be used to identify M7 measure criteria.

Viewers are advised to review and frequently reference the QIP-NJ Measure Specifications and Submission Guidelines document (also called the Databook) and the QIP-NJ Value Set Compendium (also called the VSC) while listening to this presentation. Both documents may be found on the QIP-NJ website on the Documents & Resources webpage. Active links to these materials are also available on this presentation.

## M7 Overview (Slide 5)

M7 will measure the percentage of pregnant or postpartum women aged 18 to 55 years old with a severe hypertensive episode that is treated within one hour by a recommended first-line agent. A list of approved first-line agents is available in the Databook and also found in VSC Table M07_00. A list of approved SHTN diagnoses is also available in the Databook and can be found in VSC Table M07_01. Finally, a list of excluded SHTN diagnoses is available in the Databook and VSC Table M07_02. The statewide benchmark for this measure is 80%. Sampling in data reporting is allowed for measure M7. Please refer to the Databook for the sampling methodology for this measure. Please also refer to the Databook for the baseline and measurement periods for this measure. The baseline period runs from July 1, 2020, through December 31, 2020. The measurement period for year 1 runs from July 1, 2021, to December 31, 2021.

## M7 Flowchart (Slide 6)

DOH will now discuss the flowchart for Maternal Health Measure 7 – Treatment of Severe Hypertension (SHTN).

## M7 Flowchart Overview (Slide 7)

In this presentation, DOH has created a flowchart for the denominator criteria and the numerator criteria. When calculated, the denominator will reflect the eligible population and the numerator will reflect the measure compliant population. The flowcharts have been developed to codify the measure criteria and assist in identifying the data elements.

## M7 Flowchart Part 1: Denominator (Slide 8)

Part 1 of the M7 Flowchart displays a decision point for each criterion in M7 that determines if an individual from the attributed population should be included or excluded from the denominator.

Now, the Department will walk through the diagram together taking time to consider each element. First, a hospital must determine if the attributed individual's age is between 18 and 55 years old, and that they are 20+ weeks gestation through 7 days postpartum with a new principal diagnosis as listed in table

M07_01 within the VSC. If the individual meets this requirement, a hospital should then check to see if they had two or more readings of new onset SHTN taken between 15 minutes and 1 hour apart. Please note that 'new onset' here refers to the first instance of the individual presenting with SHTN at the facility. Finally, a hospital should check if the individual had an exacerbation of chronic hypertension or a principal diagnosis for Gestational Edema or Unspecified Maternal Hypertension by referring to the codes listed in VSC Table M07_02. The associated value sets within the VSC are listed here and in parentheses within the Databook.

## M7 Flowchart Part 2: Numerator (Slide 9)

Part 2 of the M7 Flowchart displays a decision point for each criterion that determines if an individual should be included in the numerator. The NDC numbers listed in value set M07_00 of the QIP-NJ VSC reflect all possible numerator scenarios for this measure. The first orange diamond at the top indicates an individual with new-onset SHTN who was treated with the first hour of their second blood pressure reading with a first-line recommended agent. This orange diamond is the scenario in which the numerator criteria for the measure are met.

The second orange diamond indicates that the individual did not have a documented administration of a recommended first-line agent. Finally, the third orange diamond indicates that the individual received a recommended first-line agent, but it was not administered within one hour of their second blood pressure reading. These two diamonds are scenarios in which the numerator criteria were not met for M7.

## Standard Reporting Template (Slide 10)

The Standard Reporting Template, as described in the materials posted on the QIP-NJ website, will be used to submit data for chart-based measures. Please refer to the Standard Reporting Template materials on the QIP-NJ Participants & Stakeholders webpage for more information on how to use the template to report results for the baseline period, also known as MY0. Please also note that some of the columns from the standard reporting template have been omitted in this presentation for brevity.

## Key Variables (Slide 11)

The following is a list of some of the key variables within the Standard Reporting Template that pertain to M7. Hospitals must report member data elements to identify the attributed individual. The M_ELEMT variable refers to the data element component addressed by each row of data for an individual. In other words, does the row of data qualify the individual for the numerator or denominator, or is the row being used to document an exclusion?

The date and time elements identify the instance when the individual was seen at the facility and the time when blood pressure was taken and treatment was given (when applicable). The SVC_DT variable will define the service data for the individual. BP_TM variable will indicate the blood pressure time at which the individual's SHTN in military time, and BG_TM and ED_TM will specify the beginning and the end of the individual's treatment for SHTN, also in military time.

The RES_VAL and CODE_VAL variables will be used to report the appropriate code, such as ICD-10 CM codes for eligible and ineligible diagnoses, as well as NDC numbers for the treatment drug administered.

The measure specific-data elements will be used to document the blood pressure readings, both systolic and diastolic, as well as whether or not the treatment administered was a recommended first-line agent under the ED_OTHTX variable.

## Understanding Measure Criteria (Slide 12)

Now that the Department has walked through the measure flowchart and key variables in the Standard Reporting Template, it can further examine what individual data elements are required to meet each criterion for M7.

## M7: Denominator Criteria (Slide 13)

There are two criteria that qualify an individual for the denominator of this measure. First, an individual must be between 18 and 55 years old, greater than or equal to 20 weeks gestation through 7 days postpartum, with a new principal diagnosis. The data element required to verify an individual's age will be their Data of Birth. The column/variable in the Standard Reporting Template used to report a member's data of birth is M_DOB. The data element to identify the principal diagnosis is their ICD-10-CM code corresponding with one of the codes listed in Table M07_01 of the VSC. The column/variables in the Standard Reporting Template used to report a member's diagnosis are RES_VAL and CODE_VAL variables.

Second, an individual must have had at least two consecutive new-onset SHTN readings taken between 15 minutes and 1 hour apart, defined by a systolic blood pressure greater than or equal to 160 mm Hg or diastolic blood pressure greater than or equal to 110 mm Hg. To report this information using the standard reporting template, hospitals will use the M_ELEMT, SVC_DT, BP_TM, BP_SYST, and BP_DIAS variables.

## M7 Exclusion Criteria (Slide 14)

There are three exclusionary criteria for this measure. First, individuals are excluded if they have an exacerbation of chronic hypertension. Individuals are also excluded if they have an instance of SHTN that occurred prior to 20 weeks of pregnancy or after 7 days postpartum. Finally, an individual will be excluded from the denominator of M7 if they have a diagnosis for Gestational Edema or Unspecified Maternal Hypertension. The list of diagnoses that would constitute an exclusion for M7 are available in Table M07_02 of the VSC.

To report exclusions on the standard reporting template, hospitals will need to use the M_ELEMT, RES_VAL, and CODE_VAL columns.

## M7 Numerator Criteria (Slide 15)

There is one criterion that qualifies and individual for the numerator of this measure. An individual must have persistent episodes of new-onset SHTN and have been treated within one hour of their second blood pressure reading with a recommended first-line agent. NDC numbers for the recommended first-line drugs are found in Table M07_00 of the VSC.

This information will be reported on the standard reporting template using columns M_ELEMT, BG_TM, ED_TM (for treatment), and ED_OTHTX. That's the ED_OTHTX variable, which identifies the drug administered as not being one of the recommended first-line agents.

## Examples with Sample Data (Slide 16)

The Department will now walk through a few examples with sample individual data. This data has been randomly generated and does not reflect any real individual information. Please note again that some of the columns from the standard reporting template have been omitted here for brevity

## Sample Individual #1 (Slide 17)

First, DOH will review sample individual number 1.

## Sample Individual #1: Profile (Slide 18)

DOH's first example is a 29-year-old with an encounter date on 9/30/2020, as shown by the M_DOB and SVC_DT variables. Below, please see an example of how this data might be recorded using the standard reporting template.

Her blood pressure was measured at 4:00 PM at 175/120, shown here as 1600 hours in military time. Her second blood pressure reading was taken at 4:45 PM, and was measured at 180/120. Note how the RES_VAL variable for the first two rows is equal to 'Z', which denotes the code as 'other', and that the CODE_VAL variable is blank. In addition, notice how the M_ELEMT variable shows the first row of data as data that qualifies this individual for the Denominator. Moving to the third row of data, there is an ICD-10-CM code, O12.22, associated with a diagnosis of Gestational Edema in the Second Trimester.

This individual will be excluded from the denominator of this measure. Take a minute and see if your hospital can explain why this individual will be excluded from the eligible population for this measure.

## Sample Individual #1: Denominator (Slide 19)

First, DOH acknowledges this is an individual attributed to your hospital, they are between the ages of 18 and 55 years old, and they've had 2 or more blood pressure readings of new-onset SHTN. Next, a hospital should check if the individual has an exclusionary diagnosis (if their code comes from VSC Table M07_02), or an inclusionary diagnosis (if their code comes from VSC Table M07_01). The Individual in this case has an exclusionary diagnosis of gestational edema in the second trimester, as their ICD-10 CM code of O12.22 is found in Table M07_02. Thus, this individual is excluded from the denominator.

## Sample Individual #2 (Slide 20)

Next, DOH will review sample individual number 2.

## Sample Individual #2: Profile (Slide 21)

Our second example is a 22-year-old with an encounter date of 6/1/2020, as shown by her M_DOB and SVC_DT variables. If a hospital looks at the rows of data, the hospital sees that this individual had a blood pressure reading taken at 2:00 PM and another at 2:30 PM on their encounter date. The first two rows list 160/110 as the recorded blood pressures, with 160 under BP_SYST and 110 under BP_DIAS. Notice again how the M_ELEMT indicates denominator inclusion and the RES_VAL column contains 'Z' for 'other', as there is no code set for the blood pressure numbers.

Now, this individual had an ICD-10-CM code diagnosis of O1413 of Severe Pre-Eclampsia in the Third Trimester. She was given a drug with NDC# 101350641 at 2:45 PM. Looking at the variables, notice in the fourth row of data how the RES_VAL contains 'N' for 'NDC' and M_ELEMT has 'N' for 'numerator' instead

of 'd' for denominator like the first three rows. Also notice that the final column, the ED_OTHX column, contains the number '2' in that fourth row.

Individual #2 will be included in the denominator but will not meet numerator performance requirements. See if your hospital can identify why this individual is part of the eligible population but does not meet measure compliance.

### Sample Individual #2: Denominator (Slide 22)

First, DOH again acknowledges that this individual is part of your hospital's attributed population, meets the age requirement, and has 2 or more blood pressure readings of new-onset SHTN taken between 15 minutes and 1 hour apart. Next, a hospital should check to see if the individual's diagnosis qualifies them for inclusion (Table M07_01 of the VSC) or exclusion (Table M07_02) of the VSC. This individual had an ICD-10-CM diagnosis code of O1413 included in Table M07_01 and therefore this individual included in the denominator calculation.

### Sample Individual #2: Numerator (Slide 23)

Knowing this individual is included in the denominator population, a hospital can look at whether or not they meet performance requirements for the numerator as well. First, a hospital should check to see if the treatment administered to the individual was one of the recommended first-line drug therapies in the code set from Table M07_00 of the VSC. The drug this individual was given, with NDC# 101350641, is not included in that table M07_00. Hospitals should know this because looking at row four of the data, ED_OTHX has a number '2' which signals that the drug administered is not one of the first-line therapies contained in the code set found in the VSC.

Thus, this individual does not meet numerator performance requirements.

### Sample Individual #3 (Slide 24)

Finally, DOH will review sample individual number 3.

### Sample Individual #3: Profile (Slide 25)

The third example individual is 37 years old with an encounter date on 7/15/2020. Looking at the data provided, a hospital can see that this individual had two blood pressure readings of new-onset SHTN taken within an hour of each other. At 9:30 AM on the encounter date, this individual had a blood pressure reading of 170/120 and at 10:20 AM they had a reading of 180/120. Looking at the third row of data, a hospital can see that the ICD-10-CM code, as classified with an 'I' in the RES_VAL location, was marked as O139 in the CODE_VAL variable location, meaning this individual was diagnosed with Gestational Hypertension without Significant Proteinuria in Unspecified Trimester. Looking at the fourth row of data in this standard reporting template, a hospital will see information on the treatment given to this individual. Note again how there is an 'N' under the M_ELEMT column. Specifically, a hospital sees under variable BG_TM, or beginning treatment variable, that treatment began at 11:00 AM on the encounter date, and that the treatment NDC # was 433860440 with a '1' under that final column, ED_OTHX.

This individual will be included in the denominator and meets the numerator performance requirements. Take a minute to think about why this individual is the first to be included in both.

## Sample Individual #3: Denominator (Slide 26)

Again, DOH acknowledges that this individual is part of this hospital's attributed population, and that this individual has two or more blood pressure readings of SHTN, and that they are within the age range. Next, a hospital should look at this individual's diagnosis code to see if it is included or excluded from the denominator. This individual's diagnosis code, as listed in the CODE_VAL variable location, was included in the code set for valid diagnoses (Table M07_01 in the VSC). Thus, this individual meets the requirements for denominator inclusion.

## Sample Individual #3: Numerator (Slide 27)

Knowing this individual meets the denominator requirements for inclusion, a hospital should look at the Standard Reporting Template to see if they qualify for numerator performance requirements. First, a hospital should check that the number of the drug administered lines up with a number one the list of NDC numbers in Table M07_00 of the VSC. Under CODE_VAL, the NDC # is 433860440 and the number under ED_OTHX, in the final column to the right, is 1 which, per the reporting template, means this NDC# is one of the recommended first-line therapies that could be found in that table M07_00. Next, a hospital should look at the time at which the treatment was given, as M7 requires treatment to be given within an hour of the second blood pressure reading. This drug was administered at 11:00 AM which means it was administered within the required timeframe. Thus, this individual does meet performance requirements for numerator inclusion.

## How to Calculate Performance (Slide 28)

The Department hopes the previous sample individual profiles helped increase understanding of the data elements necessary to determine whether an individual meets the measure criteria. DOH will now demonstrate how to calculate the hospital's overall performance based a cohort of 30 individuals who fall into the eligible population and numerator compliant population. These individuals are separate from the individual profiles presented on previous slides.

## Calculating Performance: Subgroups (Slide 29)

Here is a sample population of individuals divided into subgroups. There are 30 individuals in the starting population who were attributed to the hospital for the maternal health measures. There are 5 individuals with known exclusions. There are 15 individuals with new-onset SHTN who received a first-line agent as treatment within an hour of their second blood pressure reading, 5 who did not have a document first-line agent, and another 5 who did not receive treatment within an hour of their second blood pressure reading.

## Calculating Performance: Denominator (Slide 30)

The eligible population for M7 is the denominator. To find the value of the denominator, a hospital should subtract the exclusions from the starting attributed population. So, in the sample population, 30 individuals minus 5 individuals with exclusionary codes is 25 individuals in the eligible population.

## Calculating Performance: Numerator (Slide 31)

The measure compliant population for M7 becomes the numerator. To find the value of the numerator, a hospital should look at the number of individuals with new-onset SHTN who received a first-line drug treatment within an hour of their second blood pressure reading. This subgroup appears in a green cell. So, in the sample population, 15 individuals qualify for the numerator compliant population.

## Calculating Performance: Percentage (Slide 32)

After a hospital has identified the eligible population and the numerator compliant population, it can easily calculate the hospital's performance on M7 as a percentage. 15 individuals who are compliant divided by 25 individuals who are in the eligible population multiplied by 100 is equal to 60% compliant. This means that the individual hospital's performance on this measure is 60%. Remember that the benchmark for this measure is 80%, which means that this hospital has not met performance improvement requirement for this measure.

## Conclusion (Slide 33)

This concludes the Department's overview of QIP-NJ's Maternal Health Measure 7, Treatment of Severe Hypertension.

## More Information (Slide 34)

This final slide provides information and resources to aide QIP-NJ participating hospitals in the data submission process. If you have additional questions that were not covered in this presentation, please email the QIP-NJ team at QIP-NJ@pcgus.com. Thank you.