NATIONAL QUALITY FORUM

Measure Information - Composite

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

Brief Measure Information

NQF #: 0729
De.2. **Measure Title:** Optimal Diabetes Care
Co.1.1. **Measure Steward:** MN Community Measurement
De.3. **Brief Description of Measure:** The percentage of adult diabetes patients who have optimally managed modifiable risk factors (A1c, blood pressure, statin use, tobacco non-use and daily aspirin or anti-platelet use for patients with diagnosis of ischemic vascular disease) with the intent of preventing or reducing future complications associated with poorly managed diabetes.
Patients ages 18 - 75 with a diagnosis of diabetes, who meet all the numerator targets of this composite measure: A1c less than 8.0, Blood Pressure less than 140 systolic and less than 90 diastolic, Statin use unless contraindications or exceptions, Tobacco-free (non-user) and for patients with diagnosis of ischemic vascular disease daily aspirin or antiplatelet use unless contraindicated.
Please note that while the all-or-none composite measure is considered to be the gold standard, reflecting best patient outcomes, the individual components may be measured as well. This is particularly helpful in quality improvement efforts to better understand where opportunities exist in moving the patients toward achieving all of the desired outcomes. Please refer to the additional numerator logic provided for each component.
1d.3. **Developer Rationale:** Achieving the intermediate physiological outcome targets related to blood pressure and glycemic control in addition being tobacco free and use of daily aspirin and statins where appropriate are the diabetic patient's best mechanisms of avoiding or postponing long term complications associated with this chronic condition which affects millions of Americans.
Measuring providers separately on individual targets is not as patient centric as a measure that seeks to reduce multiple risk factors for each patient. Diabetic patients are more likely to reduce their overall risk and maximize health outcomes by achieving several intermediate physiological targets.

S.4. **Numerator Statement:** Patients ages 18 to 75 with diabetes who meet all of the following targets from the most recent visit during the measurement year:
A1c less than 8.0, Blood Pressure less than 140/90, Statin Use if no contraindications/ exceptions, Tobacco non-user and Daily aspirin or anti-platelets for patients with diagnosis of ischemic vascular disease use unless contraindicated.
S.7. **Denominator Statement:** Patients ages 18 to 75 with diabetes who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months.
S.10. **Denominator Exclusions:** Valid exclusions include patients who only had one visit to the clinic with diabetes codes during the last two years, patients who were pregnant, died or were in hospice or palliative care, or a permanent resident of a nursing home during the measurement year.

De.1. **Measure Type:** Composite
S.23. **Data Source:** Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records
S.26. **Level of Analysis:** Clinician : Group/Practice

IF Endorsement Maintenance – Original Endorsement Date: Mar 28, 2011 **Most Recent Endorsement Date:** Mar 28, 2011

1d.1. **Composite Measure Construction:** all-or-none measures (e.g., all essential care processes received, or outcomes experienced, by each patient)
Component Measures (if endorsed or submitted for endorsement):

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.***

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form
0729_MNCM_Optimal_Diabetes_Care_Template_MeasSubm_Evidence__All_Five_Components.docx

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- disparities in care across population groups.

1b.1. **Briefly explain the rationale for this measure** *(e.g., the benefits or improvements in quality envisioned by use of this measure)*

1b.2. **Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.** *(This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*
Please note: For 2013 dates of service, patients were still being cared for under the previous guidelines for cholesterol management that supported an LDL target of < 100. The most recent data that we have available is for 2013 dates of service; these rates do not reflect the newly designed cholesterol component that focuses on statin use which is to begin for dates of service in 2015.

For 2013 dates of service, 38.9% of the patients met all five component targets in the composite measure and considered optimally managed. This rate is a weighted average of the total population of patients for clinics submitting data (Total Population = 237,354, Submitted = 230,818). Patients with diabetes
There was a wide range of variability with the lowest scoring clinic at 5% and the highest scoring clinic at 78%

The trends for this measure by reporting year:

	Rate	Patients (Den)	Numerator	Eligible	% submit/elig
2006	9.5%	8,401	798	41,831	20.1%
2007 *	13.5%	58,911	8,297	85,225	69.1%
2008	17.1%	83,034	15,772	130,019	63.9%
2009	18.9%	112,819	23,470	178,748	63.1%
2010	25.1%	140,945	40,078	216,290	65.2%
2011	37.0%	158,770	61,930	209,479	75.8%
2012	38.2%	184,234	73,037	212,077	86.9%
2013	37.7%	208,809	80,190	223,036	93.6%
2014	38.9%	230,818	90,499	237,354	97.2%

* New direct data submission process. Increasing rates indicative of EMR implementation and submission of full population data, which is a MN Health Reform requirement for all clinics that had an EMR implemented for the full year prior to the measurement year.

Consumer facing website MN HealthScores Displays the top 10 best performers in addition to rates for all clinics in MN:

Rating%	Clinic	Location
67	Catalyst Medical Clinic	Watertown, MN
62	Entira Family Clinics – Banning Clinic	White Bear Lake, MN
61	Fairview Rosemount Clinic	Rosemount, MN
60	Park Nicollet Clinic - Prairie Center	Eden Prairie, MN
59	Entira Family Clinics - Bellaire Avenue	White Bear Lake, MN
58	Cromwell Medical Clinic-IHN	Cromwell, MN
58	Entira Family Clinics - Inver Grove Hts	Inver Grove Heights, MN
57	Park Nicollet Clinic - St. Louis Park	St. Louis Park, MN

57 Park Nicollet Clinic - Golden Valley Golden Valley, MN
56 River Falls Medical Clinic-Spring Valley Spring Valley, MN

Individual rates of the components are as follows:

A1c < 8.0	74%
LDL < 100	64%
Blood Pressure < 140/90	84%
Daily Aspirin Use	100%
Tobacco Non-user	84%

Optimal Diabetes Care Rates by Clinic
Number of Medical Groups: 118
Number of Reportable Clinics (n is greater than or equal to 30): 580
Rate Range Clinics: 5% to 67%

Ranking of Clinics:

Above	27.9% (162)
Average	37.6% (218)
Below	34.5% (200)

Distribution of Rates Among Clinics:

Range of Rate	# of Clinics	% of Clinics
0%-9.9%	4	0.7%
10%-19.9%	58	10.0%
20%-29.9%	127	21.9%
30%-39.9%	152	26.2%
40%-49.9%	162	27.9%
50%-59.9%	74	12.8%
60%-69.9%	3	0.5%

Weighted Mean: 38.9%
Mean: 36.0%
Median: 37.1%
Standard Deviation: 0.18
Min: 5.4%
Max: 66.7%

Clinic Rates by Decile:

Percentile	Rate
10th	19.4%
20th	24.9%
30th	28.8%
40th	33.4%
50th	37.1%
60th	40.6%
70th	43.6%
80th	46.7%
90th	51.2%

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity,

gender, age, insurance status, socioeconomic status, and/or disability. *(This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.*

Race/ Ethnicity	0 = No Not Optimal	1 = Yes Optimal	Grand Total	Rate
White	85530	60264	145794	41.3%
Black or African American	9443	3497	12940	27.0%
Asian	2921	2335	5256	44.4%
Hispanic or Latino	3273	1593	4866	32.7%
Chose not to disclose	1402	972	2374	40.9%
American Indian/Alaska Native	1720	554	2274	24.4%
Some Other Race	522	382	904	42.3%
Native Hawaiian/Pacific Isl	144	78	222	35.1%
Unknown	90	31	121	25.6%
Race not Reported	35273	20792	56067	37.1%
Grand Total	140318	90498	230818	39.2%

Gender	0 = No Not Optimal	1 = Yes Optimal	Grand Total	Rate
F	65924	40933	106857	38.3%
M	74394	49565	123959	40.0%
Grand Total	140318	90498	230818	39.2%

Age Band	0 = No Not Optimal	1 = Yes Optimal	Grand Total	Rate
18 to 25	2198	388	2586	15.0%
26 to 50	36052	13498	49550	27.2%
51 to 65	65495	41135	106630	38.6%
66 to 75	36573	35477	72050	49.2%
Grand Total	140318	90498	230818	39.2%

Type of Diabetes	0 = No Not Optimal	1 = Yes Optimal	Grand Total	Rate
Type I DM	12320	4869	17189	28.3%
Type 2 DM	127290	85373	212663	40.1%
Type Unknown DM	708	256	964	26.6%
Grand Total	140318	90498	230818	39.2%

Of note, our rates for this measure compare similarity with literature supporting increased risk of diabetes for African Americans, Asian Americans, and American Indians.

Age, family history and a previous history of gestational diabetes are indicators of increased risk for diabetes, along with being African American, Asian American, Hispanic/Latino or American Indian. Potentially modifiable risks for developing diabetes include: obesity, inactivity, high blood pressure and abnormal cholesterol levels. Studies show that people at high risk for type 2 diabetes can prevent or delay the onset of the disease by maintaining a healthy diet and regular exercise. Knowler WC. N Engl J Med 346(6):393-403, 2002.

The risk of diabetes increases with age. According to projections from the Minnesota State Demographic Center, the population aged 65 years and older will rise sharply in the coming decades: In 2000, one in every eight Minnesotans were 65 years of age or older; by 2030, that ratio will be one in five. Increases in the elderly population are likely to contribute significantly to the burden of diabetes in Minnesota in the future. African American, Asian or Pacific Islander, American Indian or Hispanic/Latino American populations are at greater risk for developing diabetes, and these populations are also growing. In 2000, roughly one in every eight (12 percent) of Minnesota's nearly five million people were Persons of Color or American Indians; by 2025, that proportion will be 17 percent, or nearly one in every five.

There continues to be a significant gap in rates for this measure between MN Health Care Programs- MHCP (25.3%) and Other Purchasers (40.2%). The 2013 Health Care Disparities report can be accessed at http://mncm.org/wp-content/uploads/2014/06/2013-Disparities-Report-FINAL-6.11.2014.pdf

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.

1c. High Priority (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare

Affects large numbers, Severity of illness, A leading cause of morbidity/mortality

1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare. List citations in 1c.4.

According to the MN Department of Health, diabetes is a high impact clinical condition in Minnesota. It is estimated that 7.3% of Minnesotans (~ 300,000) have diabetes and approximately 18,000 new cases are diagnosed each year. This estimate is even higher (~9%) including those with undiagnosed diabetes. It is estimated that 35% of adults in MN may have pre-diabetes.

According to the Centers for Disease Control, 29.1 million Americans have diabetes. It is estimated that 1 in 4 do not know they have diabetes and that an additional 86 million people have pre-diabetes. 15 to 30% of people with pre-diabetes will develop type 2 diabetes within 5 years. It is estimated that the annual medical costs and lost work and wages for people diagnosed with diabetes is 245 billion dollars and the risk of death for adults with diabetes is as much as 50% higher than those adults without diabetes

A multifactorial approach to diabetes care that includes emphasis on blood pressure, lipids, glucose, aspirin use and non-use of tobacco will maximize health outcomes far more than a strategy that is limited to just one or two of these clinical domains (American Diabetes Association, 2014; Duckworth, 2009; Gaede, 2008; Holman, 2008a).

1c.4. Citations for data demonstrating high priority provided in 1a.3

MDH Diabetes in Minnesota Fact Sheet 2013 http://www.health.state.mn.us/diabetes/pdf/DiabetesinMinnesota-2013-final-0317.pdf
CDC US Diabetes Infographic http://www.health.state.mn.us/diabetes/pdf/CDC-2014-diabetes-infographic.pdf
ICSI Guidelines 2014- Diabetes Mellitus in Adults, Type 2; Diagnosis and Management of.
https://www.icsi.org/guidelines__more/catalog_guidelines_and_more/catalog_guidelines/catalog_endocrine_guidelines/diabetes/

1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. *(Describe how and from whom their input was obtained.)*

1d. Composite Quality Construct and Rationale

1d.1. A composite performance measure is a combination of two or more component measures, each of which individually reflects quality of care, into a single performance measure with a single score.

For purposes of NQF measure submission, evaluation, and endorsement, the following will be considered composites:

- Measures with two or more individual performance measure scores combined into one score for an accountable entity.
- Measures with two or more individual component measures assessed separately for each patient and then aggregated into one score for an accountable entity:
  - all-or-none measures (e.g., all essential care processes received, or outcomes experienced, by each patient); or
  - any-or-none measures (e.g., any or none of a list of adverse outcomes experienced, or inappropriate or unnecessary care processes received, by each patient).

1d.1. Please identify the composite measure construction: all-or-none measures (e.g., all essential care processes received, or outcomes experienced, by each patient)

1d.2. **Describe the quality construct, including:**

- the overall area of quality
- included component measures and
- the relationship of the component measures to the overall composite and to each other.

This composite measure is a patient level all-or-none composite in which the desired goal is for the patient is to achieve multiple intermediate physiological clinical outcome and medication use targets to best reduce their overall risk of developing long term complications (acute MI, cardiovascular and peripheral vascular disease, kidney damage and failure, loss of vision, amputation, etc.) Reducing modifiable risks was the reason why this measure was developed. The components of this measure include blood sugar and blood pressure control, being tobacco-free, appropriate use of statins and daily aspirin or anti-platelet use if ischemic vascular disease.

1. HbA1c less than 8.0
2. Blood pressure less than 140 systolic and less than 90 diastolic
3. Statin use if no contraindications/ exceptions
4. Tobacco-free
5. Daily aspirin or anti-platelets if has ischemic vascular disease and no contraindications/ exceptions

Numerator is calculated at the patient level and numerator compliance is defined as the patient achieving all five components of the measure. The components are treated equally.

1d.3. **Describe the rationale for constructing a composite measure, including how the composite provides a distinctive or additive value over the component measures individually.**

Achieving the intermediate physiological outcome targets related to blood pressure and glycemic control in addition being tobacco free and use of daily aspirin and statins where appropriate are the diabetic patient's best mechanisms of avoiding or postponing long term complications associated with this chronic condition which affects millions of Americans. Measuring providers separately on individual targets is not as patient centric as a measure that seeks to reduce multiple risk factors for each patient. Diabetic patients are more likely to reduce their overall risk and maximize health outcomes by achieving several intermediate physiological targets.

1d.4. **Describe how the aggregation and weighting of the component measures are consistent with the stated quality construct and rationale.**

Numerator is calculated at the patient level and numerator compliance is defined as the patient achieving all five components of the measure. The components are treated equally; there is no weighting. Some of the components have an exception methodology within allowing a "free-pass" on the component if it does not apply to the patient.

Most recent HbA1c in the measurement period is less than 8.0 (applies to all denominator patients)
AND
Most recent blood pressure in the measurement period is less than 140 systolic AND less than 90 diastolic (applies to all denominator patients)
AND
Statin Use if appropriate and no contraindications/ exceptions
Diabetic age 18-20 "free-pass"
Diabetic Age 21 to 75 and ischemic vascular disease? on statin unless LDL < 40 or contraindications/ exceptions
Diabetic Age 21 to 39 and LDL greater than or equal to 190? on statin or contraindications/ exceptions. If in this age group and LDL less than 190 is a "free-pass"
Diabetic Age 40 to 75 ? on statin unless LDL < 70 or contraindications/exceptions.
AND
Patient's tobacco status (documented within the last 2 years) is tobacco free (applies to all denominator patients)
AND
Daily aspirin or anti-platelet use if patient has ischemic vascular disease. If the patient does not have ischemic vascular disease, this component is a "free-pass"

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when

implemented. ***Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.***

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. **Subject/Topic Area** *(check all the areas that apply):*
Endocrine, Endocrine : Diabetes

De.6. **Cross Cutting Areas** *(check all the areas that apply):*
Patient and Family Engagement

S.1. **Measure-specific Web Page** *(Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)*
http://mncm.org/wp-content/uploads/2014/01/Optimal_Diabetes_Care_2014-Final-12.19.2013.pdf Please note that the cholesterol component re-design is effective 1/1/2015 DOS and not included in the current guide; however details are in data dictionary.

S.2a. **If this is an eMeasure**, HQMF specifications must be attached. Attach the output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)
Attachment:

S.2b. **Data Dictionary, Code Table, or Value Sets** *(and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)*
Attachment **Attachment:** MNCM_Diabetes_Measure_Data_Dictionary_and_Risk_Adj__11-11-2014-635513985759706332.xlsx

S.3. **For endorsement maintenance**, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.
The cholesterol component of this measure was re-designed in 2014 as a result of significant changes to guidelines for cholesterol management released November 2013 by the American College of Cardiology and the American Heart Association. Previously the cholesterol component was an intermediate outcome defined as target LDL < 100, which is no longer supported by evidence and guidelines. The redesigned cholesterol component was completed by the measure development work group in October of 2014 and focuses on appropriate statin use. This change in the measure will be effective for the 2016 reporting year for 2015 dates of service (1/1/2015 to 12/31/2015).

S.4. **Numerator Statement** *(Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)*
IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.
Patients ages 18 to 75 with diabetes who meet all of the following targets from the most recent visit during the measurement year: A1c less than 8.0, Blood Pressure less than 140/90, Statin Use if no contraindications/ exceptions, Tobacco non-user and Daily aspirin or anti-platelets for patients with diagnosis of ischemic vascular disease use unless contraindicated.

S.5. **Time Period for Data** *(What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)*
Values are collected as the most recent during the measurement year (calendar year January 1st through December 31st).

S.6. **Numerator Details** *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*
IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.
Please note that while the all-or-none composite measure is considered to be the gold standard, reflecting best patient outcomes, the individual components may be measured as well. This is particularly helpful in quality improvement efforts to better understand

where opportunities exist in moving the patients toward achieving all of the desired outcomes. Please refer to the additional numerator logic provided for each component.
Please note that all of the denominator criteria apply to the numerator as well, but are not repeated in the numerator codes/ descriptions.

HbA1c Date [Date (mm/dd/yyyy)] AND
HbA1c Value [Numeric]
Numerator component calculation: numerator component compliant is HbA1c during the last 12 months (measurement year) AND HbA1c value is less than 8.0.
Enter the date of the most recent HbA1c test prior to and including 12/31/YYYY (measurement year).
Leave BLANK if an HbA1c was never performed.
• Do NOT enter test date that occurred in 201x. Dates in 201x will create ERRORs upon submission.
• Test from an outside referring provider or specialist is acceptable (not required) but only if documented in the primary clinic's record and is more recent than the primary clinic's test.
Point-of-care HbA1c labs: If the HbA1c is "too high to calculate," enter the HbA1c date field and leave the HbA1c value field blank.

Blood Pressure Date [Date (mm/dd/yyyy)] AND
BP Systolic [Numeric] AND
BP Diastolic [Numeric]
Numerator component calculation: numerator component compliant is BP during the measurement year AND Systolic < 140 AND Diastolic < 90.
Enter the date of the most recent Blood Pressure (BP) test prior to and including 12/31/YYYY (measurement year).
Leave BLANK if a BP was never performed.
• For multiple BPs on the same date, it is acceptable (not required) to use the lowest systolic value and lowest diastolic value from any of the readings on that date. The systolic and diastolic results do not need to be from the same reading.
• Do NOT enter BP date that occurred in 201x. Dates in 201x will create ERRORs upon submission.
• BP from any outside referring provider or specialist is acceptable (not required) but only if documented in the primary clinic's record and is more recent than the primary clinic's reading.
• Nurse-only BP checks in the clinic may be used.
• Do NOT enter BP reported by or taken by the patient.
• For medical groups in an integrated delivery system with a common medical record, do NOT submit BP taken in the following settings: Inpatient, Emergency Department, Urgent Care or other settings designated for surgical or diagnostic procedures.
• If you are able to determine that the most recent BP was for a visit associated with acute pain, you may elect to exclude this BP reading and select the next most recent BP.
• Patient-reported pain and elevated BP: If your clinic uses a patient-reported pain assessment tool and you are able to identify visits in which the patient reports an elevated pain score, you may elect to exclude this BP reading and select the next most recent BP. For a patient-reported pain score, the level of pain must be moderate to severe/intolerable (i.e., 4 or higher on a 0 to 10 pain scale).

LDL Date [Date (mm/dd/yyyy)] AND
LDL Value [Numeric]
Numerator component calculation: Is used for the cholesterol component for statin use; patients with low untreated LDL values may not be appropriate for the initiation of statin medication.
Enter the date of the most recent LDL test on or prior to 12/31/201x.
Leave BLANK if an LDL was never performed.
• Test from an outside referring provider or specialist is acceptable (not required) but only if documented in the primary clinic's record and is more recent than the primary clinic's test.
• Elevated Triglyceride: If LDL is "too high to calculate," enter the LDL date field and leave the LDL value field blank.
• LDL values within the last five years will be used to calculate potential exceptions to being on a statin medication. The data portal will determine if an appropriate exception exists based on the following evidence based guidelines:
o Patients with diabetes and ischemic vascular disease ages 21 to 75 should be on a statin unless LDL is less than 40
o Patients with diabetes and LDL greater than or equal to 190 ages 21 to 39 should be on a statin; LDL less than 190 = numerator pass
o Patients with diabetes ages 40 to 75 should be on a statin unless LDL < 70

Statin Medication [Numeric] AND
Statin Medication Date [Date (mm/dd/yyyy)] AND/OR
Station Medication Exception [Numeric] AND
Station Medication Exception Date [Date (mm/dd/yyyy)]
Numerator component calculation: numerator component compliant if on a statin (prescribed/ ordered) or low LDL value (see above) or documented contraindication/exception is present.

Statin Medication:
Enter the value indicating if the patient is prescribed a statin medication or a statin medication is active on the patient's medication list any time during the measurement year.
Please refer to Appendix X-1 for a list of statin medications.
o 1 = Yes, patient was prescribed a statin medication
o 2 = No, patient was not prescribed a statin medication
• Prescribed is defined as any of the following: statin prescription indicated in medical record, statin medication is ordered or statin medication is active on the medication list any time during the measurement year.
• It is not necessary to be on the statin medication the entire duration of the measurement period, any portion of the period is acceptable.
• For patients not on a statin, the data portal will determine if an appropriate exception exists based on the most recent LDL within the last five years. The following age parameters and LDL values are applicable:
o Patients with diabetes and ischemic vascular disease ages 21 to 75 should be on a statin unless LDL less than 40
o Patients with diabetes and LDL greater than or equal to 190 ages 21 to 39 should be on a statin; LDL less than 190 = numerator pass
o Patients with diabetes ages 40 to 75 should be on a statin unless LDL less than 70
Statin Medication Date:
Enter the most recent date of a statin prescription, order or review of active medications list during the measurement period.
If no statin prescribed, ordered, or reviewed as an active medication during the measurement period, leave blank

Statin Medication Exception:
If the patient was not prescribed a statin medication during the measurement year (Field Statin Medication = 2); please indicate if any of the following contraindications or exceptions apply by entering one of the values below. Values 1 through 5 have associated diagnosis codes that may be used to identify the condition; either by patient's problem list, encounter diagnoses codes or other EMR generated fields indicating the condition exists. Code lists for guidance are located in Appendix X-2.
Values 6 through 10 do not have any associated diagnosis codes; EMR fields or progress notes may be used as a source for these exceptions.
1 = pregnancy during the measurement period
2 = active liver disease (liver failure, cirrhosis, hepatitis)
3 = rhabdomyolysis
4 = end stage renal disease on dialysis
5 = heart failure
6 = other provider documented reason: breastfeeding during the measurement period
7 = other provider documented reason: woman of childbearing age not actively taking birth control
8 = other provider documented reason: allergy to statin
9 = other provider documented reason: drug interaction (valid drug-drug interactions include HIV protease inhibitors, nefazone, cyclosporine, gemfibrozil, and danazol)
10 = other provider documented reason: intolerance (with supporting documentation of trying a statin at least once within the last 5 years). Additionally, ICD-9 codes for myositis or toxic myopathy related to drugs may (not required) be used to document intolerance to statins.

If one of the above categories is not documented in the record; leave BLANK

If the reason the patient is not on a statin is due to low LDL (see parameters in field Statin Medication); it is acceptable to leave this field blank. The data portal will use the actual LDL submitted to calculate the exception.

Note: For those groups with EMR systems that historically have stored allergy and intolerance in the same discrete field, it is acceptable to default to value = 10 other provider documented reason: intolerance

On validation audit, MNCM will confirm either the intolerance (more common) or allergy (rare), but will not be considered an error if an allergy is coded as value 10. Groups are encouraged to consider future separation of allergies and intolerance into separate discrete fields as these have different implications for clinical practice.

Statin Medication Exception Date:
If the patient has a documented statin medication exception (values 1 through 10 in Statin Medication Exception field) enter the date of the statin medication exception.
If only the month and year is known (e.g., Liver failure- June 2012), enter a valid date to indicate the time, (e.g., 6/01/2012). Look back at least three years (dates of service in 2015, 2014 or 2013) for contraindication date. Looking back four years or more is optional.
Leave BLANK if on a statin or if there is no known exception, this field is only needed for patients not taking a statin medication with a documented reason for exception to statin medication.

Tobacco Status Documentation Date [Date (mm/dd/yyyy)] AND
Tobacco Status [Numeric]
Numerator component calculation: numerator component compliant if tobacco status within the last two years and status is tobacco-free.

Tobacco Status Documentation Date:
Within current measurement period or prior measurement period (01/01/201x to 12/31/201x)
Enter the most recent date the patient's tobacco status was documented. This date can be in 201x or prior as long as it is the most recent documented status. The MNCM auditor must be able to validate the date and status, and validate that the date and status are the most recent.
• Leave BLANK and enter 2 (No Documentation) for the Tobacco Status if the patient was not asked or there is no associated date with the patient's tobacco status.
• Do NOT enter any 201x tobacco status date. Dates in 201x will create ERRORs upon submission.

Tobacco Status:
Enter the tobacco status. Tobacco includes any amount of cigarettes, cigars, pipes, or "chew." Do NOT count e-cigarettes as tobacco products.
1 = Tobacco Free (patient does not use tobacco)
2 = No Documentation
3 = Current Tobacco User
Blank values will create ERRORs upon submission.

Aspirin or Anti-platelet Medication [Numeric] AND
Aspirin or Anti-platelet Date [Date (mm/dd/yyyy)] AND/OR
Aspirin or Anti-platelet Exception [Numeric] AND
Aspirin or Anti-platelet Exception Date [Date (mm/dd/yyyy)]
Numerator component calculation: Calculation applied only if patient has ischemic vascular disease (IVD); if no IVD indicated, is a numerator component "free-pass". For patients with IVD, numerator component compliant if indicated on daily aspirin or anti-platelet medication (prescribed/ ordered) or documented contraindication/exception is present.

Aspirin or Anti-platelet Medication:
Enter the value indicating if the patient is prescribed a daily aspirin product or antiplatelet medication or an aspirin product or anti-platelet medication is active on the patient's medication list any time during the measurement year.
Please refer to Appendix X-3 for methods to identify appropriate aspirin products or antiplatelet medications.
1 = Yes, patient was prescribed a daily aspirin product or antiplatelet medication
2 = No, patient was not prescribed a daily aspirin product or antiplatelet medication
As aspirin products are most frequently obtained over-the-counter, so "prescribed" for aspirin products is defined as any of the following: daily aspirin product is indicated in medical record, aspirin product is ordered or active on the medication list any time during the measurement year.
For antiplatelet medications, prescribed is defined as any of the following: antiplatelet prescription indicated in medical record, antiplatelet is ordered or antiplatelet is active on the medication list any time during the measurement year.
It is not necessary to be on the aspirin product or anti-platelet medication the entire duration of the measurement period, any

portion of the period is acceptable
A discrete field in the EMR indicating patient is taking daily aspirin is acceptable.
Do NOT count ASA/narcotic combo medication for the "daily aspirin use" component of the measure.
Do NOT assume that a pre-op standing order like, "Do not take ASA seven days prior to the procedure," means that a patient is taking ASA every day; there must be other documentation in the record that the patient is taking daily ASA.
If the ASA has been discontinued prior to a surgical procedure, do NOT count this as a contraindication; rather document this patient as taking ASA during the measurement period.

Aspirin or Anti-platelet Date:
Enter the most recent date of documented (prescribed/ordered/indicated) aspirin product or anti-platelet medication (prescribed/ordered) during the measurement period.
If no aspirin prescribed or ordered during the measurement period, leave blank
Do NOT enter a 201x date. Dates in 201x will create ERRORs upon submission.

Aspirin or Anti-platelet Medication Exception:
If the patient was not (prescribed/ordered/ indicated) aspirin product or anti-platelet medication (prescribed/ ordered) during the measurement period (Field AH Aspirin or Anti-platelet Medication = 2); please indicate if any of the following contraindications or exceptions apply by entering one of the values below. Values 2 and 3 have associated diagnosis codes that may be used to identify the condition; either by patient's problem list or encounter diagnoses codes. Please refer to Appendix X-4 for diagnosis codes that may be used to identify gastrointestinal or intracranial bleed; however the history of these events may be contained in places other than historical encounter diagnosis codes.
1 = prescribed/ ordered anti-coagulant medication
2 = history of gastrointestinal bleed
3 = history of intracranial bleed
4 = other provider documented reason: allergy to aspirin or anti-platelets
5 = other provider documented reason: use of non-steroidal anti-inflammatory agents
6 = other provider documented reason: documented risk for drug interaction
7 = other provider documented reason: uncontrolled hypertension (>180 systolic, >110 diastolic)
8 = other provider documented reason: gastroesophogeal reflux disease (GERD)

If one of the above categories is not documented in the record; leave BLANK
Note: Some patients taking lower dose anti-coagulant medication are able to take and tolerate aspirin products or anti-platelet medication. If this is true, enter information for the aspirin/ anti-platelet medication use and do not enter an exception.

Aspirin or Anti-platelet Medication Exception Date:
If the patient has a documented aspirin product or anti-platelet medication exception enter the date of the aspirin product or anti-platelet medication exception.
If only the month and year is known (e.g., GI Bleed- June 2012), enter a valid date to indicate the time, (e.g., 6/01/2009). Look back at least three years (dates of service in 2015, 2014 or 2013) for contraindication date. Looking back four years or more is optional.

Leave BLANK if patient is prescribed/ ordered an aspirin product or anti-platelet medication or if there is no known exception, this field is only needed for patients not taking an aspirin product or anti-platelet medication with a documented reason for exception to aspirin products or anti-platelet medication.
If the patient is on an anticoagulant, enter the most recent prescription/ order date.

S.7. **Denominator Statement** *(Brief, narrative description of the target population being measured)*
Patients ages 18 to 75 with diabetes who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months.

S.8. **Target Population Category** *(Check all the populations for which the measure is specified and tested if any):*
Populations at Risk

S.9. **Denominator Details** *(All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses , code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*

Please also refer to all code lists included in the data dictionary attached in S.2b.
• Patient was age 18 to 75 years at the start of the measurement period (date of birth was on or between 01/01/19xx to 01/01/19xx).
• Patient was seen by an eligible provider in an eligible specialty face-to-face visit at least two times during the last two measurement periods (01/01/201x to 12/31/201x) with visits coded with a diabetes mellitus ICD-9 diagnosis code (in any position, not only primary). Use this date of service range when querying the practice management or EMR system to allow a count of the visits.
• Patient was seen by an eligible provider in an eligible specialty face-to-face visit at least one time during the measurement period (01/01/201x to 12/31/201x) for any reason. This may or may not include a face-to-face diabetes visit with a diabetes mellitus ICD-9 code.
• Diagnosis of Diabetes mellitus; ICD-9 diagnosis codes include: 250.00 to 250.93. See ICD-9 codes provided in data dictionary.
Eligible specialties: Family Medicine, General Practice, Internal Medicine, Geriatric Medicine, Endocrinology
Eligible providers: Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurses (APRN)

S.10. **Denominator Exclusions** *(Brief narrative description of exclusions from the target population)*
Valid exclusions include patients who only had one visit to the clinic with diabetes codes during the last two years, patients who were pregnant, died or were in hospice or palliative care, or a permanent resident of a nursing home during the measurement year.

S.11. **Denominator Exclusion Details** *(All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*
• Patient was a permanent nursing home resident during the measurement period
• Patient was in hospice at any time during the measurement period
• Patient died prior to the end of the measurement period
• Patient was pregnant during measurement period (Diabetes mellitus complicating pregnancy, ICD-9 codes: 648.0-648.04)
• Documentation that diagnosis was coded in error

S.12. **Stratification Details/Variables** *(All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)*
The diabetes population is not currently stratified when publicly reported on our consumer website, MN HealthScores. The data is, however, stratified by public (MN Health Care Programs- Prepaid Medical Assistance including dual eligibles, MinnesotaCare, and General Assistance Medical Care) and private purchasers for our 2013 Health Care Disparities Report, a hard copy report available on our corporate website at http://mncm.org/wp-content/uploads/2014/06/2013-Disparities-Report-FINAL-6.11.2014.pdf. This report notes a gap in outcomes of fifteen percentage points between diabetic patients in public programs and other purchasers.

S.13. **Risk Adjustment Type** (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)
Statistical risk model
If other:

S.14. **Identify the statistical risk model method and variables** *(Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)*
Background and Evolution of Risk Adjustment:
MN Community Measurement has been publicly reporting unadjusted ambulatory outcome rates at the clinic site level for several years dating back to 2004. Currently, the lowest level of reporting is at the clinic site and we do not publicly report any practitioner level information. As our state begins moving towards utilizing cost and quality measures to demonstrate value and utilizing these measures for incentive based payment and tiering by health plans, we began to explore risk adjustment of measures used for these purposes.

Historically, the risk adjustment method used has been a case mix adjustment methodology (See data dictionary Tab = Risk Adjustment 1) based on health plan product (Commercial, Medicare and MN Healthcare Programs plus Self-pay/Uninsured) as a proxy for socioeconomic status and age bands (18-25, 26-50, 51-65 and 66 to 75). The overall average state-wide distribution of patients across both risk adjustment variables is calculated and then each clinic site's patient distribution is adjusted to match the average mix. Rates are re-weighted based on the new distribution of patients and then rates are re-calculated.

In 2012/13 the MNCM Measurement and Reporting Committee (MARC) formed a task force to investigate the value and feasibility of risk adjusting the MNCM Clinic Quality measures on MNHealthScores (public reporting). The Risk Adjustment Task Force offered recommendations that the measures should be adjusted as long as the adjustments meet the following guiding criteria:

1. Predicts Outcome
2. Significant Variation between providers
3. Beyond control of provider
4. Free of unintended consequences
5. Feasible Collection
6. Retain actual (Unadjusted) measure value
7. Use an Actual to Expected methodology
8. Segment by Insurance Product when feasible
9. Not all measures should be adjusted, case by case examination
10. Must be affordable and understandable

In 2014, a Risk Adjustment Sub-Committee of the MARC was formed to implement risk adjustment with the current measures and to create a framework for selection and study of future variables. In November of 2014, recommendations utilizing an actual to expected methodology for risk adjusting the first set of five measures (including Optimal Diabetes Care) were approved by MARC.

Actual to Expected Methodology:

Risk Adjustment does NOT change the result, but instead changes the comparison. It attempts to answer the question, "what would the market average be if the market had the same risk mix as the clinic?" Subsequently, a unique expected rate was created for each clinic based on the clinic's actual distribution of risk and the overall market rate for each category. (See data dictionary Tab = Risk Adjustment 2)

Example	Rate (actual)	Expected	Actual to Expected Rating
Clinic A	58%	45%	Above
Clinic B	45%	46%	Expected
Clinic C	41%	42%	Expected
Clinic D	35%	38%	Below
Clinic E	33%	30%	Above

S.15. **Detailed risk model specifications** *(must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)*

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

Available in attached Excel or csv file at S.2b

S.15a. **Detailed risk model specifications** (*if not provided in excel or csv file at S.2b*)

S.16. **Type of score:**

Rate/proportion

If other:

S.17. **Interpretation of Score** *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*

Better quality = Higher score

S.18. **Calculation Algorithm/Measure Logic** *(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)*

This measure is calculated by submitting a file of individual patient values (e.g. blood pressure, A1c value, etc) to a HIPAA secure data portal. Programming within the data portal determines if each patient is a numerator case and then a rate is calculated for each clinic site. Please also refer to the measure calculation algorithms submitted within the data dictionary for this measure.

If any component of the numerator is noncompliant for any one of the five components, then the patient is numerator noncompliant for the composite patient level all-or none optimal diabetes care measure.

Numerator logic is as follows:
A1c Component:
Is the HbA1c date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.
Is the HbA1c value less than 8.0? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.
Note: A1c needs to occur during the measurement year AND most recent value less than 8.0
Assess next component.

Blood Pressure Component:
Is Blood Pressure date in the measurement year? If no, is numerator noncompliant for this component. If yes, assess next variable.
BP Systolic < 140? If no, is numerator noncompliant for this component. If yes, assess next variable.
BP Diastolic < 90? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component.
Note: BP needs to occur during the measurement year AND most recent BP systolic less than 140 AND BP diastolic less than 90
Assess next component.

Cholesterol Statin Use Component:
Is the patient on a statin medication? If yes, and most recent date is in the measurement year, is numerator compliant for this component. If no, assess next variable.
For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:
Is the patient age 18 to 20? If yes, numerator compliant (free-pass), if no, assess next variable.
Is the patient age 21 to 75? Do they have ischemic vascular disease (IVD)?
If Yes IVD, is their most recent LDL in the last five years less than 40? If Yes, numerator compliant (free-pass), if no, assess next variable.
Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.
If No IVD, is the patient age 21 to 39 and is their most recent LDL in the last 5 years greater than or equal to 190? If No, numerator compliant (free-pass).
If Yes LDL greater than or equal to 190, does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.
If No IVD, no LDL greater than or equal to 190 for patients ages 40 to 70, is their most recent LDL in the last five years less than 70? If Yes, numerator compliant (free-pass), if no, assess next variable.
Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.
Note: Patient is either on a statin (prescribed/ ordered) during the measurement year or has a valid exception either by age, presence or absence of ischemic vascular disease, low untreated LDL or valid contraindication/ exception.
Assess next component.

Tobacco-Free Component:
Is Tobacco Status = 1 (Tobacco Free) and Tobacco Assessment Date a valid date? If yes, is numerator compliant for this component. If no, is numerator noncompliant for this component. Assess next component.

Daily Aspirin/ Anti-platelet Component:
Does the patient have cardiovascular/ ischemic vascular disease?
Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/ anti-platelet is in the measurement year is numerator compliant, if no, assess next variable.
Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this

component. If no, fail this numerator component and remains in the denominator.
Note: Patients with ischemic vascular disease are either on daily aspirin (indicated/ prescribed/ ordered) or an anti-platelet prescribed/ ordered) during the measurement year or has a valid contraindication/ exception.

If all of the above numerator components are in compliance, then the patient calculated as a numerator case for the optimal diabetes care measure.

S.19. **Calculation Algorithm/Measure Logic Diagram URL or Attachment** *(You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*
Available in attached appendix at A.1

S.20. **Sampling** *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*
IF a PRO-PM, identify whether (and how) proxy responses are allowed.
Medical groups are encouraged to submit their full population of patients when possible (EMR) however clinics who are on a paper chart system are allowed to create a random sample of no less than 60 patients per clinic site. MNCM recommends that medical groups submit total population for each measure. By submitting total population, the confidence interval around the rate narrows, indicating a higher confidence that the rate accurately reflects the clinics' performance. If total population is not an option for a medical group, MNCM encourages medical groups to submit a large sample. The minimum required sample is 60 patients per clinic site, per measure. If a clinic site has less than 60 patients in the total population for the measure, the entire population must be submitted.

For 2013 dates of service 91% submitted total population, 7% submitted a sample, and 2% submitted a mix of total and sample.

Excel's Random Number Generator Instructions:
For lists generated in Excel, use the "RAND" function to assign a random number to each record (please also see Microsoft Excel Help, topic RAND for more information):

1. Insert a blank column on the leftmost side of the spreadsheet
2. Label new column "RAND"
3. Place cursor in the first blank cell (A2) and type =RAND()
4. Press enter (a number like 0.793958 will appear)
5. Place the cursor back into this cell; resting over the corner to have the pointer change to a black cross, double click or drag the formula down to the last row/patient
6. Highlight the whole column and click Edit, Copy, Paste Special = Values to freeze the random number (otherwise it will change with every click on the spreadsheet)
7. Sort entire patient population by this new random number
8. Work down the list row by row, starting with row 1 until the number of records in the sample is met for submission (at least 60 patients per clinic, per measure)
9. If a patient meets one of the accepted exclusions, keep working down the list and use oversamples that are after the number of records in the sample. For example, if 60 records will be submitted and 2 exclusions were found, include patient rows 61 and 62 to replace the excluded records.

S.21. **Survey/Patient-reported data** *(If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)*
IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

S.22. **Missing data** (specify how missing data are handled, e.g., imputation, delete case.)
Required for Composites and PRO-PMs.
For this patient level all-or-none composite measure, elements missing from any component (e.g. visit but no blood pressure during the measurement year) are counted as a numerator component fail and therefore the patient would be accounted for and remain in the denominator.

The impact of missing data on measure calculations is minimal. For 2013 dates of service on over 230,800 diabetic patients submitted for rate calculation two variables were considered 1) with in the appropriate measurement timeframe and 2) valid values

submitted:

Variable	Within measure period	Invalid values
A1c	96.8%	0.003%
Blood Pressure	99.8%	0.02%
LDL	89.8%	0.9%

Tobacco Status documented – 99.8%
Aspirin or anti-platelets if IVD- 97.2% had documented aspirin or anti-platelet in the measurement year or the date of a valid contraindication.

In planning for the new redesigned cholesterol component:
95.4% of the patients had an LDL in the last five years; of these 220,124 patients the LDL distribution is:

Less than 40	2.2%
40 to 69	23.8%
70 to 99	45.6%
100 to 189	27.5%
190 or greater	0.9%

What is not known at this time is the percentage of patients that are on a statin. Will be collected as part of the measure re-design beginning with dates of service as of 1/1/2015.

S.23. Data Source *(Check ONLY the sources for which the measure is SPECIFIED AND TESTED).*
If other, please describe in S.24.
Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

S.24. Data Source or Collection Instrument *(Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)*
IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.
An excel template with formatted columns for data fields is provided. Many medical groups extract the information from their EMR. Registries can be used as a source of information to create the data file; however groups must ensure that all of their eligible patients are included. Paper abstraction forms are provided for those clinics who wish to use them as an interim step to creating their data file. All data is uploaded in electronic format (.csv file) to a HIPAA secure, encrypted and password protected data portal.

Please note that all fields are defined and included in the data dictionary [Tab = Data Field Dictionary] and also included in the data collection guide URL provided in S.1.

S.25. Data Source or Collection Instrument *(available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*
Available at measure-specific web page URL identified in S.1

S.26. Level of Analysis *(Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)*
Clinician : Group/Practice

S.27. Care Setting *(Check ONLY the settings for which the measure is SPECIFIED AND TESTED)*
Ambulatory Care : Clinician Office/Clinic
If other:

S.28. COMPOSITE Performance Measure - Additional Specifications *(Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)*
Calculation of the patient level all-or-none composite measure is indicated 1) in the measure algorithms provided in the data dictionary and the additional appendix A-1. Please note that while the all-or-none composite measure is considered to be the gold standard, reflecting best patient outcomes, the individual components may be measured as well. This is particularly helpful in quality improvement efforts to better understand where opportunities exist in moving the patients toward achieving all of the desired outcomes. Individual component logic is included below:

Denominator is the same for calculating individual component rates as the patient level all-or-none composite measure: Patients

ages 18 to 75 with diabetes who have at least two visits for this diagnosis in the last two years (established patient) with at least one visit in the last 12 months. Exclusions are: hospice or palliative care, death, pregnancy and documentation diagnosis coded in error.

Component for HbA1c Control:
Is the HbA1c date in the measurement year? If No, fails the numerator. If Yes, assess next variable.
Is the most recent HbA1c value less than 8.0? If Yes, is in the numerator for this component.
Expressed as a rate:
Patients with most recent A1c during the measurement year is less than 8.0/
Eligible patients with diabetes

Component for Blood Pressure Control:
Is the BP date in the measurement year? If No, fails the numerator. If Yes, assess next variable.
Is the most recent BP value less than 140 systolic AND less than 90 diastolic? If Yes, is in the numerator for this component.
Expressed as a rate:
Patients with most recent BP during the measurement year is less than 140 systolic AND 90 diastolic/
Eligible patients with diabetes

Component for Cholesterol/ Statin Use:
Is the patient on a statin medication? If yes, and most recent date is in the measurement year, is in the numerator for this component.
For patients not on a statin the following variables are used to assess numerator compliance related to contraindications or exceptions to statin use:
Is the patient age 18 to 20? If yes, in the numerator (free-pass), if no, assess next variable.
Is the patient age 21 to 75? Do they have ischemic vascular disease (IVD)?
If Yes IVD, is their most recent LDL in the last five years less than 40? If Yes, in the numerator(free-pass), if no, assess next variable.
Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is in the numerator. If no, fail this numerator component and remains in the denominator.
If No IVD, is the patient age 21 to 39 and is their most recent LDL in the last 5 years greater than or equal to 190? If No, is in the numerator (free-pass).
If Yes LDL greater than or equal to 190, does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is in the numerator. If no, fail this numerator component and remains in the denominator.
If No IVD, no LDL greater than or equal to 190 for patients ages 40 to 70, is their most recent LDL in the last five years less than 70? If Yes, is in the numerator (free-pass), if no, assess next variable.
Does the patient have a valid contraindication/ exception to statin use defined as one of the following: pregnancy, active liver disease, rhabdomyolysis, ends stage renal disease on dialysis, heart failure, breastfeeding, allergy to statin, drug-drug interaction with statin, or intolerance with documentation of trying a statin at least once in the last 5 years)? If yes, is in the numerator. If no, fail this numerator component and remains in the denominator.
Expressed as a rate:
Patients with statin use unless with contraindications/ exceptions/
Eligible patients with diabetes

Component for Tobacco-Free:
Is the date of smoking status in the measurement year or the year prior? If No, fails the numerator. If Yes, assess next variable.
Is the patient's tobacco status noted as tobacco-free ? If Yes, is in the numerator.
Expressed as a rate:
Patients with most recent tobacco status during the measurement year or the year prior is free of all tobacco products (tobacco free)/
Eligible patients with diabetes

Component for Daily Aspirin/ Anti-platelet Component:
Does the patient have cardiovascular/ ischemic vascular disease?

Is the patient on daily aspirin or an antiplatelet? If yes, and date of most recent aspirin/ anti-platelet is in the measurement year is numerator compliant, if no, assess next variable.
Does the patient have a valid contraindication/ exception to aspirin anti-platelet use defined as one of the following: anti-coagulant medication, history of gastrointestinal bleed, history of intracranial bleed, allergy, or physician documented reasons related to: risk of drug interaction, use of NSAIDS, uncontrolled HTN or gastro-intestinal reflux disease. If yes, is numerator compliant for this component. If no, fail this numerator component and remains in the denominator.
Expressed as a rate:
Patients with ischemic vascular disease with daily aspirin/ anti-platelet use unless with contraindications/ exceptions/
Eligible patients with diabetes

2a. Reliability – See attached Measure Testing Submission Form
2b. Validity – See attached Measure Testing Submission Form
0729_MNCM_Optimal_Diabetes_Care_Template_MeasSubm_CompositeMeasTesting_v2.docx

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. **Data Elements Generated as Byproduct of Care Processes.**
generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition,
Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)
If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. **To what extent are the specified data elements available electronically in defined fields?** *(i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)*
ALL data elements are in defined fields in electronic health records (EHRs)

3b.2. **If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.**

3b.3. **If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.**
Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. **Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.**
IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.
Over the last four years we have learned the following:

1. Data Submission- Providing data collection software for medical groups wishing to submit data was not always the best and most efficient way of collecting data. As electronic health records use becomes more pervasive in our state, providing templates of data file submissions proved to be more efficient.
2. Specifications- Detailed specifications with instructions on how to handle most situations (e.g. detailed instructions on blood pressure values) has been valuable to medical groups, increased data accuracy and resulted in 98% of groups submitting data successfully.
3. Audit- Audit methods have ensured the accuracy of our data and we are able to successfully compare providers because everyone is pulling their data the same way and subject to the same rules.
4. Confidentiality- Patient confidentiality has been addressed by numerous mechanisms. MNCM only receives the patient level information needed to calculate the rates, determine eligibility for inclusion in the measure and support the administration of pay for performance programs. The PHI submitted is minimal and the data is protected by 1) password protection with password only available to the medical group submitting data, 2) file upload process is encrypted as data is transferred and 3) Data is stored on a separate secure server and meets all HIPAA protection rules.
5. Electronic Medical Record- It is easier for groups that have an electronic medical record to submit data and to submit their full population of patients, however many groups with paper chart systems can successfully submit their sample.
6. Acceptance of Data- Vast improvement in terms of sample sizes and timeliness of the data submitted by medical groups six weeks after the end of the measurement year as compared to prior method of health plan's samples and the results over a year old. Providers are more accepting of the results as compared to previous methods of pooling health plan samples.
7. Data Collection Burden- We have learned that for additional future measures we will need to stagger the data collection time frames and submission deadlines as to not burden the medical groups in terms of abstraction/ extraction (e.g. can't always have a measurement period Jan 1st to Dec 31st reported the second week of February, may need to consider July 1st to June 30th with data submission in August)
8. Health Plans: pay for performance and the inclusion of measures within contracts significantly impacts the number of groups participating in each measure (Diabetes, Ischemic Vascular, and Depression)

3c.2. **Describe any fees, licensing, or other requirements to use any aspect of the measure as specified** *(e.g., value/code set, risk model, programming code, algorithm)*.
There are no fees associated with participation and submitting data for this measure. Results are available to 1) all data submitters within the HIPAA secure MNCM data portal and 2) to the public on our consumer facing website MN Health Scores at www.mnhealthscores.org and 3) annual health care quality report on our corporate website at www.mncm.org. There are costs to the medical groups in terms of extract programs or abstraction to submit patient level clinical information for rate calculation.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. **Current and Planned Use**

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Planned	Current Use (for current use provide URL)
	Public Reporting MN Community Measurement- MN HealthScores Website http://www.mnhealthscores.org MN Community Measurement- Health Care Quality Report http://mncm.org/reports-and-websites/reports-and-data/

	Payment Program MN Bridges to Excellence http://mnhealthactiongroup.org/wp-content/uploads/2013/08/2014MNBTERewardedClinics.pdf Regulatory and Accreditation Programs MN Department of Health- Statewide Quality Reporting and Measurement System http://www.health.state.mn.us/healthreform/measurement/index.html CMS Accountable Care Organizations GPRO WI http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality_Measures_Standards.html

4a.1. For each CURRENT use, checked above, provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

MN Community Measurement- MN HealthScores Website
Public Reporting consumer-facing website
All primary care and endocrinology clinics in Minnesota (mandatory) and bordering communities (voluntary)
118 Medical groups representing 580 clinic sites; 2013 dates of service 230,818 patients with diabetes

MN Community Measurement- Health Care Quality Report
Public Reporting: Hard-copy report (pdf) highlighting top performers, most improved
118 Medical groups representing 580 clinic sites; 2013 dates of service 230,818 patients with diabetes

MN Bridges to Excellence
Pay for Performance Program for top performers and those attaining improvement goals/ benchmarks. All clinics participating in MNCM's data portal who submit full population are eligible for inclusion in this program. Annual recognition event and rewards distributed.

MN Department of Health- Statewide Quality Reporting and Measurement System
Based on 2008 health reform state legislation; this program requires mandatory submission of data from Minnesota physician clinics that have provider specialties that are applicable to the measured population. For the Optimal Diabetes Measure: family medicine, general practice, internal medicine, geriatric medicine and endocrinology.

CMS Accountable Care Organizations GPRO WI
146 organizations listed on the website that displays component rates separately by group (search) at www.medicare.gov/physiciancompare/aco/search.html?AspxAutoDetectCookieSupport=1
Measure has been included in the ACO measure set for the last three years (2012- 2014), but current proposal/ rule is to remove the measure from this measure set. Please not that this decision is not aligned with the Measure Application Partnership's recommendation for continued inclusion in federal programs.

4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (*e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?*)

4a.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (*Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.*)

4b. Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b.1. **Progress on Improvement. (Not required for initial endorsement unless available.)**
Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- **Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)**
- **Geographic area and number and percentage of accountable entities and patients included**

Although the state-wide average, reflecting over 230,000 patients, may appear to be making only small incremental improvements year to year, please note the increasing number of numerator cases. For 2013 dates of service (reported in 2014), over 10,300 more diabetic patients achieved their optimal care targets than the previous year. The overall state-wide average tends to be off-set by the increasing denominator which is reflective of greater EMR penetration in MN allowing more groups (over 90%) to submit their full population of patients instead of a sample.

The trends for this measure by reporting year:

	Rate	Patients (Den)	Numerator	Eligible	% submit/elig
2006	9.5%	8,401	798	41,831	20.1%
2007 *	13.5%	58,911	8,297	85,225	69.1%
2008	17.1%	83,034	15,772	130,019	63.9%
2009	18.9%	112,819	23,470	178,748	63.1%
2010	25.1%	140,945	40,078	216,290	65.2%
2011	37.0%	158,770	61,930	209,479	75.8%
2012	38.2%	184,234	73,037	212,077	86.9%
2013	37.7%	208,809	80,190	223,036	93.6%
2014	38.9%	230,818	90,499	237,354	97.2%

Number of Medical Groups: 118
Number of Reportable Clinics (n is greater than or equal to 30): 580
Rate Range Clinics: 5% to 67%

Ranking of Clinics:

Above	27.9% (162)
Average	37.6% (218)
Below	34.5% (200)

4b.2. **If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.**

4c. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4c.1. **Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.**
No unintended negative consequences identified.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

Yes

5.1a. **List of related or competing measures (selected from NQF-endorsed measures)**

0061 : Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)
0064 : Comprehensive Diabetes Care: LDL-C Control <100 mg/dL
0545 : Adherence to Statins for Individuals with Diabetes Mellitus
0575 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)

5.1b. **If related or competing measures are not NQF endorsed please indicate measure title and steward.**

5a. Harmonization

The measure specifications are harmonized with related measures;
OR
The differences in specifications are justified

5a.1. **If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):**
Are the measure specifications completely harmonized?

No

5a.2. **If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.**

Denominator differences due to data source, different composite measure construct and philosophical beliefs of our measure development work group work group. Please see 5b.1.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);
OR
Multiple measures are justified.

5b.1. **If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):**
Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

Measures (3) listed below are part of a composite measure that is stewarded by NCQA.
0061: Comprehensive Diabetes Care: Blood Pressure Control (<140/90 mm Hg)
0064: Comprehensive Diabetes Care: LDL-C Control <100 mg/dL
0575: Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)

NCQA's composite is a different measure construct; it is calculated at the physician panel level (what percentage of my patients have an A1c < 8.0, what percentage had BP < 140/90) but is not a patient level composite. MNCM believes that its patient level all-or-none composite is superior, patient-centric (not provider centric) and individual patients achieving as many health targets as possible only increases their likelihood of reducing long term microvascular and macrovascular complication of diabetes.

These three measure's numerators are harmonized, at least currently, knowing that MNCM's cholesterol component has been redesigned to reflect updated evidence and guidelines that no longer treat to LDL target, rather focus on appropriate statin use.

We have philosophical differences in the denominator definitions and this is due in part to the data source. NCQA uses claims data to identify diabetic patients, MNCM used EMR based data. NCQA's methodology looks for diabetes diagnosis codes but additionally will include patients on oral medications and insulin who do not have the diagnosis. Patients with polycystic ovary syndrome are sometimes treated with metformin, so NCQA excludes women with polycystic ovary syndrome; but there has been or more recent addition to try to pull PCOS patients with the diagnosis of diabetes back into the denominator. This is good because it is estimated

that 40 to 50% of women with PCOS will develop diabetes. We also believe that is important to exclude diabetic women who are currently pregnant during the measurement year, related to cholesterol management. NCQA's denominator does not exclude these patients.

We have had discussions with NCQA about harmonization of denominator definitions and believe that definitions in ICD-10, based on the improvement in coding types of diabetes in ICD-10 will bring us closer to harmonized denominators.

This measure is related (but not exactly the same)
0545 : Adherence to Statins for Individuals with Diabetes Mellitus (CMS)
Uses the same denominator definition as the NCQA composite. From information available in QPS, it does not appear that there are exceptions to this measure related to liver disease, rhabdomyolysis, pregnancy, etc. This is different from our planned cholesterol component for statin use. We believe our cholesterol component is superior in that it takes into account patient safety.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.
Attachment **Attachment:** Measure_Flow_Logic_11-17-2014.pdf

Contact Information

Co.1 **Measure Steward (Intellectual Property Owner):** MN Community Measurement
Co.2 **Point of Contact:** Jasmine, Larson, jlarson@mncm.org, 612-746-4514-
Co.3 **Measure Developer if different from Measure Steward:** MN Community Measurement
Co.4 **Point of Contact:** Collette, Pitzen, pitzen@mncm.org, 612-454-4815-

Additional Information

Ad.1 **Workgroup/Expert Panel involved in measure development**
Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.
An expert panel was convened in December 2008 to determine the most appropriate A1c target for this composite. The group reviewed literature and incorporated current ICSI Diabetes Guideline discussions as this guideline was also undergoing revision. Members included:
Beth Averbeck, MD Assoc Medical Director, Health Partners, MNCM Board
Barry Bershow, MD Medical Director, Quality & Informatics, Fairview, Co-Chair MNCM Reporting Advisory Committee (RAC) and MNCM Board Member
Rich Bergenstal, MD Executive Director, International Diabetes Center, ICSI Diabetes Guideline Workgroup
John Fredrick, MD Exec Vice President & Chief Medical Officer PreferredOne, MARC Member
Gene Ollila, MD Allina Medical Clinic, ICSI Diabetes Guideline Workgroup

Expert panel was re-convened in March 2010 to address the aspirin component and again in July 2010 to address the blood pressure component of the composite measure. This technical advisory panel included:
Beth Averbeck, MD HeathPartners
Barry Bershow, MD, Fairview Health Services
Rich Bergenstal, MD International Diabetes Center, Park Nicollet
John Fredrick, MD Preferred One
Gene Ollila, MD Allina Medical Clinic
Linda Walling, MD, HealthEast
Mark Nyman, MD Mayo Clinic
JoAnn Sperl-Hillen, MD HealthPartners
Victor Montori, MD Mayo Clinic
Kari Retzer, ICSI Facilitator for Diabetes Guideline

Measure development work group was convened March 2014 thru October 2014 to redesign the cholesterol component for both the Optimal Diabetes Care (#0729) and Optimal Vascular Care (#0076) measures whose previous target of LDL < 100 was no longer appropriate or supported by updated evidence and guidelines (American College of Cardiology/ American Heart Association Treatment of Cholesterol Guidelines Nov 2013). Members included:

Beth Averbeck, MD	Chair Internal Med MNCM Board	HealthPartners
Mark Nyman, MD	Internal Med MARC member	Mayo Clinic
Victor Montori, MD	Endocrinology	Mayo Clinic
JoAnn Sperl-Hillen, MD	Internal Med	HealthPartners
Courtney Baechler, MD	Cardiologist	Allina Penny George Institute
J. Ward Godsall, MD	Endocrinology	Allina Medical Group
Christopher Restad, DO	Family Medicine	Health East
Rebecca Moxness, MD	Endocrinology	Park Nicollet
Thomas Knickelbine, MD	Cardiologist	Minneapolis Heart Inst.
Woubeshet Ayenew, MD	Cardiologist	Hennepin County Med Cen
Terry Murray, RN	Data Analyst	Allina Medical Group
Jeanine Rosner, RN	QI or Clinic Admin	Park Nicollet
Monica Simmer	Health Plan	Metropolitan Health Plan
Pam York	State Agency	MDH/ Chronic Disease
Kris Soegaard	Consumer/ Empl/ MARC Member	MN Health Action Group
Collette Pitzen	Facilitator/ Measure Dev	MNCM

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 **Year the measure was first released:** 2007

Ad.3 **Month and Year of most recent revision:** 10, 2014

Ad.4 **What is your frequency for review/update of this measure?** Annual, but can be more frequently as evidence emerges and guidelines change.

Ad.5 **When is the next scheduled review/update for this measure?** 06, 2015

Ad.6 **Copyright statement:**

Ad.7 **Disclaimers:**

Ad.8 **Additional Information/Comments:**