Cardiovascular Phase 2, Post-evaluation Comments
Comment ID #4679, 4680, 4681, 4682, 4684
From: Tara Center, LLC,
Dr. Kay E. Jewell, MD
Comment for: **Measure 0543-Adherence to Statin Therapy for Individuals with Cardiovascular Disease**

I fully recognize the importance of ASCVD and its management as already defined by CMS in their submission. ASCVD is the leading cause of death for men and women in the United States and accounts for approximately $312.6 billion in health care expenditures annually. Multiple studies have identified the gaps in care that exist with the new guidelines and will need to be addressed. (Maddox JACC 2014, pp.2183-2192; Maddox 2014 JACC pp539-546; Pecina NEJM 2014 pp.1422-1431; Schoen 2015 Am J Med) The challenge is to re-tool existing measures and create new ones that will achieve improved care to reduce mortality and events.

I have a number of comments about the measure and the expected positive outcome from the measure. However, there are a number of problems with the design of this process measure which would affect the expectation that it will achieve the desired impact on CV outcomes.

First, as it is defined, the measure recognizes a prescription of a statin at any dose. It does not match the dose of statin to the patient's level of risk. The AHA/ACC guidelines emphasize the research findings that the dose of the statin is relevant and critical to achieving maximal reduction in ASCVD events. (Stone 2013) As it is written, a patient can be given a low dose and the clinician could pass the measure if the patient took it regularly. A high score would be imply that the patients are getting better care, care more aligned with the standard of care but it would be misleading to those who use the performance measures to assess quality, select providers, and pay-for-performance. Those given an inadequate dose would not achieve the improvement in outcomes desired.

It cannot be assumed that the low dose will be adjusted up to the appropriate dose for the patient's level of ASCVD risk. Experience with the hospital performance measure for AMI would indicate it will not happen in the majority of the cases. (Arnold JACC 2013,1791-801) At the time the measure was in place, the recommendation was to titrate the dose to achieve a target LDL. At 12 months, only 26% of patients were on the goal dose of statins. They found that prescription of the goal dose at the time of discharge was strongly associated with the patient being on the goal dose 1 year later. They suggest that the sub-optimal dosing at hospital discharge and in-frequent up-titration would explain why the benefits reported in clinical trials has not been achieved in clinical practice, and why outcomes in association with the performance measures have been unsatisfactory. (Werner JAMA 2006 1307-16, Fonarow JAMA 2007, 61-70; Glickman JAMA 2007, 2373-80.)

2-Prescribing the optimal dose is a critical factor in achieving desired outcomes but even cardiologists, who have the highest level of expertise and treat patients most at risk, do not prescribe optimal doses as reported by Maddox. (Maddox JACC 2014, 539-46) NCQA has reported that only 40% of patients achieved the target LDL level under the previous 'treat to target' guidelines. (NCQA HEDIS 2016) A number of factors besides patient noncompliance have been identified as reasons for these low

numbers including clinical inertia on the part of physicians and delays in titrating doses and the quality of the doctor-patient relationship in patient trust and understanding of the treatment rationale. (Molfenter 2014 GenMed-LA PMID 25593977; Vlasnik JJ, ,Case Manager 2005 pp 47-51; Podl TR, AmJPrevMed 1999 pp 207-210; DiMatteo MR, Health Psychol, 1993, pp 93-102, Street RL Jr, Patient Educ Couns 2009 pp 295-301)

Schoen et al analyzed the impact of the guidelines in the academic medical practice. (Schoen Am J Med 2014) It is their assessment that the recommendations for the intensity of treatment will have a big impact on clinical practice and in achieving the treatment goals. Based on the ACC/AHA recommendations, they found that only 56% of patients were receiving the level of treatment recommended. For patients at most at risk (ASCVD, LDL >190 mg/DL and those with diabetes with high ASCVD risk), only 9.4% were on the high-intensity statin as recommended in the guidelines. They estimate that 43% of their patients would need an increase in dosing and 72% would need to start therapy. This is the patient population that this measure should address.

As a process measure, it has limited ability to impact change, but that could be improved if it linked the prescribing of the appropriate intensity of statin to match the patient's level of risk. Without that link, there is no reason to believe that this measure, as it is defined, will have any more success in improving patient outcomes than achieved with previous guidelines and performance measures. If the patient is not started on the appropriate dose for their level of risk, it is unlikely the dose will be adjusted and unlikely they will achieve the maximum benefit of reducing their risk for an ASCVD event.

#3 There is no provision identified in the performance measure that recognizes the discontinuation of the statin after the 2nd claim. Zhang reported that more that ~53% of patients had their statin discontinued at least once in a year. (Zhang 2013, 5526-534) Ellis reported that the medication was discontinued in 20% of patients for a number of reasons not related to side effects. (Ellis 2004, 638-645). They identified numerous factors associated with nonadherence including cost/copayment; they reported that adherence was positively associated with the number of visits to the cardiologist and the average number of LDL tests a patient had each year.

Side effects play an important role in a patient's adherence to medication. In the case of statins, the impact on muscles is more important from the patient's perspective than is reflected in the AHA/ACC 2013 guidelines and the measure. The ACC/AHA 2013 Guideline Full Report acknowledges that the report of the side effects, e.g. muscle-related effects, are underreported in RCTs because they systematically exclude all patients who have risk factors, serious comorbidities or concomitant drug therapy that might predispose them to these adverse events. (Stone, Full Report, 2013) The prevalence in trial conditions is 1.5-3%, but community based studies report a higher prevalence of 10%, up to 20%. (Fernandez Cleve Clin J Med 2011, 393-403)) In community practice, there may be milder forms of myopathy that do not rise to the level of reporting as in an RCT but do impact the patient's willingness to continue taking the drug.

It is a recommendation in the ACC/AHA Full Report that additional sources of information be pursued by the clinician: "Because many patients in everyday practice would not qualify for clinical trials,

clinicians should consult other sources of safety data, such as the observational data accumulated by the FDA and package inserts of specific medications." (Stone, Full Report, 2013)

Disruption of the use of statins will be common in those who develop muscle-related symptoms. Zhang reported that myalgia/myopathy was the most common statin-related event associated with discontinuation of statins. (Zhang) The symptoms were reported to develop a median of 6 months after starting treatment. (Hansen 2005, pp 2671-2676)

If the measure is not adjusted to eliminate those who had to discontinue statins, those physicians who work with their patients to address patient concerns, wishes, and side effects will be viewed as having adherence issues and obtain a lower score, when they are practicing good clinical medicine

4. This measure by itself is insufficient to reduce ASCVD events and improve outcomes in the Medicare population because it will not address the following: 1) patients who are intolerant to statin therapy & require use of an alternate non-statin which is addressed in the text of the AHA/ACC guidelines.

2) use of non-statins in combination or alone & use of newly approved agents when indicated patients who do not achieve the recommended reduction in LDL levels.

There are a number of options. One is to modify the measure to identify a subset of patients who are statin intolerant or do not achieve desired reduction in LDL & require the use of non-statins. Another option is to create a separate measure for this patient population. New drugs which will be available to treat those intolerant or with less than desired response will need to be addressed in the measures. (Cannon 2015 EurHtJ Advance Access February 16,2015)

An alternate approach is an intermediate outcome measure of LDL levels. Many consider the guidelines a 'fixed dose' strategy that does not require knowledge of the LDL level as opposed to the 'treat to target' strategy but the text describes s a combination of initiating treatment with a fixed dose, then monitoring LDL response & adjusting the dose or adding non-statins until the patient achieves the desired reduction in their LDL. The LDL is referred to as an "indicator", directly related to the reduction in ASCVD risk: "… Classifying specific statins and doses by the percent reduction in LDL-C level is based on evidence that the relative reduction in ASCVD risk from statin therapy is related to the degree by which LDL-C is lowered."

The guidelines do recommend treatment for any person at risk who has an LDL over 70 mg/dL. The LDL level is recognized as an intermediate outcome by the USPTF in the the Final Research Plan approved in 2014. (http://www.uspreventiveservicestaskforce.org/Page/Document/ResearchPlanFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening1)

Analysis of 3 factors (blood pressure (BP), LDL levels & Hgb A1c levels) contributing to ASCVD has demonstrated that the 2 factors with the strongest influence are the BP and the LDL level. This relationship is part of the CDC Million Heart campaign and is reflected in the CMS FY 2015 Performance Budget & the QIO's 2015 scope of work.

The frequency of LDL testing provides feedback to the patient about their progress & the reason they need to continue taking their medication, empowering the patient with a feedback loop to continue engagement. As noted earlier, frequency of doctor visits & LDL testing has been associated with increased adherence to medication management.

5. A final concern is the need to include socio-demographic data in the measure. More recent studies indicate there are significant gaps in care that impact on risk for ASCVD. (Schoen 2014) as well as the need to be consistent in addressing disparity as defined by IOM, CDC and AHRQ. In its August 2014 technical report, "NQF recommends that outcome measures be adjusted for clinical severity because it affects outcomes, but up until now we have not recommended adjustment for sociodemographic factors, in part because of their link to disparities. The question of whether to adjust measures for sociodemographic factors is being called now because there is a growing body of evidence that sociodemographic factors also affect patient outcomes. These outcome measures, increasingly used in accountability programs such as public reporting and pay-for-performance, are under more intense scrutiny. Getting the measures "right" is important given that they are being used to determine which providers to include in networks, how to determine financial rewards or penalties, where to go for healthcare services, and where to focus improvement efforts.

Whether to adjust measures for sociodemographic factors is of great interest to stakeholders who have passionate views and legitimate concerns on all sides of this issue – NQF received more public comments on this topic than any other project to date. At the heart of it though, people want performance measures to provide fair comparisons across those being measured, but also agree that we cannot lose sight of disparities in healthcare and health faced by disadvantaged patients or ignore the challenges of the providers and health plans that care for them. "

In summary, I am concerned that there are no RCTs or studies in the natural environment which test the recommendations in the AHA/ACC guidelines as they are being interpreted with a focus on statins and the exclusion of monitoring the patient's response to treatment. I do not anticipate that this process measure will have as positive an impact on outcomes as is hoped unless it is modified to address the real gaps in care related to undertreatment, appropriate treatment for those unable to tolerate statins and the sociodemographic factors. I would suggest that it be modified to address the subset of patients unable to tolerate statins and recognize the non-statin options available so that the physician and patient are given credit for appropriate management of these patients as well.