Using the Primary Care Equity Dashboard to Support an Equity-Focused Quality Improvement Initiative

Beth DeSanzo, PharmD, BCPS ¹

Jamie L. Estock, MA ¹

Leslie R.M. Hausmann, PhD ^{1,2}



Objectives

- Review the prevalence of cardiovascular (CV) disease
- Discuss the role of HMG-CoA Reductase Inhibitors, or "statins", in preventing CV events
- Review the Primary Care Equity Dashboard (PCED)
- Identify the disparity in statin adherence amongst Black versus White Veterans
- Highlight the role of the PCED in supporting a quality improvement (QI) initiative to reduce racial disparities in statin adherence

Background – VA Pittsburgh Healthcare (VAPHS)



- Two Main Campuses
 - University Drive (UD)
- Five Community Based Outpatient Clinics
- UD campus: Large, urban, academic VA medical center
- Center for Health Equity Research and Promotion (CHERP) located on campus
- Provides primary care along with numerous other services
 - Patient aligned care teams (PACTs)
 provide primary care to Veterans
 - Teams include clinical pharmacy specialists (CPS)

Background

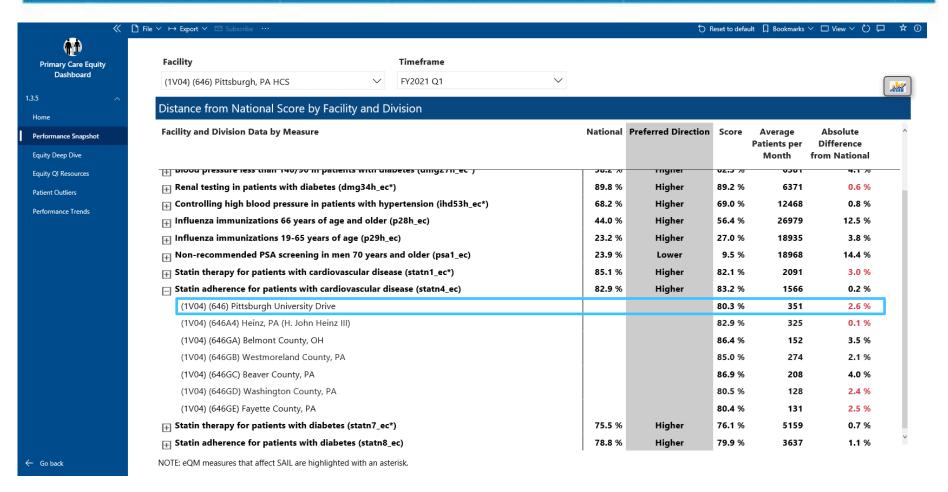
- Cardiovascular (CV) disease
 - Leading cause of death in the United States (US)
 - Responsible for 690,000 deaths in 2019
- HMG-CoA Reductase Inhibitors ("statins")
 - Class of medications that lower cholesterol
 - Used to prevent CV events (primary prevention)
 - Used in patients with established CV disease to prevent additional CV events and death (secondary prevention)
 - Adherence is emphasized by the American College of Cardiology

Background - Statin Adherence

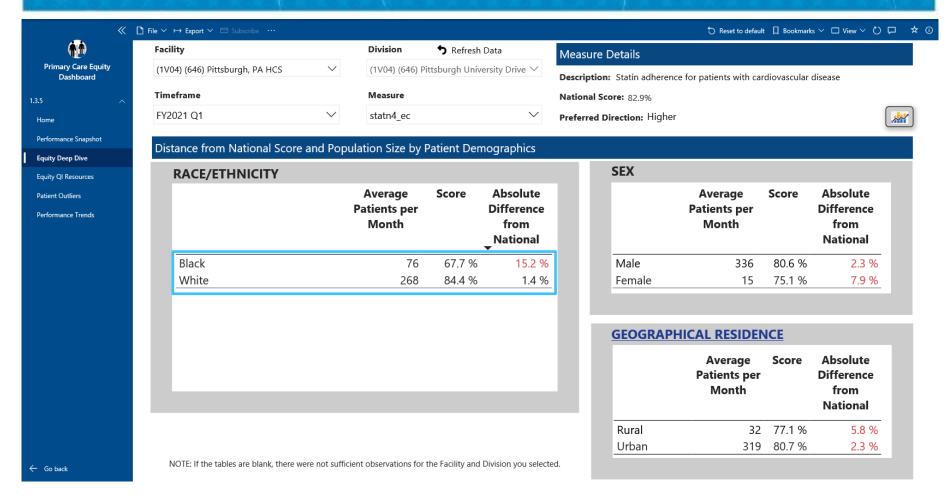
- Adherence to statin therapy is problematic
 - US population with CV disease: 20.9% non-adherent (2014)
 - Veteran population with CV disease: 17% non-adherent (2021)
- Racial disparities exist between Black and White patients
 - Black Medicare beneficiaries are 24% more likely to be nonadherent (2009)
 - Black Veterans are 42% more likely to be non-adherent (2019)

Colantonio et al., 2019; Rodriguez et al., 2019; Yang et al., 2009

Background – Statin Adherence at VAPHS



Background – Statin Adherence at VAPHS



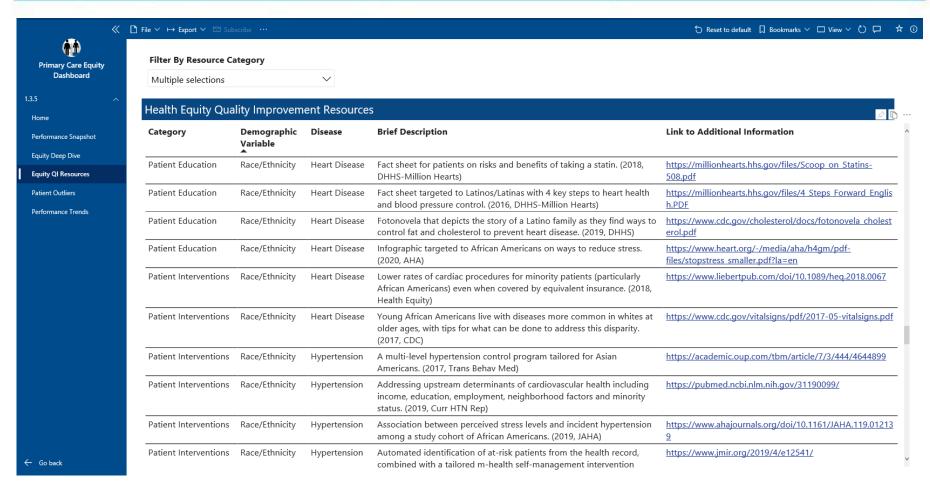
Background – Our Project

- Improve statin adherence rates among Black Veterans at VAPHS
- Reduce the disparity between our Black and White Veteran populations





Intervention – Identifying an Intervention



Intervention – Identifying an Intervention

- Education by a pharmacist can have a positive impact on medication adherence
- Our team aimed to improve statin adherence rates among Black Veterans and reduce the disparity between our Black and White Veteran population

Nieuwkert et al., 2012; Ho et al., 2014

Intervention – Role of the Pharmacist

- 3 PACT Clinical Pharmacy Specialists (CPS) at VAPHS UD
- Developed an education consult template in the electronic medical record
- Conducted 30-minute phone education consults

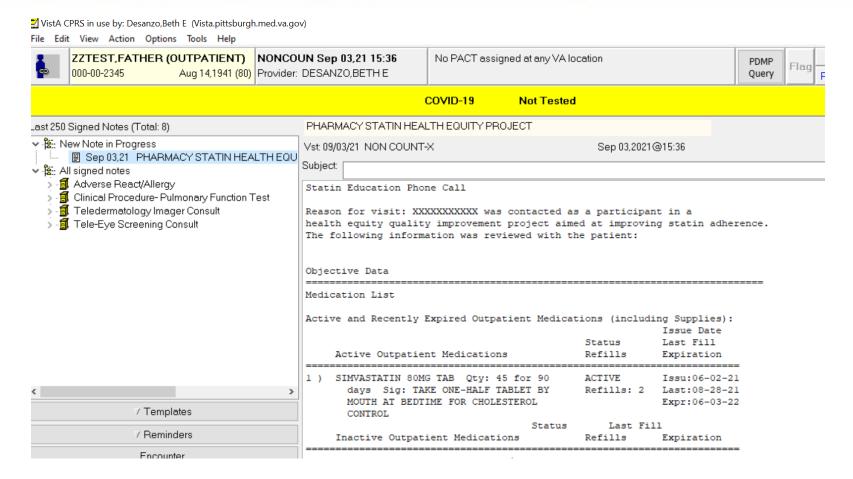
Intervention – Role of the Pharmacist

- Education consult template was developed to provide answers to the following questions:
 - What is a statin?
 - How do statins help those with established CV disease?
 - How should patients take statins?
 - Importance of adherence and what to do if dose is missed
 - What are the common adverse effects and how should patients report these to providers?

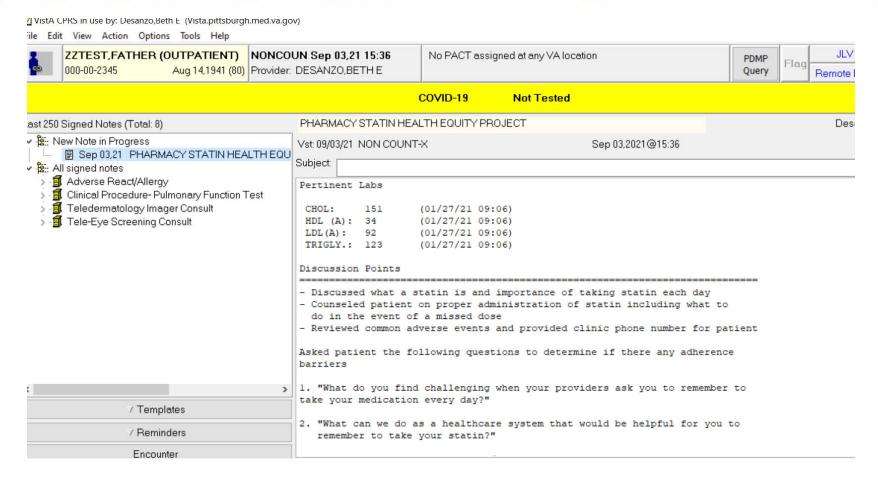
Intervention – Educating Veterans

Hi! My name is Beth DeSanzo calling from VA Pittsburgh and I am one of the pharmacists in the primary care clinic. I was wondering if you had a moment to talk about one of your medications that is on your medication list called atorvastatin. I am calling to make sure that you understand why we have prescribed a statin for you. As someone with cardiovascular disease, statins help lower the bad cholesterol levels.....

Intervention – The Statin Education Consult



Intervention – The Statin Education Consult



Procedures – Eligible Veterans

- Prescribed a statin
- Had cardiovascular disease
- Had an established primary care provider at VAPHS UD

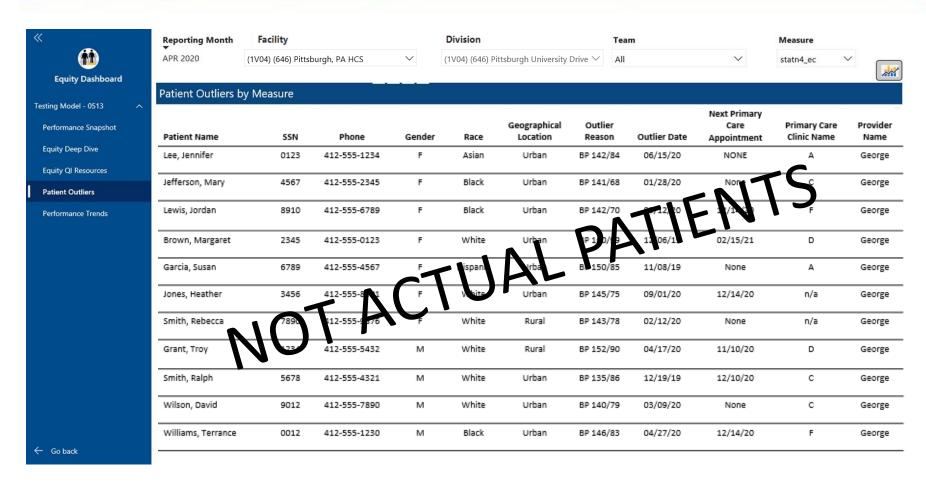
Procedures – Eligibility Definitions

- Prescribed a moderate or high intensity statin in the past year, age 21-75 (male) or age 40-74 (female), with at least one of the following during the prior year:
 - Myocardial Infarction (MI)
 - Coronary artery bypass graft procedure (CABG)
 - Percutaneous coronary intervention (PCI)
 - Other revascularization
 - Ischemic vascular disease diagnosis

Procedures – Eligibility Definitions

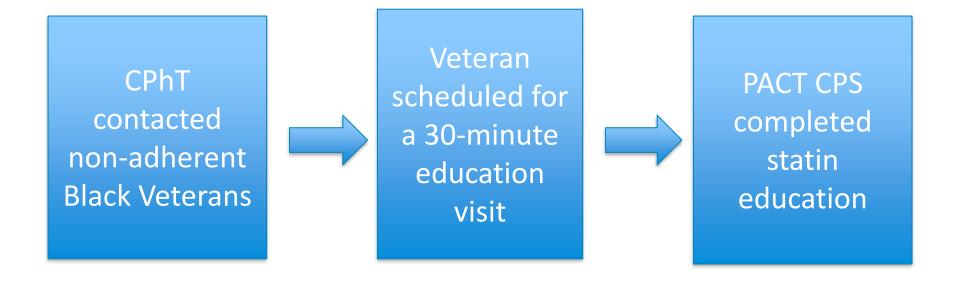
- Adherent: Patient is adherent for ≥ 80% of the days in any 12-month period
- Non-adherent: Patient is adherent for < 80% of the days in any 12-month period

Procedures -Identifying Non-adherent Veterans



Procedures – Scheduling and Educating Veterans

Timeframe: January – February 2021



Outcomes - Data Collected for Statin Refills

Statin Refills

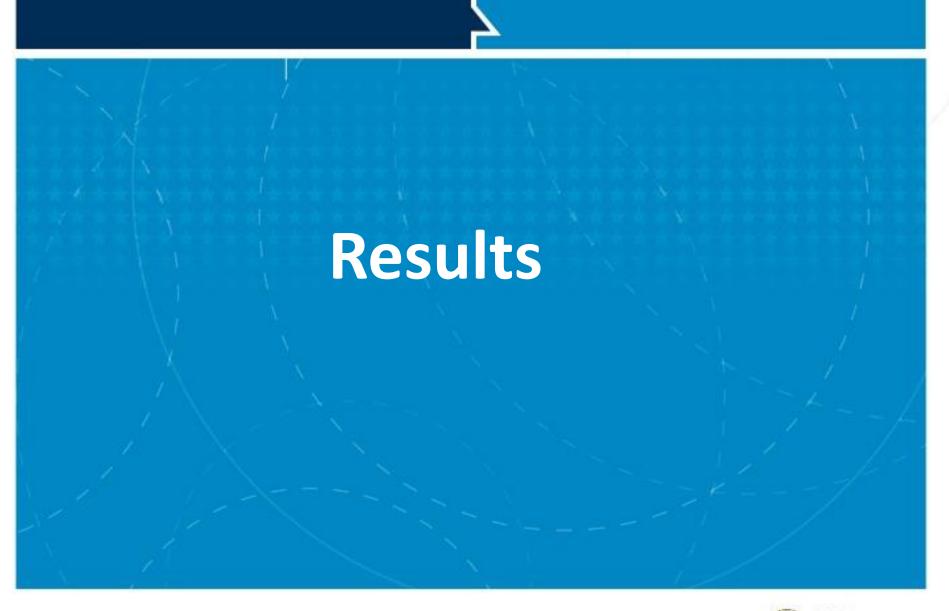
- Electronic health record refill data
 - "Refilled": Statin refilled at any point during the timeframe
- Date of refill
 - Before or after CPhT scheduling call
 - Before or after CPS education

Evaluated the effectiveness of our intervention by comparing the # of Black Veterans who received the intervention and the White control group who did not

Adherence

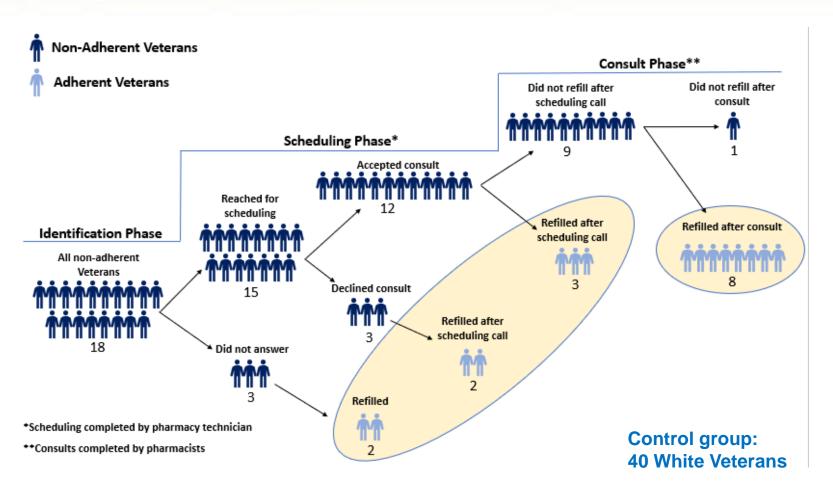
- Overall adherence rates for all VAPHS UD patients monthly
- Barriers to adherence
 - "What do you find challenging when your providers ask you to remember to take your medication every day?"
 - "What can we do as a healthcare system that would be helpful for you to remember to take your statin?"

Tracked the disparity in statin adherence between Black and White Veteran populations

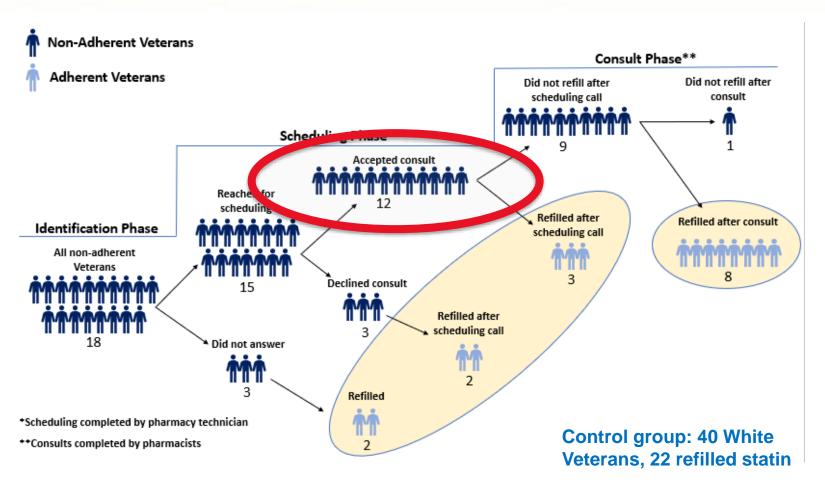




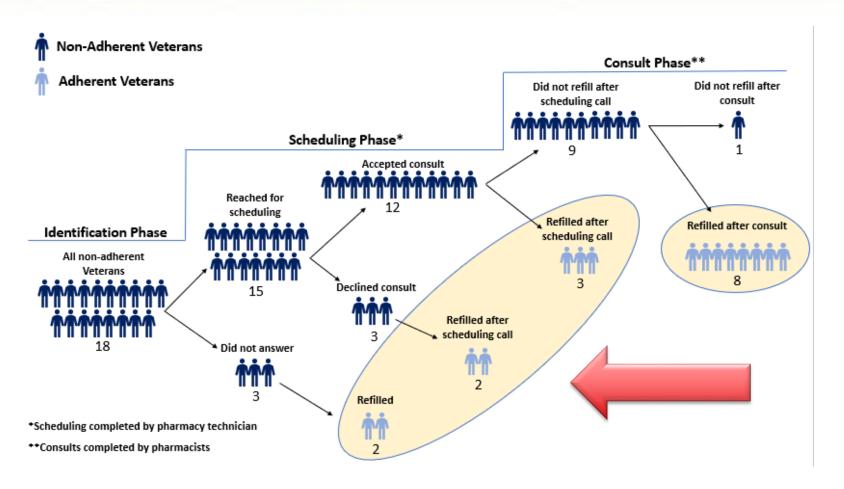
Results – Veterans Eligible for Intervention



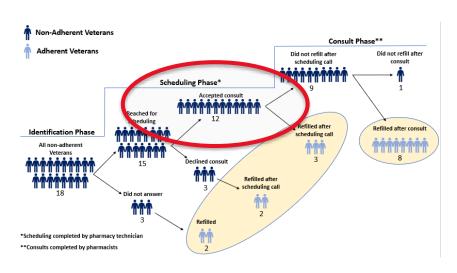
Results - Veterans Eligible for Intervention



Results - Veterans Eligible for Intervention



Results - Veteran Feedback



- Three Veterans

 learned important
 information about
 their statin therapy
 that they did not
 know before
- Four Veterans identified barriers to adherence

Results - Barriers to Adherence

Question asked to veteran:

"What do you find challenging when your providers ask you to remember to take your medication every day?"

"What can we do as a healthcare system that would be helpful for you to remember to take your statin?"

Veteran response:

Veteran 7: Remembering, falling asleep before taking statin, forgetting to order refills

Veteran 10: Overwhelmed, unaware of indication and importance of taking statin, unaware of proper time to take statin

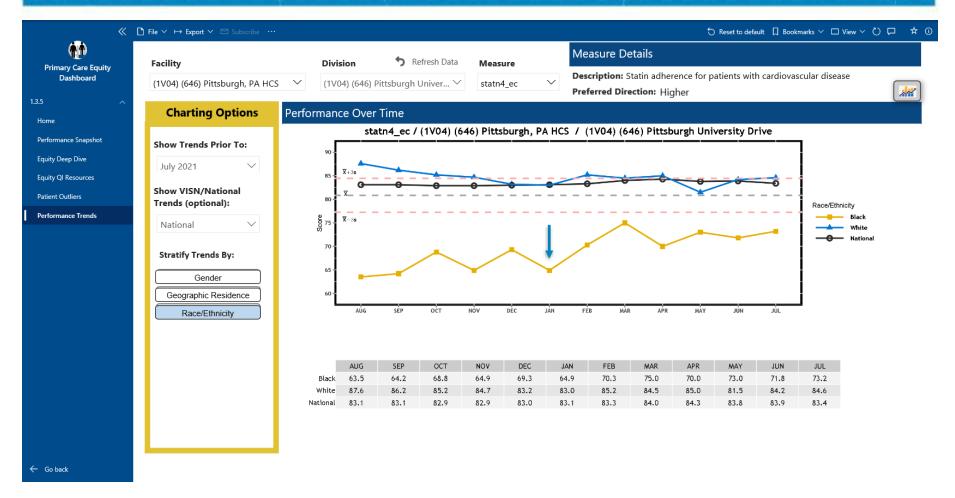
Veteran 5: Provide automatic refills for statin

Veteran 6: Allow cellular phone access to web-based healthcare system's patient medication refill request portal

Veteran 7: Ensure prescriber allows for adequate refills on statin prescription

Veteran 10: Ensure prescriber educates veteran on the risks and benefits of statin

Results – Statin Adherence Rates



Discussion and Conclusions



Limitations

- Small sample size
- Limited to Black Veterans at VAPHS UD with CV disease and were non-adherent to statins
- Applicable to sites that have a CPS integrated in direct patient care activities
- CPS narrative did not explicitly highlight gaps in statin refills
- Primary outcome measure used in this project was statin refills
 - eQM measure pulls different timelines for refills
 - May be a delay for an intervention to have effect on a measure

Future directions

- The responses from Veterans who identified barriers are valuable information
 - Can help guide future interventions to help improve adherence
- Brief interaction with our CPhT resulted in Veterans refilling statins
 - Shorter, focused contact with Veterans may be effective in improving statin adherence
 - Short refill reminder calls utilizing nursing staff
- The PCED can be utilized to identify other disparities and track progress following an intervention
 - Statin adherence in Veterans with diabetes mellitus

Conclusions

- Pharmacist-led statin education appears to be an effective tool to improving statin adherence
- Any focused contact with Veterans regarding statin adherence was beneficial
- The Primary Care Equity Dashboard is a valuable tool that can help clinicians easily identify disparities in healthcare across populations

Contact Information:

Beth DeSanzo: Beth.Desanzo@va.gov

Jamie Estock: Jamie. Estock@va.gov

Leslie Hausmann: Leslie.Hausmann@va.gov

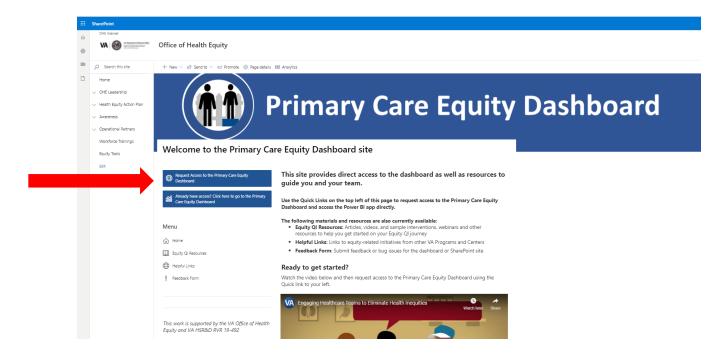


References

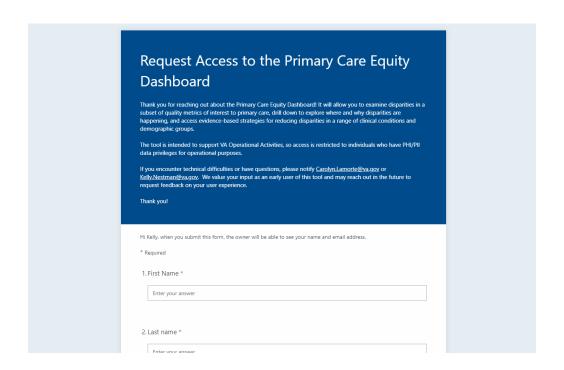
- Virani SS, Alonso A, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, et al. Heart disease and stroke statistics—2020 update: a report from the American Heart Association. *Circulation*. 2020;141(9):e139—e596.
- Grundy SM, Stone NJ, Bailey AL, et al. AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA guideline on the management of blood cholesterol: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines [published online November 2018]. J Am Coll Cardiol. doi:10.1016/j.jacc.2018.11.003
- Colantonio LD, Rosenson RS, Deng L, et al. Adherence to Statin Therapy Among US Adults Between 2007 and 2014. J Am Heart Assoc. 2019;8(1):e010376. doi:10.1161/JAHA.118.010376
- Rodriguez F, Maron DJ, Knowles JW, Virani SS, Lin S, Heidenreich PA. Association of Statin Adherence With Mortality in Patients With Atherosclerotic Cardiovascular Disease. *JAMA Cardiol*. 2019;4(3):206-213. doi:10.1001/jamacardio.2018.4936
- Yang Y, Thumula V, Pace PF, Banahan BF 3rd, Wilkin NE, Lobb WB. Predictors of medication nonadherence among patients with diabetes in Medicare Part D programs: a retrospective cohort study. *Clin Ther*. 2009;31(10):2178-2151. doi:10.1016/j.clinthera.2009.10.002
- Nieuwkerk PT, Nierman MC, Vissers MN, et al. Intervention to improve adherence to lipid-lowering medication and lipid-levels in patients with an increased cardiovascular risk. *Am J Cardiol*. 2012;110(5):666-672. doi:10.1016/j.amjcard.2012.04.045
- Ho PM, Lambert-Kerzner A, Carey EP, et al. Multifaceted intervention to improve medication adherence and secondary prevention measures after acute coronary syndrome hospital discharge: a randomized clinical trial. *JAMA Intern Med.* 2014;174(2):186-193. doi:10.1001/jamainternmed.2013.12944
- American Society for Quality. (n.d.) Control Chart. https://asq.org/quality-resources/control-chart. Accessed 9/5/21.

How to request access to the Primary Care Equity Dashboard

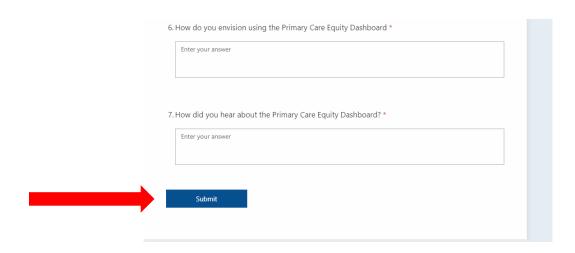
- 1. Use this link to navigate to the Primary Care Equity Dashboard SharePoint Form. Note: You may have to copy and paste the link into your browser for it to work: https://dvagov.sharepoint.com/sites/VACOVHAOHE/SitePages/Test.aspx
- 2. Once at the landing page, click the "Request Access to the Primary Care Equity Dashboard" button.



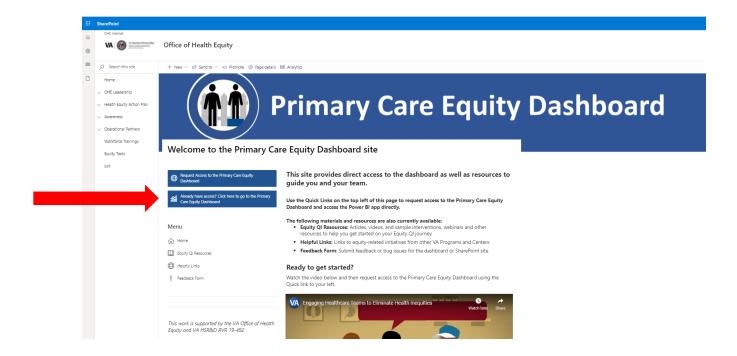
3. Complete the SharePoint form to be granted access.



3. Once the form is complete, click the submit button at the bottom of the form.



4. Within 2-3 business days, you will receive an email confirming that permission has been granted. You can then access the dashboard through the Primary Care Equity Dashboard SharePoint site. It is important to bookmark the link for the SharePoint site for updates and for the most current link to the report.



Statin Education Call Template

Hi Mr/Mrs. ###,

My name is ### calling from VA Pittsburgh and I am one of the pharmacists in the primary care clinic. I was wondering if you had a moment to talk about one of your medications that is on your medication list called ###. If yes...

What is a statin and how is it helpful for CVD?

- I am calling to make sure that you understand why we have prescribed a statin for you.
- As someone with cardiovascular disease, statins help:
 - Lower the bad cholesterol levels and increase the good cholesterol levels in your blood.
 - Lower your risk of suffering from heart attacks, strokes, and death by 20-25 percent.

How should patients take statins?

To achieve these benefits, you have to:

- Take your statin once every day around the same time
- If you happen to miss a dose, take it as soon as you remember. If it has been more than 12 hours since the missed dose, skip the missed dose and take your next normally scheduled dose
- Never take two of your statin pills at the same time
- For simvastatin, make sure they know to take in the evening **Can recommend switching to** atorvastatin or rosuvastatin if they do have trouble remembering evening dose

We know that some patients find it difficult to keep up on their statin.

- 1. "What do you find challenging when your providers askyou to remember to take your medication every day?" and
- 2. "What can we do as a healthcare system that would be helpful for you to remember to take your statin?"

What are some common adverse effects with statins?

While statins have many benefits, I wanted to make sure I discussed some of the common side effects so you can let us know if you have any of them.

- One common side effect is muscle pain. You may feel achy or fatigued because of this muscle pain. If you notice this, call us here in clinic. We have options available to help and may include switching to other types of statins that you may tolerate better
- Another side effect is a change in the color of your urine, specifically a dark red/brown color. If this happens, stop taking the statin and present to the nearest emergency room as soon as possible for the proper treatment. While this is very rare, it is also serious, and we want to make sure you are properly treated.

Leave time for any questions

Procedural outline for scheduling patients for Cycle 1

- 1. Pharmacy technician uses primary care dashboard and identifies 18 Black Veterans who are outliers according to the statn4_ec measure
- 2. Pharmacy technician schedules 30-minute appointments for each Veteran identified, attaching the following note: "appointment for statin health equity project"
- 3. Pharmacist enters dashboard/reviews CPRS chart prior to appointment with patient
- 4. Pharmacist calls patient and follows script

Statin Education Call Template

Reason for visit: Mr/Mrs. |PATIENT NAME| was contacted as a participant in a health equity quality improvement project aimed at improving statin adherence. The following information was reviewed with the patient:

Objective Data

Medication List

|DETAILED RECENT MEDS|

Pertinent Labs

|LIPID PROFILE|

Discussion Points

- Discussed what a statin is and importance of taking statin each day
- Counseled patient on proper administration of statin including what to do in the event of a missed dose
- Reviewed common adverse events and provided clinic phone number for patient

Asked patient the following questions to determine if there any adherence barriers

 "What do you find challenging when your providers ask you to remember to take your medication every day?"

Response:

2. What can we do as a healthcare system that would be helpful for you to remember to take your statin?" $\,$

Response:

Other Patient specific questions/concerns:

Medication Changes: (###If patient was switched from simvastatin###)

Medications Refilled:

Pharmacist's time: