

# Building More Effective and “Friendlier” Systems of Care for Population Health

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# Overview

- Shift towards 1<sup>o</sup> prevention while enhancing the system for all
- Ways to a more effective + “friendlier” system
- Pre-conference survey results



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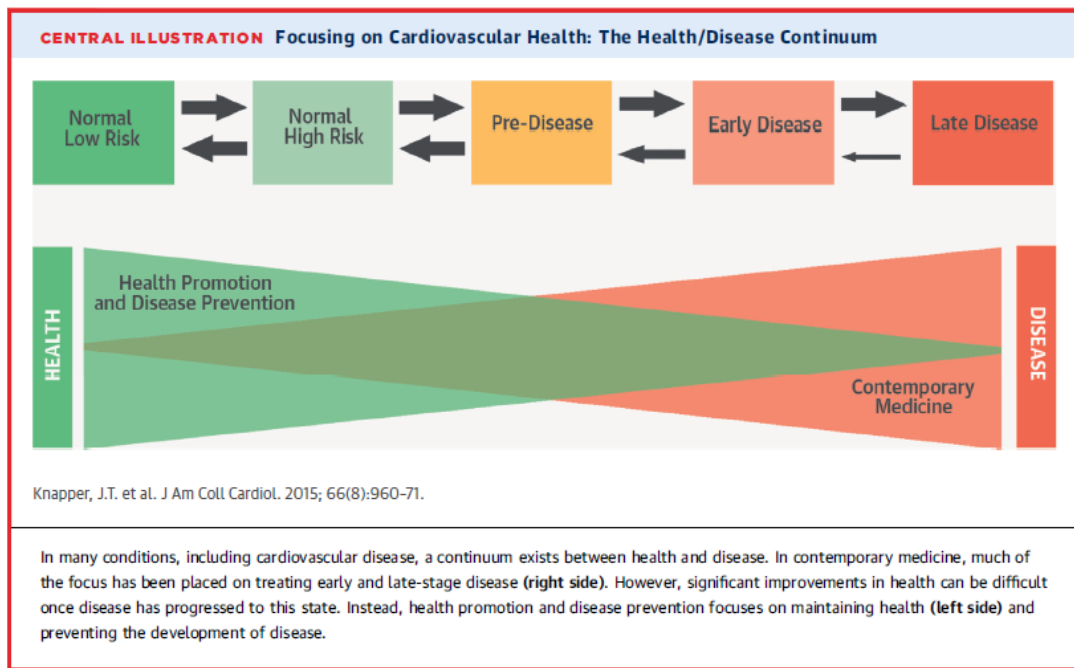
# Time to Change Our Focus

## Defining, Promoting, and Impacting Cardiovascular Population Health

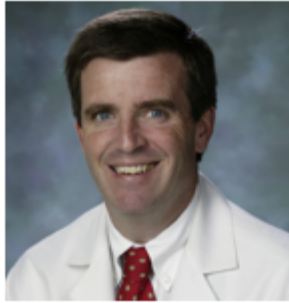
Joseph T. Knapper, MD,\* Nima Ghasemzadeh, MD,\* Mohamed Khayata, MD,\* Sulay P. Patel, MD,\*  
Arshed A. Quyyumi, MD,\* Shanthi Mendis, MD,† George A. Mensah, MD,‡ Kathryn Taubert, PhD,§  
Laurence S. Sperling, MD\*

Cost for CVD projected to triple to  
\$800 billion by 2030.

Sustainable?



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# New American College of Cardiology Population Health Agenda to Focus on Primary Prevention



Kim Allan Williams, Sr, MD, FACC, *ACC President*, Gerard R. Martin, MD, FACC, *Chair, ACC Population Health Committee*

**“we need to turn off the faucet instead of  
just mopping the floor”**



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# Underutilization of High-Intensity Statin Therapy After Hospitalization for Coronary Heart Disease

Robert S. Rosenson, MD,\* Shia T. Kent, PhD,† Todd M. Brown, MD,‡ Michael E. Farkouh, MD,\*||  
Emily B. Levitan, PhD,† Huifeng Yun, MD, PhD,† Pradeep Sharma, MS,† Monika M. Safford, MD,‡  
Meredith Kilgore, PhD,§ Paul Muntner, PhD,† Vera Bittner, MD‡

**TABLE 2** Percentage of Medicare Beneficiaries <75 Years Filling Prescriptions for High-Intensity Statins After a CHD Event

	<b>First Fill After CHD Event (n = 8,762)</b>	<b>Any Statin Fill Within 365 Days (n = 8,019)</b>
Any high-intensity statin	2,364 (27.0)	2,810 (35.0)
Atorvastatin 40 or 80 mg	1,377 (15.7)	1,499 (18.7)
Atorvastatin 80 mg	565 (6.4)	679 (8.5)
Simvastatin 80 mg	684 (7.8)	1,037 (12.9)
Rosuvastatin 20 or 40 mg	303 (3.5)	491 (6.1)



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# Actionable Items at Multiple Levels for Statin Therapy after ACS

HEALTH SYSTEM FACTORS 		PROVIDER BEHAVIOR 		PATIENT FACTORS 	
⚠ Challenges	✓ Solutions	⚠ Challenges	✓ Solutions	⚠ Challenges	✓ Solutions
<ul style="list-style-type: none"> <li>Limited access to medical care</li> <li>Multiple providers</li> <li>High copayments and insurance coverage</li> <li>High drug costs</li> <li>Clinical inertia</li> </ul>	<ul style="list-style-type: none"> <li>Education/media campaign</li> <li>Coordination of care</li> <li>Reduce or eliminate copayments</li> <li>Pill burden reduction with fixed dose combination therapy (polypill)</li> <li>Pharmacy refill tracking/reminders</li> <li>Automated pill counters</li> </ul>	<ul style="list-style-type: none"> <li>Failure to prescribe statin therapy</li> <li>Failure to maximally intensify statins</li> <li>Failure to reintroduce statins</li> <li>Time constraints</li> </ul>	<ul style="list-style-type: none"> <li>Provider education</li> <li>Clinical decision support tools (EMR prescribing alerts)</li> <li>Adherence to guidelines</li> <li>Participation in quality improvement programs</li> <li>Team-based approach</li> <li>Dosing strategies for patients with presumed statin intolerance</li> <li>Re-challenge with statin in patients with a history of myalgia</li> </ul>	<ul style="list-style-type: none"> <li>Demographics, socioeconomic</li> <li>Lack of patient education</li> <li>Co-morbid conditions</li> <li>Depression (particularly post-ACS)</li> <li>Cognitive impairment</li> <li>Caregiver involvement</li> <li>Adverse reactions and intolerance to statins</li> <li>Polypharmacy</li> <li>Drug-drug interactions</li> <li>White coat adherence</li> </ul>	<ul style="list-style-type: none"> <li>Discharge counseling</li> <li>Patient education</li> <li>Smartphone reminder applications</li> <li>Pill burden reduction with fixed dose combination therapy (polypill)</li> <li>Once-daily medication dosing</li> <li>Patient outreach programs</li> <li>Caregiver participation</li> <li>Cardiac rehabilitation</li> </ul>

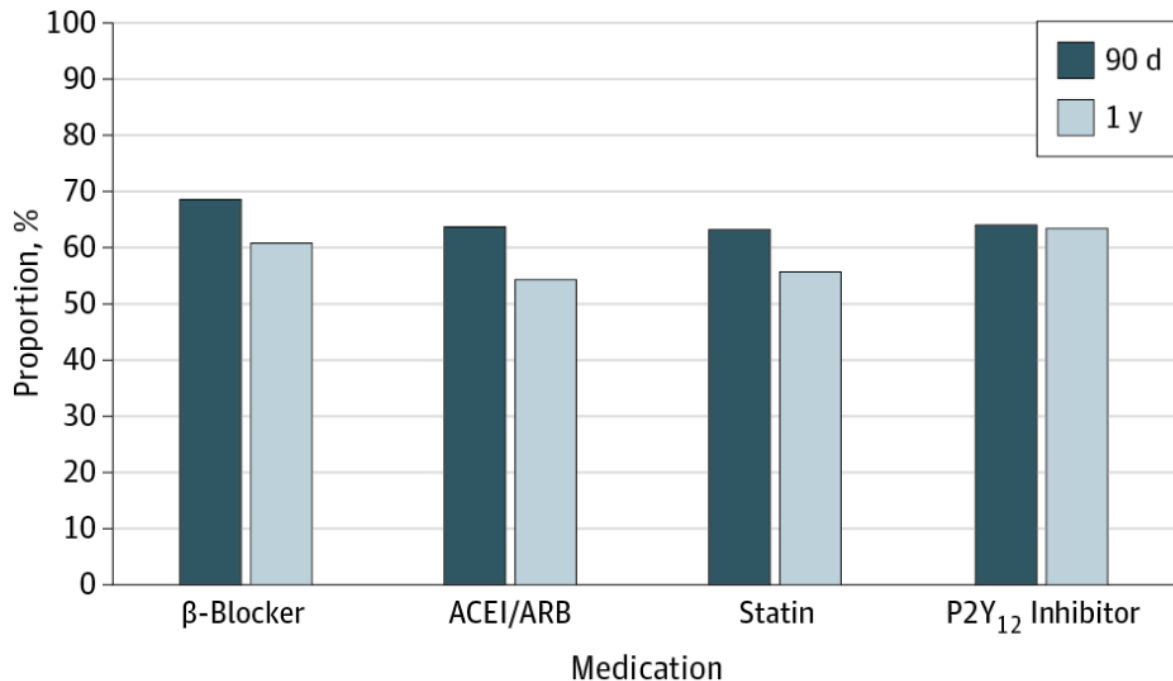
Optimal Statin Use After Acute Coronary Syndrome

Hirsh, B.J. et al. J Am Coll Cardiol. 2015; 66(2):184-92.



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# Adherence in Medicare Patients after AMI



Problem across the board

Care transitions /  
coordination of care:  
Better adherence if  
follow-up within 6 weeks

Faridi KF, Wang TY, et al. JAMA Cardiol 2016;1:147-155



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# Building Friendlier Systems

THE PEOPLE

THE PEOPLE

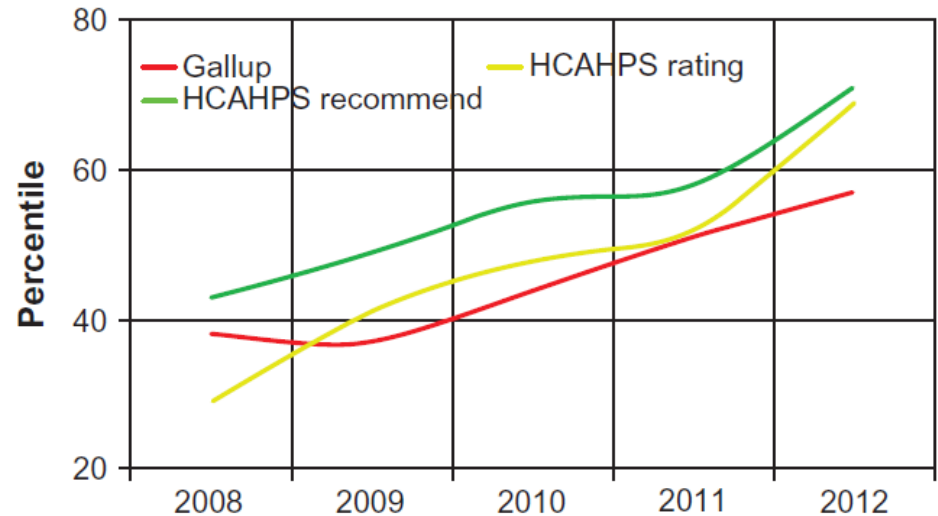
THE PEOPLE



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# Building an engaged workforce at Cleveland Clinic

- Introduction of serving leadership
- New caregiver wellness and recognition programs
- Training focused on the institution's core mission
- Changes in the institutional vocabulary



# Electronic Medical Records

- EPIC success?
  - Better, faster documentation
  - Clinical decision support, alerts
  - Patient access

- Or EPIC fail?

Case Report

## Carpal Tunnel Syndrome in the Digital Era - Are Electronic Health Records and Wrist Pedometers Potentially Synergistic Risk Factors?

David I. Feldman BS<sup>1</sup>, Seth S. Martin MD MHS<sup>1</sup>, Roger S. Blumenthal MD<sup>1</sup>, and E. Gene Deune MD<sup>2</sup>

EPIC fail "doctors spend 20 hrs/month of their

own p

peak c

assn.c

RETWEETS

85

2:22 PM - 11



85

80



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# 2015 ACC Health Policy Statement on Cardiovascular Disease and the Role of the Pharmacist

TABLE 3

## Setting

Hospital pharmacy

Chronic heart failure

Lipid clinics

Hypertension

Anticoagulation

Exercise stress testing

Structural heart disease

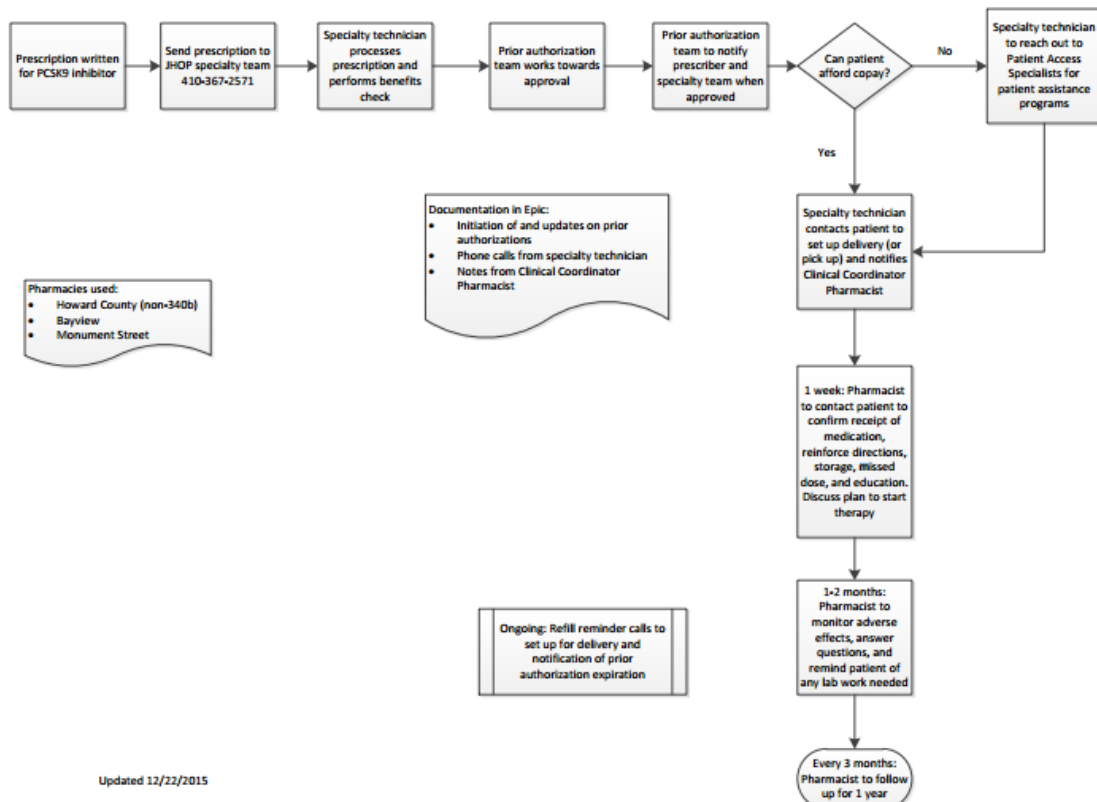
Arrhythmia management, implantable cardioverter-defibrillator

Cardiology-surgery

Outreach to underserved populations

APP = advanced practice pharmacist

## PCSK9 Inhibitor Workflow Johns Hopkins Outpatient Pharmacy



Updated 12/22/2015



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# The Outlook of Digital Health for Cardiovascular Medicine

## Challenges but Also Extraordinary Opportunities **ONLINE FIRST**

Mintu P. Turakhia, MD, MAS<sup>1,2</sup>; Sumbul A. Desai, MD<sup>1</sup>; Robert A. Harrington, MD<sup>1</sup>

JAMA Cardiol. 2016 Aug 31. doi: 10.1001/jamacardio.2016.2661

*"Digital health is still in beta testing. However its future is bright."*

- Potential to:
  - Improve patient education and engagement
  - Improve patient and clinician satisfaction
  - Improve outcomes while reducing health care costs



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# LDL: Address the Risk Thank Tank Participant Pre-Survey

Results as of 08.31.16

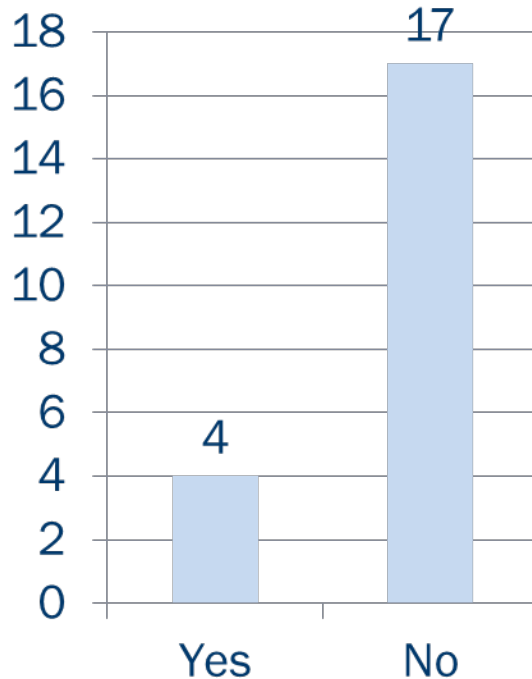
n = 21

Survey sent out to 28 participants



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# Does your health care system alert clinicians if an adult patient with clinical atherosclerotic cardiovascular disease (ASCVD) is not on a high-intensity statin?



If "Yes," please describe:

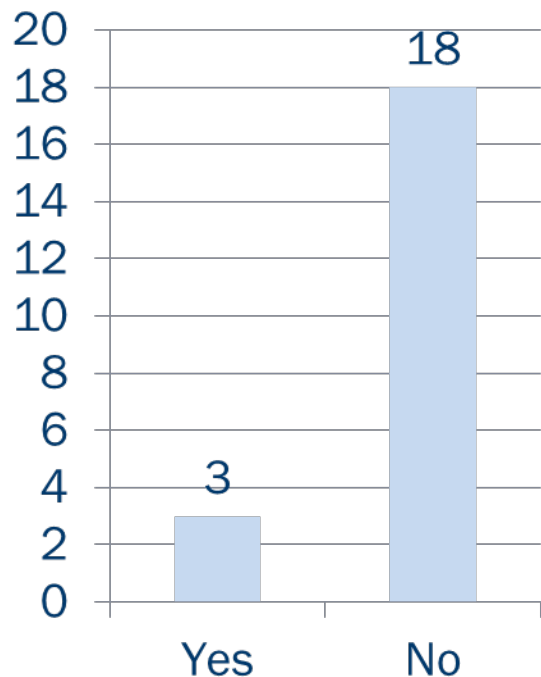
- PHASE computer support program with medical asst and RNs and PharmDs are integral to our program for all these issues.
- A process for this is being worked on and will soon be in a pilot phase.
- At the present time, no, but we are trying to provide a mechanism to provide feedback to providers
- Yes, at times. Sometimes this is part of a research protocol. Other times it is turned on routinely.
- For patients who are in hospital for percutaneous coronary intervention, order sets have been developed to guide physicians on the appropriate dosing of statins.
- We are trying to set up calculation for ASCVD risk score, but system still has some bugs.



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## Does your health care system alert clinicians if an adult patient with LDL-C $\geq 190$ mg/dL is not on a high-intensity statin?



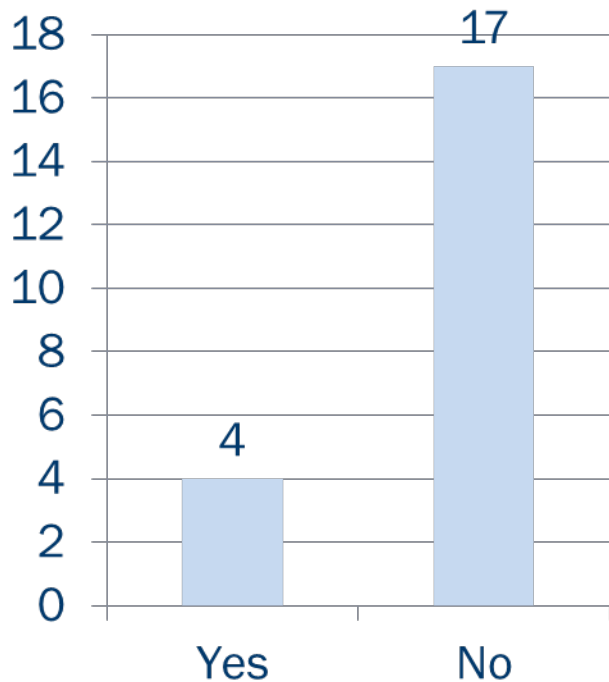
If "Yes," please describe:

- PHASE computer support program with medical asst and RNs and PharmDs are integral to our program for all these issues.
- A process for this is being worked on and will soon be in a pilot phase.
- At the present time, no, but we are trying to provide a mechanism to provide feedback to providers.



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## Does your health care system alert clinicians if an adult patient with diabetes (with LDL-C 70-189 mg/dL and no ASCVD) is not on a moderate- or high-intensity statin?



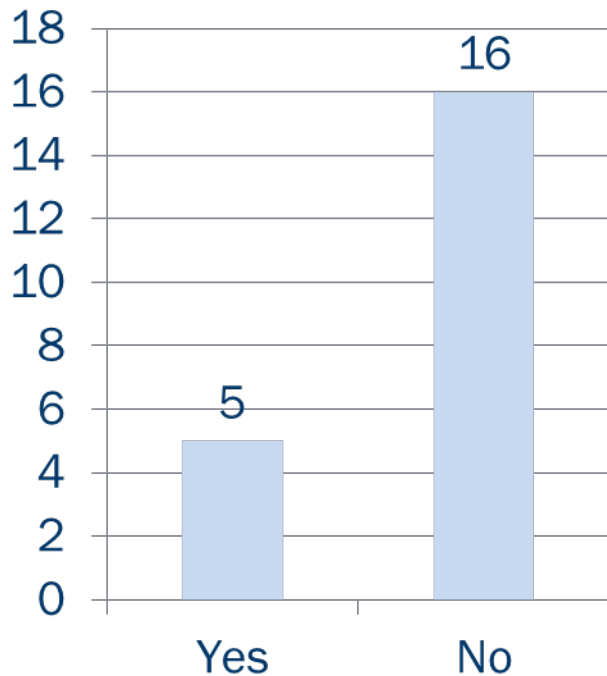
If "Yes," please describe:

- PHASE computer support program with medical asst and RNs and PharmDs are integral to our program for all these issues.
- A process for this is being worked on and will soon be in a pilot phase.
- Yes, we have a best practice alert built into our EHR system.
- Yes, at times. Sometimes this is part of a research protocol. Other times it is turned on routinely.



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## Does your health care system generate alerts when patients do not fill or refill prescriptions for statins?



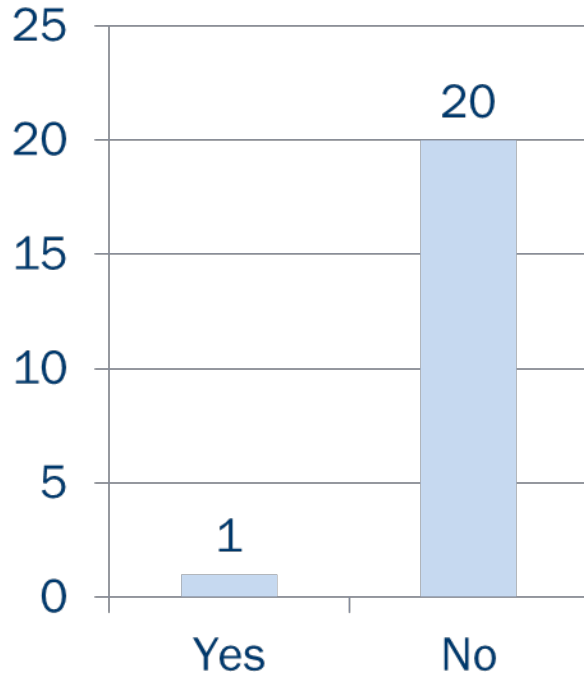
If "Yes," please describe:

- PHASE computer support program with medical asst and RNs and PharmDs are integral to our program for all these issues.
- Depends on insurance plan
- Unfortunately, there is not a closed loop system within our EHR that alerts patients to unfilled medications (including statins).
- Certain circumstances



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# Does your health care system generate an alert when a patient's statin dose may need to be increased according to 2013 ACC/AHA cholesterol guideline?



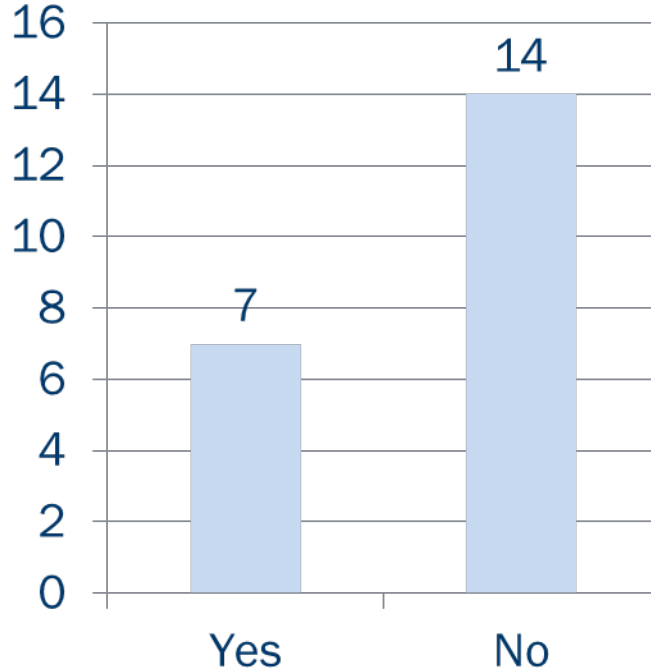
If "Yes," please describe:

- At the present time, no, but we are trying to provide a mechanism to provide feedback to providers.



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## Do you have programs in place to assist individual patients improve adherence to lipid lowering medications?



If "Yes," please describe:

- We have the MTM clinic for help with dyslipidemia in statin intolerant patients
- Yes PHASE program Prevent Heart Attack and Stroke Everyday
- Fingerstick point of care lipids for adherence.
- Select business groups
- Certain facilities have programs to help patients with coupons/vouchers to help with the cost of medications to help improve adherence.
- If employee of our HC system, generic statins are no cost



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A scenic view of St. Peter's Basilica in Rome at sunset. The basilica's large dome and classical architecture are illuminated by the warm, golden light of the setting sun. In the foreground, a stone bridge with multiple arches spans the Tiber River. The water reflects the colors of the sky and the lights of the city. The sky is filled with soft, colorful clouds in shades of orange, pink, and blue.

# Thank you

*If the Romans built such a magnificent city  
thousand of years ago, we can build a better  
system in 2016...*

# Next Steps

- **Interactive Table Discussion (55 minutes)**
- **Report Back to Full Group (30 minutes)**



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# Discussion Questions

- How do we optimize efficiency in providing accurate documentation when requesting non-statin LDL-lowering therapy?
- What can be done to establish more consistent prior authorization criteria for non-statin LDL-lowering therapy?
- How can the health systems assist in improving provider and patient-related barriers to implementing LDL-C lowering therapies? Discuss programs and tools that you may already have in place and/or programs and tools that would be helpful to address these barriers.

