

Creating a Culture of Wellness for New Hires of the Wexner Medical Center

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Objectives

- (1) Provide a model for new employee orientation health and wellness assessments.
- (2) Present 10-month pilot project data including biometric and laboratory results, engagement in health and wellness services, and online personal health assessment completion.
- (3) Discuss opportunities to utilize pilot results to implement appropriate preventative lifestyle interventions for newly-hired employees.



Philosophy of Wellness

- “The state of complete physical, mental, and social well-being, not just the absence of disease and infirmity.”
- Ohio State is committed to creating and making available the resources needed for individuals to achieve/maintain his/her optimal state of health and well-being.

World Health Organization, 1948



Wexner Medical Center

Health & Wellness Onboarding Pilot Project

- Designed to enhance the hiring experience of new Wexner Medical Center employees
 - *Methods: New Hires meet with the Health Promotion Specialist*
- Promote wellness by improving access to care and education on personal state of health
 - *Methods: New Hires triaged and engaged*



Health & Wellness Onboarding Pilot Project

- Support OSU's goal to become the healthiest university in the world
 - *Methods: Discover new disease and risk factors*
- Empower employees to engage in the wellness culture and practice PREVENTIVE self care
 - *Methods: Encourage and educate New Hires to utilize the resources available*



Pilot Project Goals

- Aim(s): This pilot project aimed to:
 - (1) Increase new-employee awareness of personal health
 - (2) Connect new employees to health, wellness, and medical resources
 - (3) Initiate continuity of care with electronic medical record (EMR) documentation
 - (4) Encourage personal health assessment (PHA) completion.

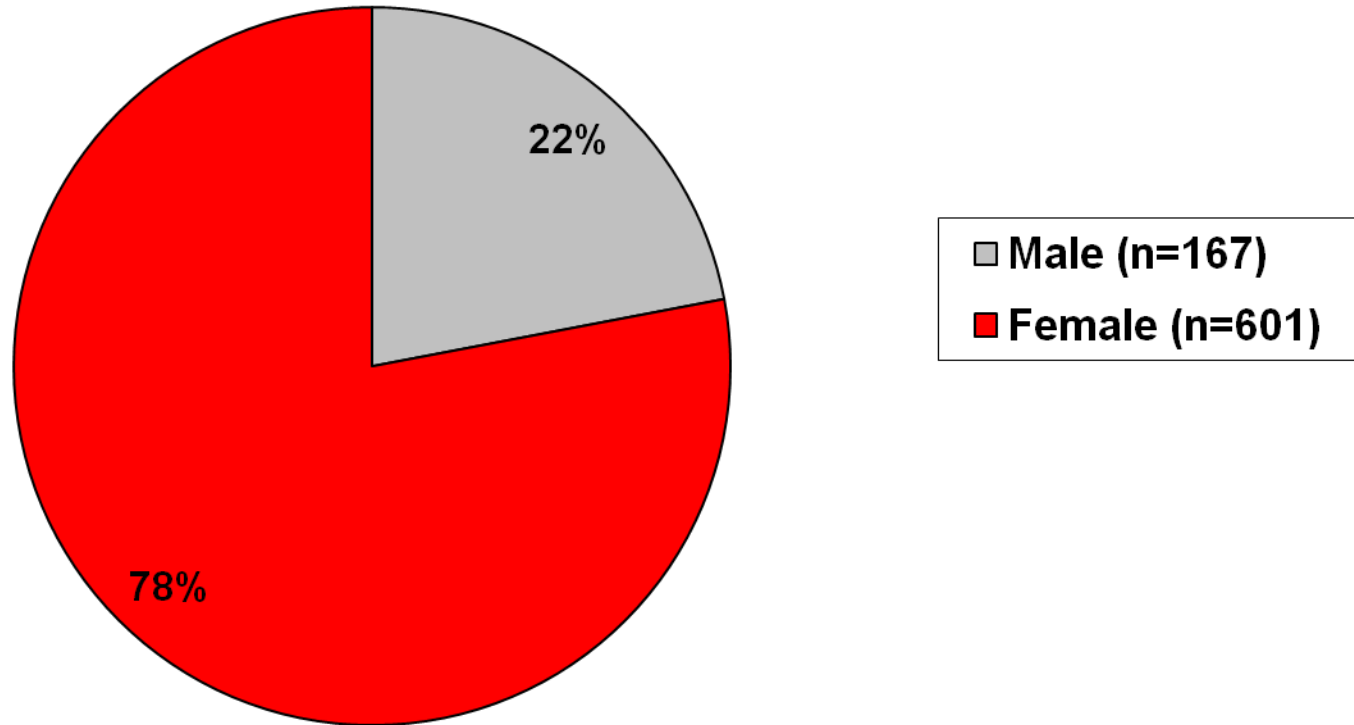


Data Review

Data collected between March 5, 2012
and February 1, 2013



Participants by Gender



Average Age: 31.2

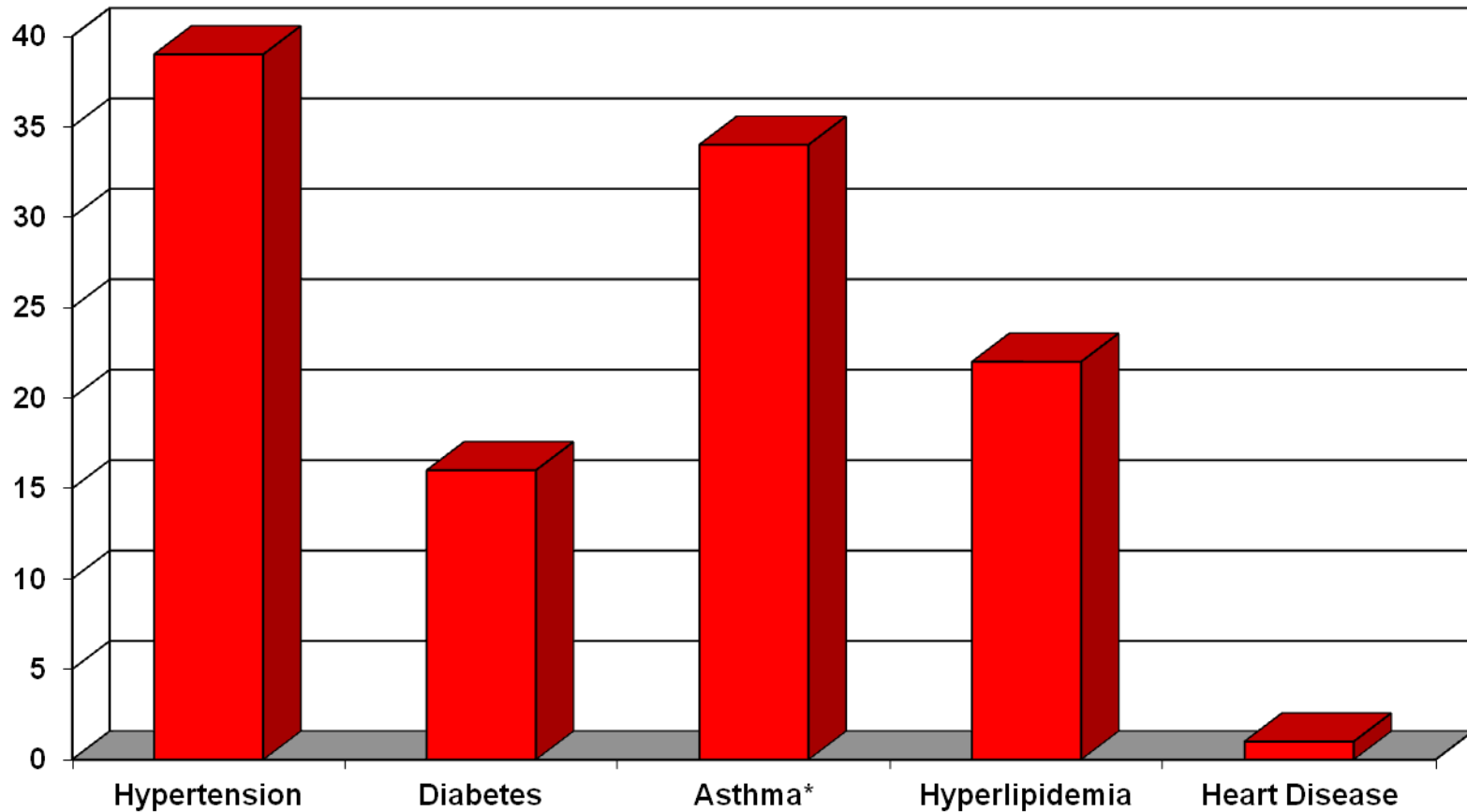
Maximum Age: 65

Minimum Age: 18

n=768



Pre-Existing Conditions



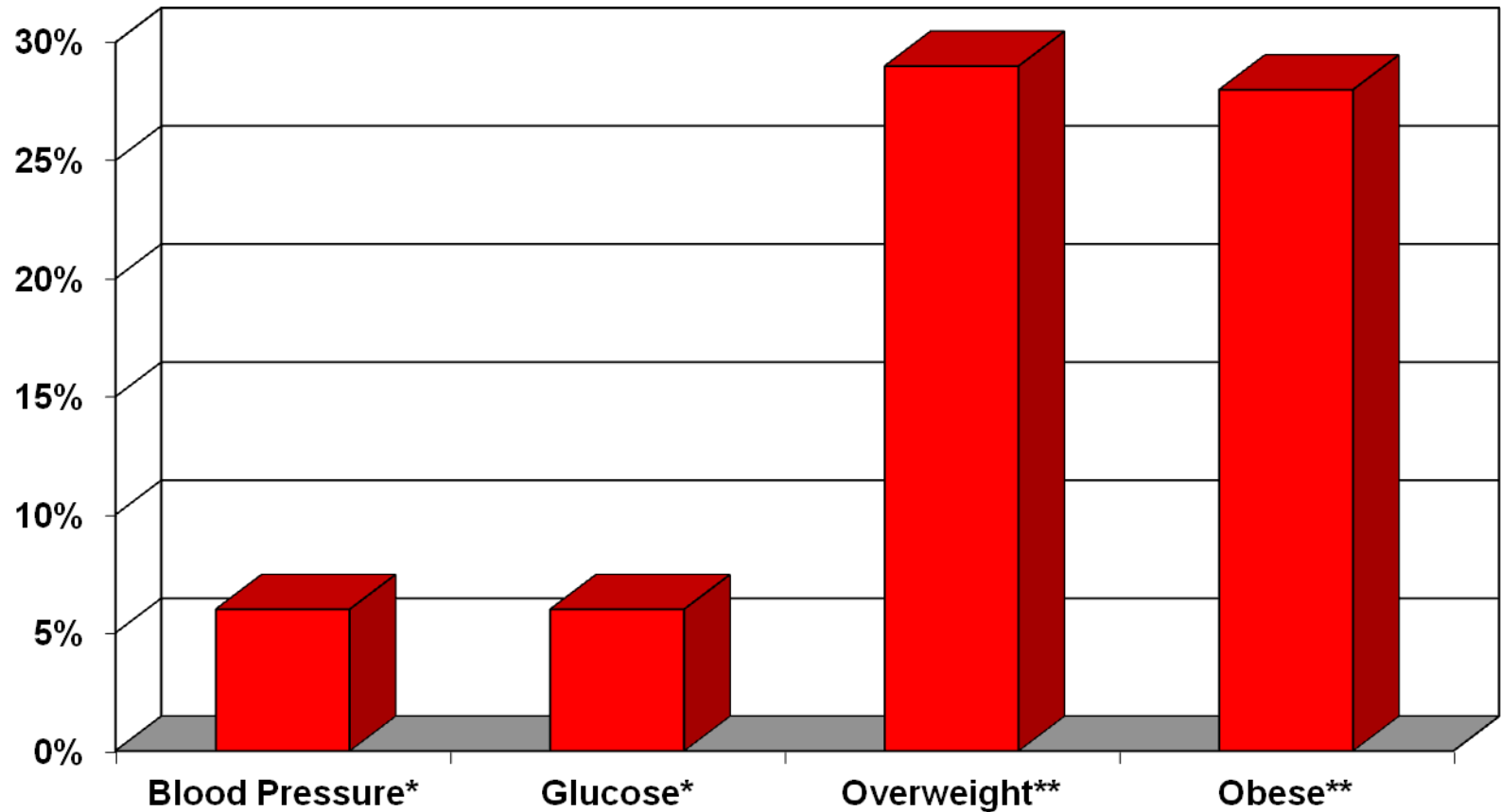
n=486

*No patients reported history of COPD



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Abnormal Biometric Results



* n=768

** n=719

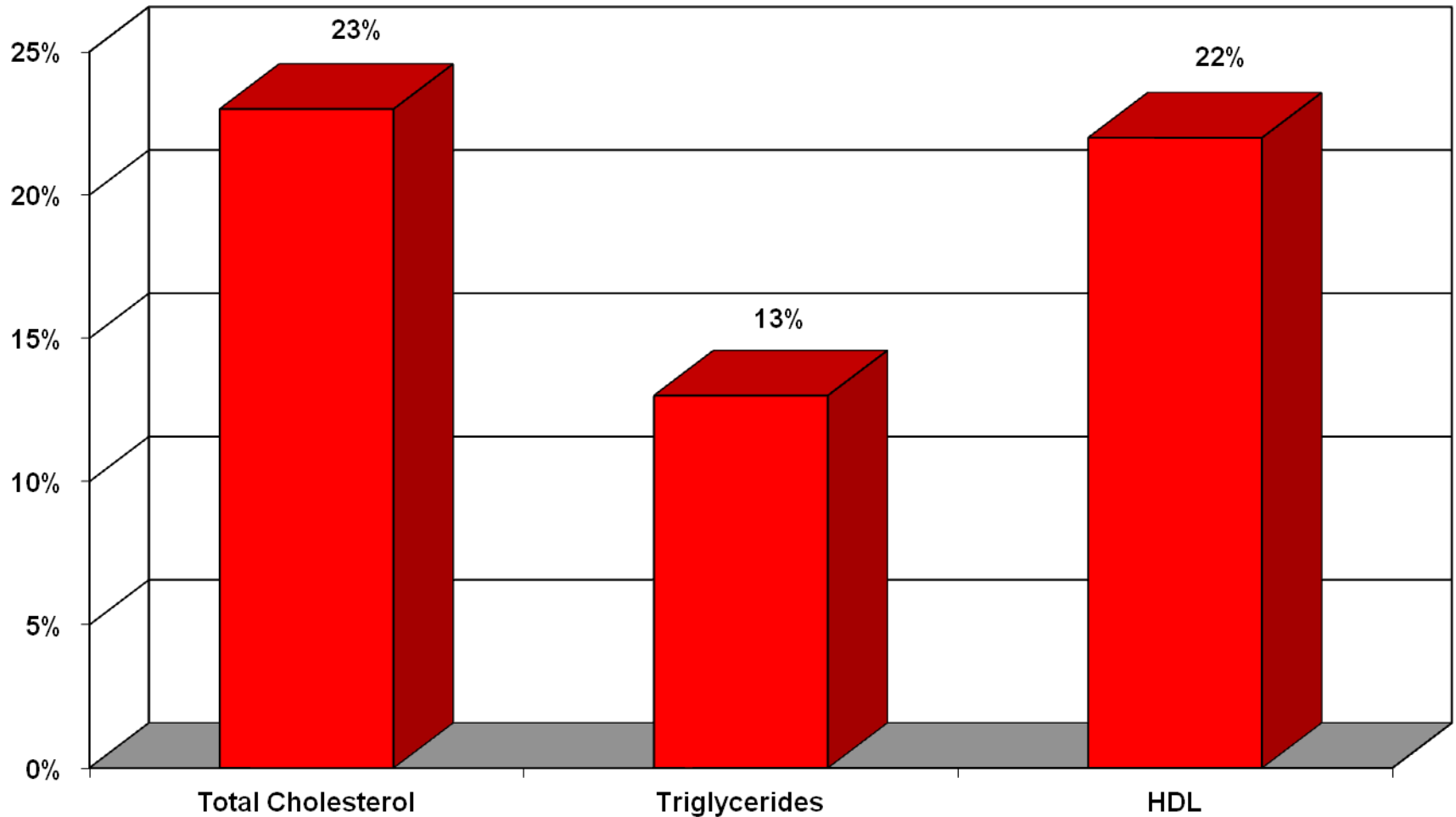
Overweight: BMI 25-29.9

Obese: BMI >30



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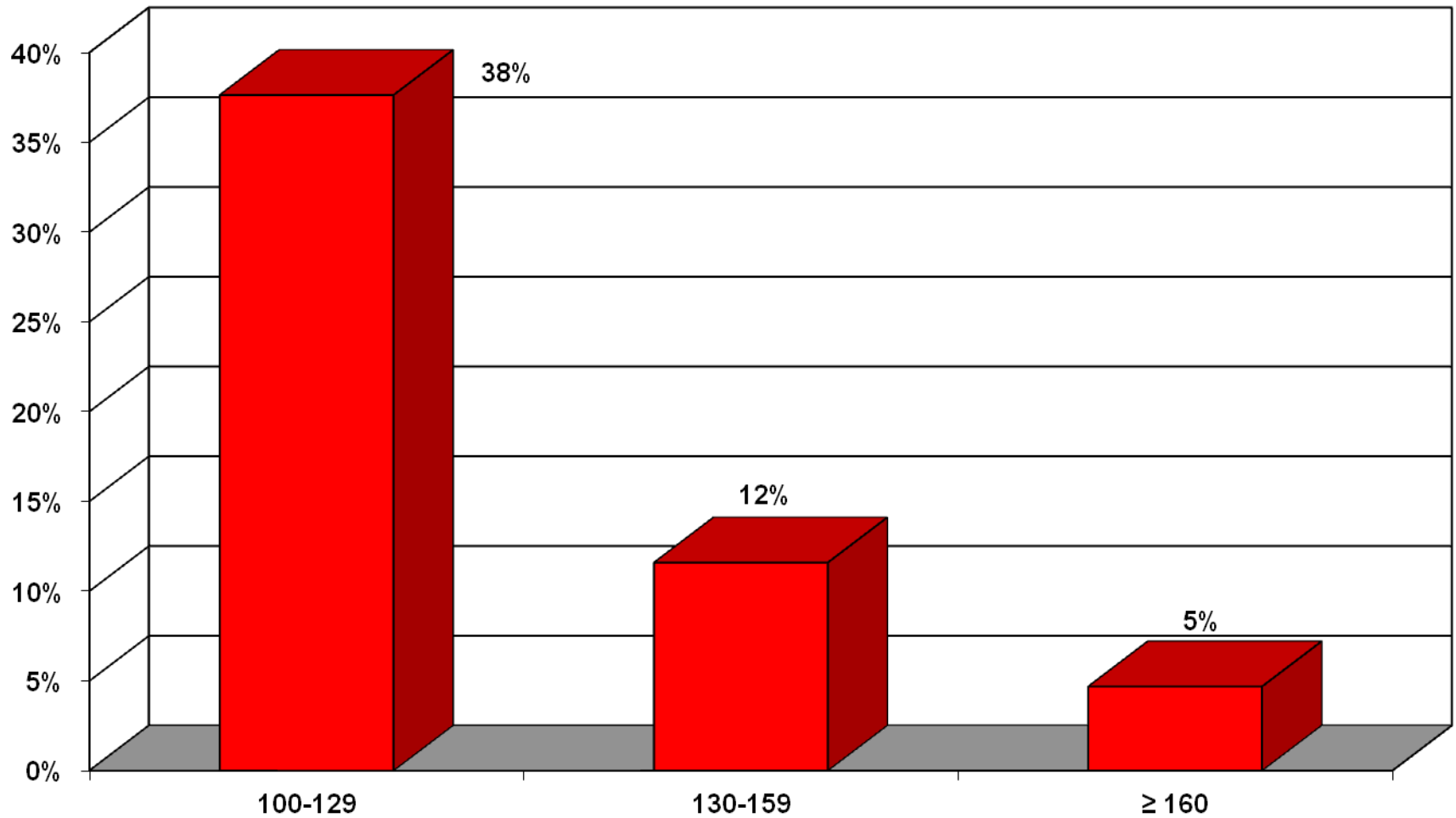
Abnormal Cholesterol Results



n=768



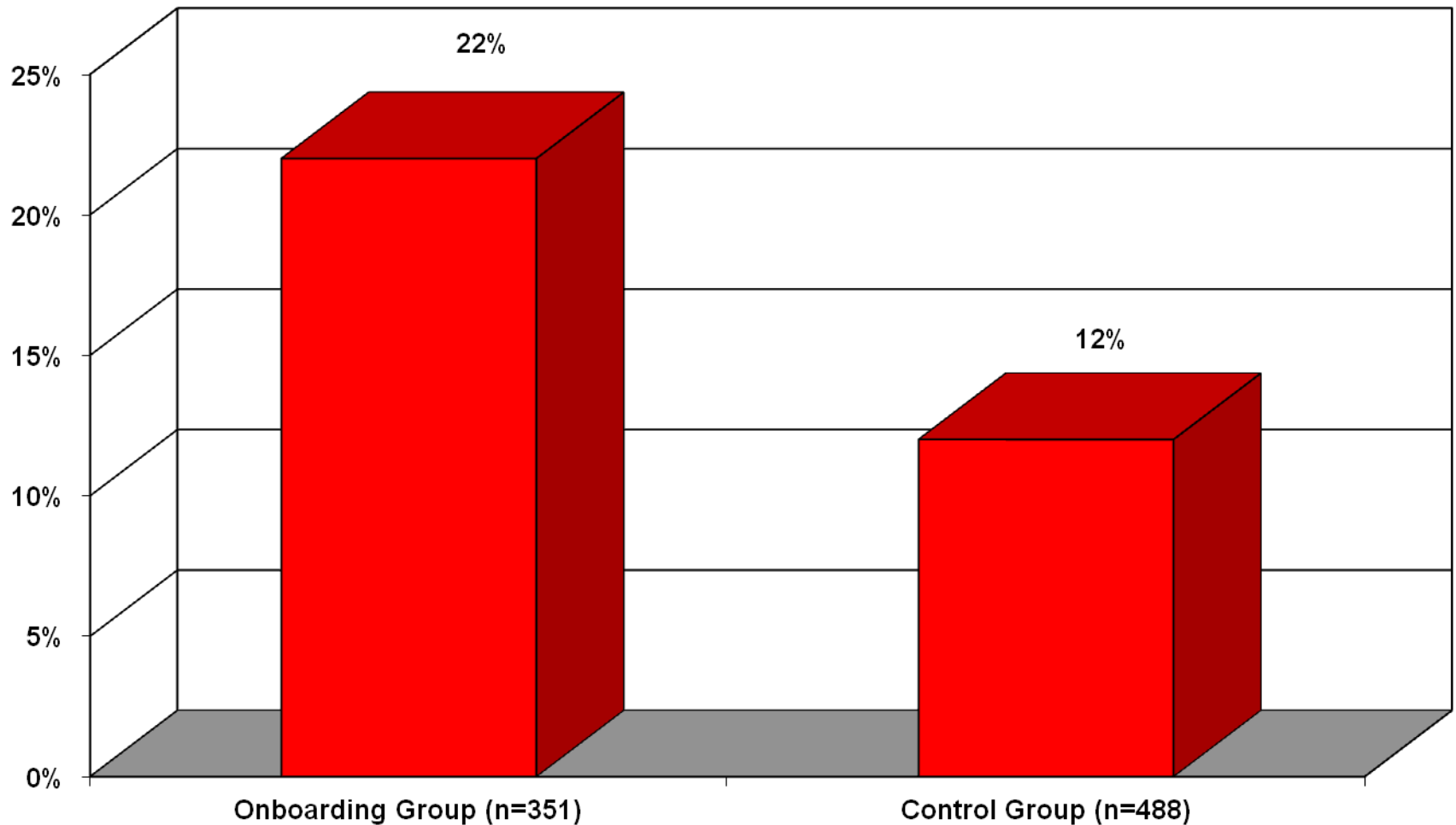
Abnormal LDL Results



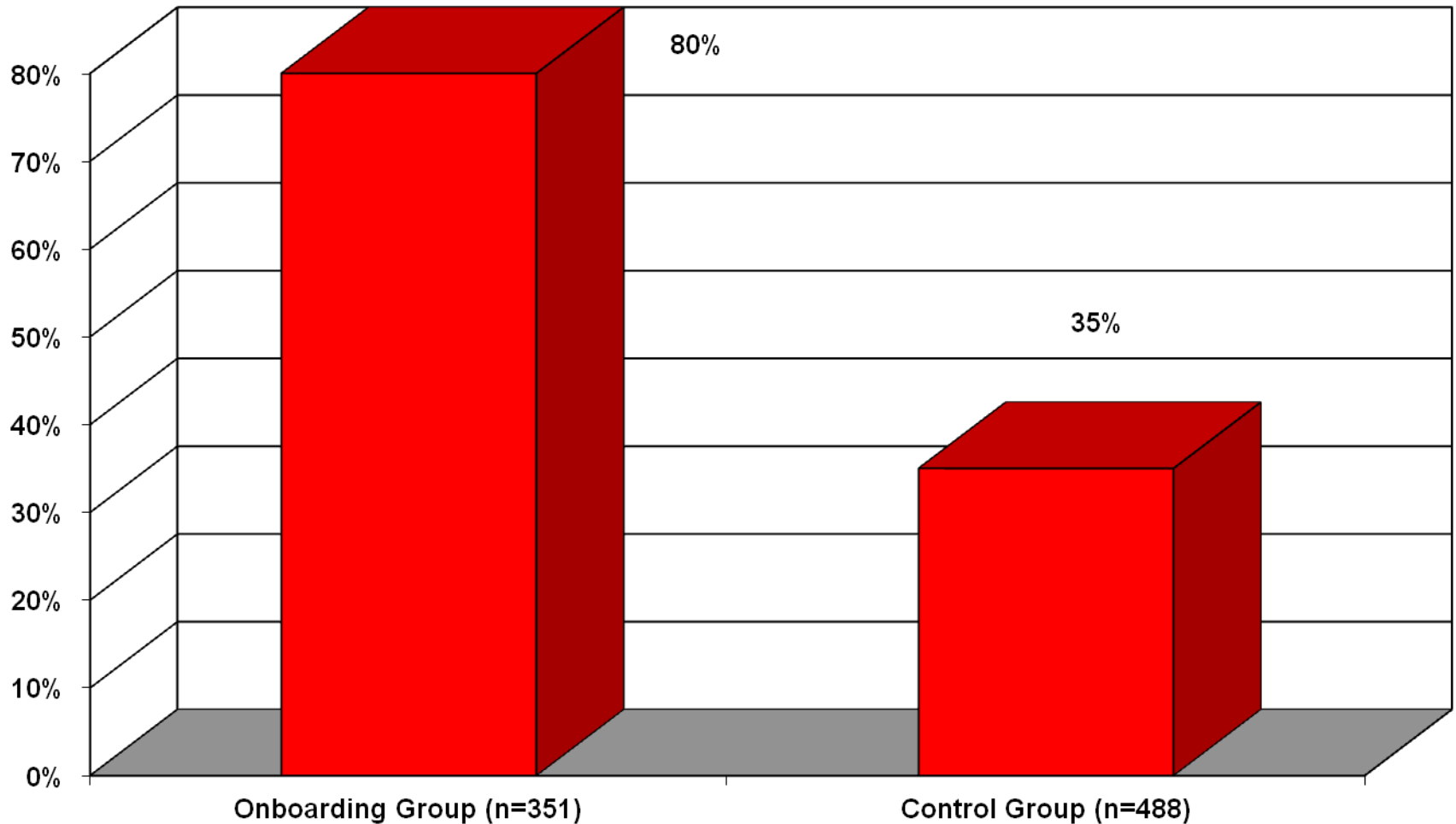
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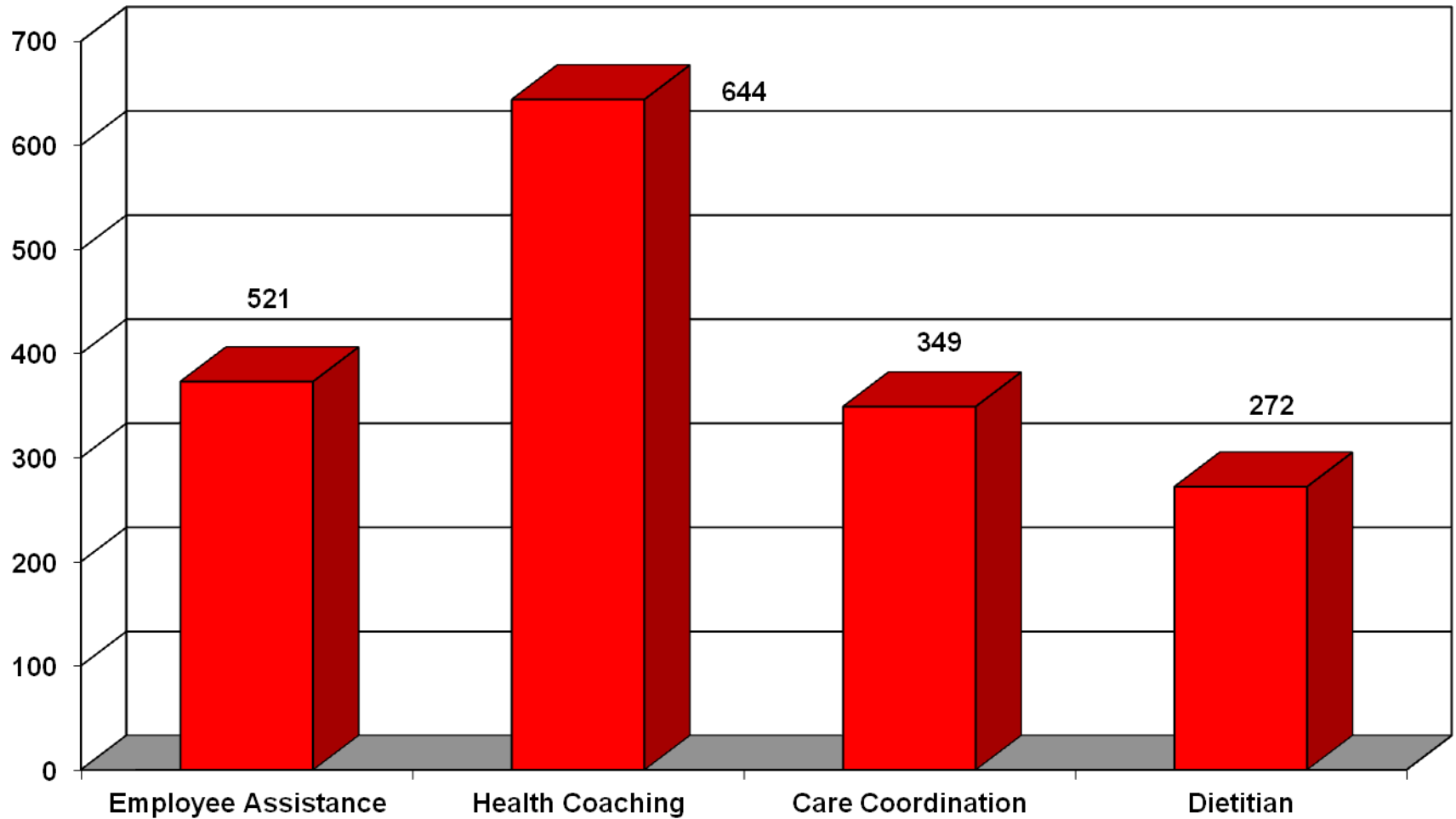
Resource Engagement



PHA Completion Rates



Benefit Information Given



n=768



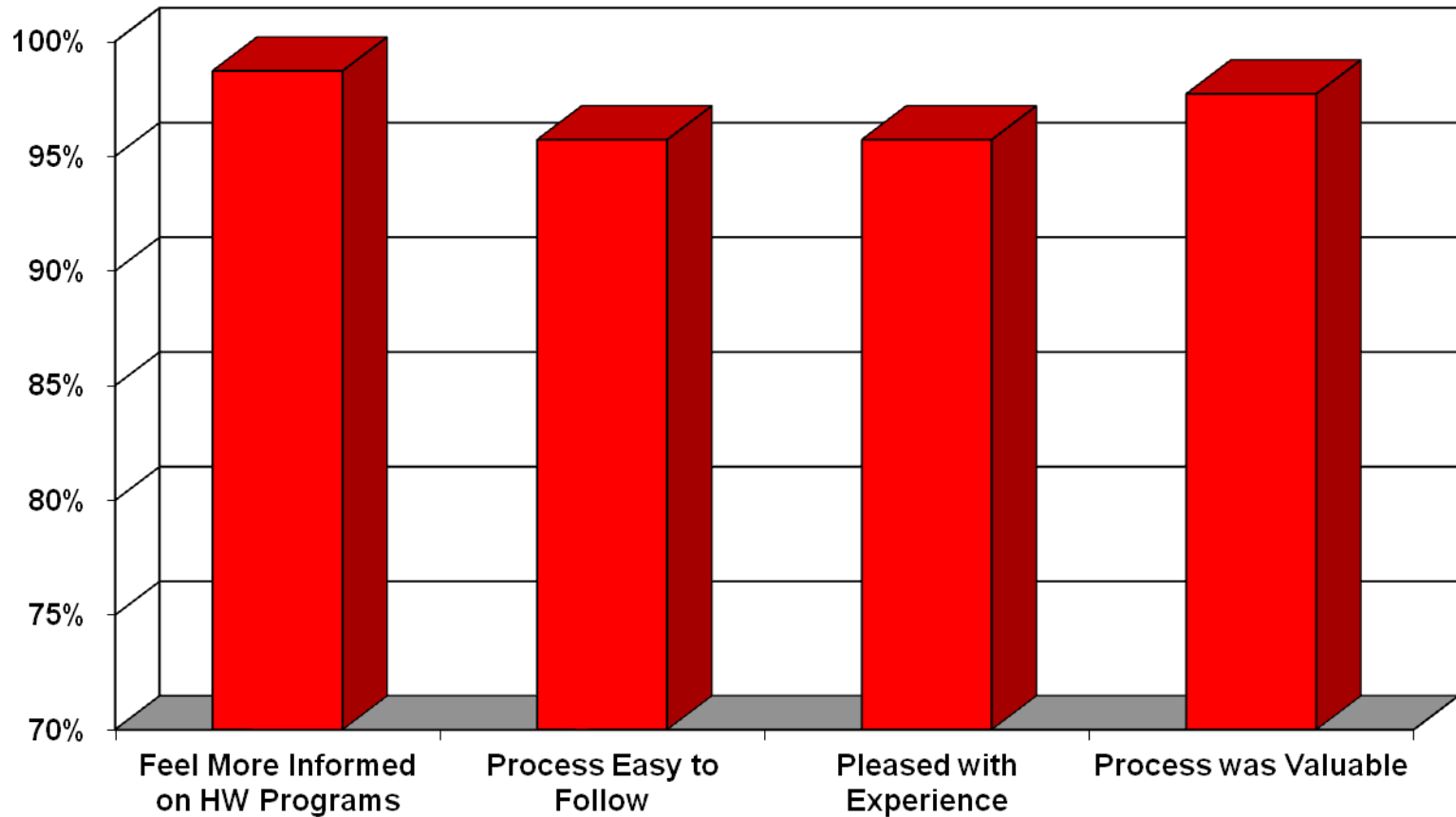
Pertinent Findings

- **76%** of New Hires given OSU PCP information
- **11%** of New Hires are followed by the CNP or Bridge Care physician
- **2%** of patients were deemed to have Urgent results
 - 45% Non-Urgent
 - 53% Normal

n=768



New Hire Satisfaction Results



“Wonderful set-up from start to finish. It felt very organized... like the university and its staff were expecting me.”

“The entire process from start to finish was extremely efficient.”

“The wellness nurse was very helpful and pleasant, very knowledgeable about the material presented.”



Clinical Review



Clinical Case: Hypertension

- 56 yo male with newly diagnosed Hypertension
 - BP 204 / 110 mmHg (goal < 140 / < 90)
 - Glucose 119 mg/dL (goal < 100) – A_{1C} normal
 - LDL 194 mg/dL (goal < 130)
- Seen immediately in Urgent Care
 - Seen in follow-up by CNP and pharmacist
 - Additional lab / tests ordered, medication initiated
 - EKG and echo showed enlarged heart (LVH)
- Established with new PCP (Rardin FP)
 - Most recent BP 118 / 76 mmHg



Hypertension: Impact

- LVH is associated with higher incidence of MI, sudden death, heart failure, dialysis dependent renal failure
 - 2.5 times more likely than someone without LVH¹
- Reducing BP by 12-13 mmHg can reduce:
 - 21% of AMI
 - 37% of CVA
 - 25% of all deaths from CVD

1. J Am Coll Cardiol 2001; 38:1829.

2. Campbell, et al, National Business Group on Health; 2006.



Clinical Case: New Diabetes

- 49 yo female patient with newly diagnosed Type 2 Diabetes
 - Glucose 150 mg/dL (goal < 100 mg/dL)
 - A_{1c} 7.4% (goal < 6.5% or < 7%)
 - Other biometrics normal
 - Health literacy / language barriers
- Seen by CNP, Bridge Care physician, Ophthalmology, and pharmacist
 - Medications initiated, no evidence of organ damage
- Connected with new PCP
 - Most recent A_{1c} 6.1%



New Diabetes: Impact

- Macrovascular (heart disease)
 - For every 1% increase in A_{1C} , there is an 18% increase in heart disease¹
- Microvascular (eyes, kidneys, nerves):
 - Decreasing A_{1C} by 1% leads to a 35% reduction in retinal, renal, and nerve related damage^{2,3}

1. Ann Intern Med 2004; 141:421.

2. Lancet 1998; 352:837.

3. BMJ 1995; 310:83.

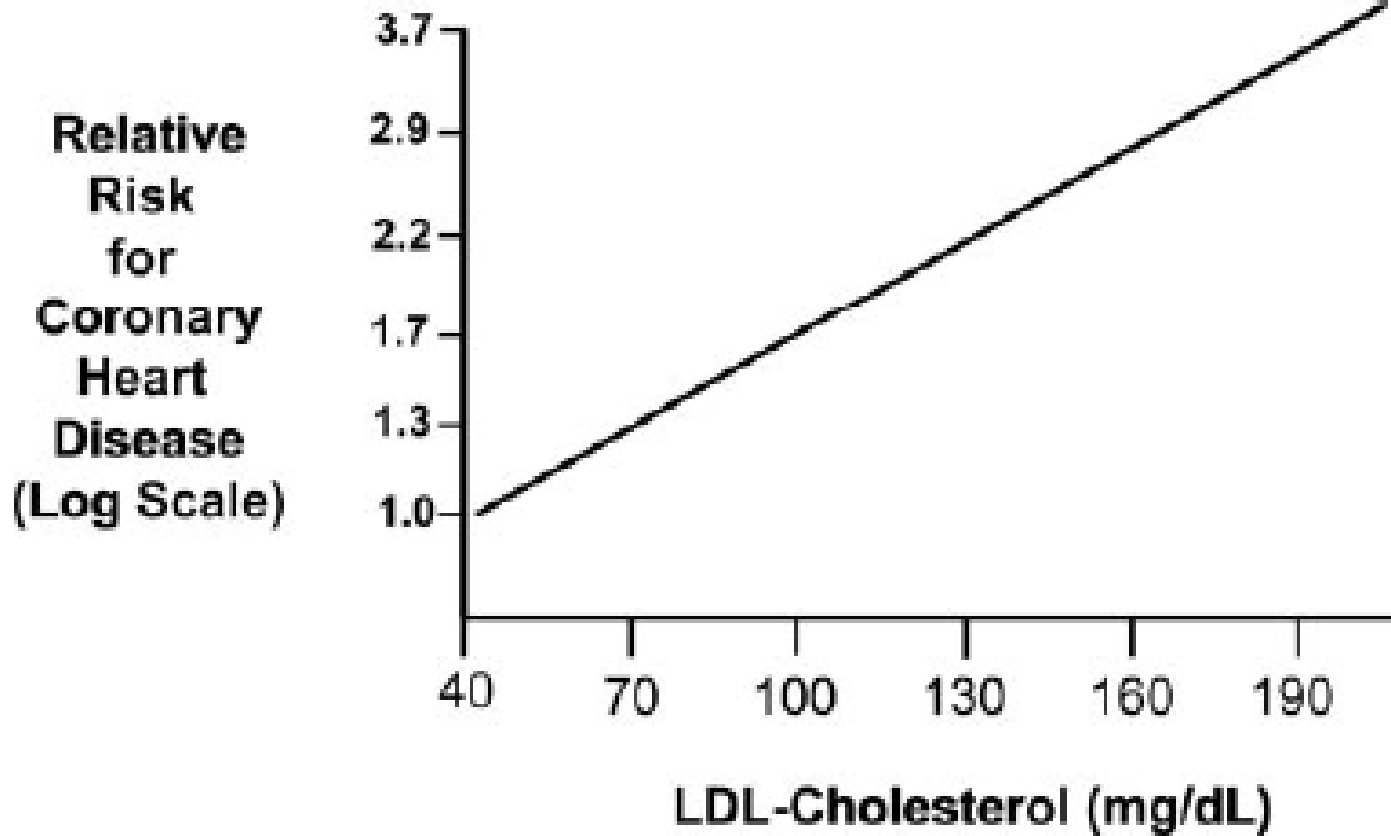


Clinical Case: Elevated Cholesterol

- 26 yo male with no history of health problems
 - LDL 237 mg/dL (goal < 160 mg/dL)
 - Other biometrics normal
 - Lives out of state
 - Guideline standards wouldn't have screened this patient until age 35
- Identified during On-Boarding, cardiac risk assessment performed by UHC staff, PCP appt scheduled
- Patient did not follow-up despite multiple outreach attempts



Elevated Cholesterol: Impact



For every 30 mg/dL increase in LDL, there is a 30% increase in the risk of Coronary Heart Disease

Program Benefit Analysis

- Potential Cost Avoidance

- Uncontrolled Diabetes: \$10,000 PPPY¹
- Heart Attack: \$55,000 per event²
- Obesity: \$1,429 PPPY³
- PHA: \$400 PPPY⁴

1. ADA: Economic costs of controlled and uncontrolled Diabetes in the US; 2007.
2. National Business Group on Health: Hidden symptoms and silent damage; June 2008.
3. Health Aff 2009;28:w822-31.
4. Internal data, The Ohio State University; 2011.



Implications

- This model takes a proactive approach to creating a culture of health and wellness for newly-hired employees. Pilot data will be used to implement targeted wellness resources and expand the program to the entire University population.



Moving Forward

- Change to non-fasting labs
- Incorporate all OSU employees
- Model for other universities to implement health and wellness upon new hire
- Increase utilization of informatics for outreach and engagement
- Improve health information data sharing



Acknowledgements

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Questions?

