Both have pre-diabetes: Who is at greatest risk for diabetes?

- 38 year old female
- BMI: 34
- HbA1c: 5.8
- Systolic BP 153
- Black

HIGHER RISK

- 44 year old male
- BMI: 22
- HbA1c: 6.1
- Systolic BP 121
- HDL: 100
- Former Smoker

LOW RISK

This example demonstrates the benefit of a multivariable model; HbA1c alone does not predict risk of developing diabetes.

### Importance of Study Findings

- Providers’ reluctance to screen for diabetes combined with high rates of prediabetes and limited resources require prioritization of patients for preventive intervention.
- DPP treatment requires substantial patient commitment and some patients are loathe to take medications due to side effects or other reasons.
- Providers currently do not have a robust way to estimate individualized benefit to support shared decision making.
- Patients with diabetes cost three times as much as patients without diabetes, according to data from one study site.
- Current health care climate motivates broad dissemination of these findings: value-based reimbursement, broad screening recommendations, CMS support of DPP.

### Implementation Strategy

- Target audience: primary care physician offices
- Sites and settings:
  - Site 1, Premier Medical Associates: Northeast, ambulatory practice, ~100 providers, Allscripts EHR
  - Site 2, Mercy Health: Midwest, integrated system, > 3,000 providers, Epic EHR
- Adapts to original intervention: predictive model adapted for EHR use
- Removal of variables like waist-to-hip ratio, see Figure 2 for complete list and example patient
- Added dummy variables for missing non-essential variables
- Strategies: pre-implementation focus groups and surveys with patients and providers; ongoing patient input

### Potential Impact

- Only 3.7% of patients with prediabetes receive metformin, and even fewer enroll in the DPP. Change is needed to empower providers with the tools to engage patients in shared decision making around treatment choices.
- This project will provide the necessary tools to help providers and systems prioritize limited resources to increase patient treatment, referral, and adherence through more targeted and tailored treatment recommendations.
- Anticipate rapid uptake among AMGA members, including lessons learned about embedding calculators into local EHRs and experience and use by primary care providers.
- Potential to impact the ~86 million people in the US, one in three adults, with prediabetes. Most are undiagnosed and therefore untreated.

### References