# TVHC SKILLS TEST

Presented by Hector Sanchez

# Introduction & Background

### Why Blood Pressure Matters:

- High BP is a major risk factor for strokes, heart disease, and kidney failure
- It can go unnoticed without routine monitoring
- BP Management can improve long term health outcomes
- Clinical Interventions play a key role in improving BP control

"Nearly 1 in 2 U.S. adults has high blood pressure" – American Heart Association

# OBJECTIVE

- Assess the impact of various interventions on BP control
- Compare pre- and post- intervention blood pressure metrics
- Calculate the percentage of patients achieving BP control (systolic < 140 mmHg and diastolic < 90 mmHg) after intervention</li>
- Identify trends in outcomes by demographic characteristics and provider or site

# KEY FINDINGS SUMMARY

#### What I Discovered:

- 60% of patients achieved controlled BP post-intervention
- 25% misclassified, risking missed follow up
- Clinical Pharmacy Program led with 81.8% control, followed by Health Coaching(76.9%) and Medication Adjustment (75%);
- Home BP Monitoring and Care Team Outreach below 41%
- BP control varied by site (52%-71%) with Site A accounting for 56% of misclassification errors
- Demographic Disparities
  - Males (63.8%) > Females (54.8%)
  - Medicare/uninsured(~56%) < Medicaid/commercial (~63%)</li>
  - BP Control declines with age: 74% (30-44 yrs) -> 48% (60-74 yrs)

# BEFORE & AFTER RESULTS

#### **Blood Pressure Improvements After Intervention**

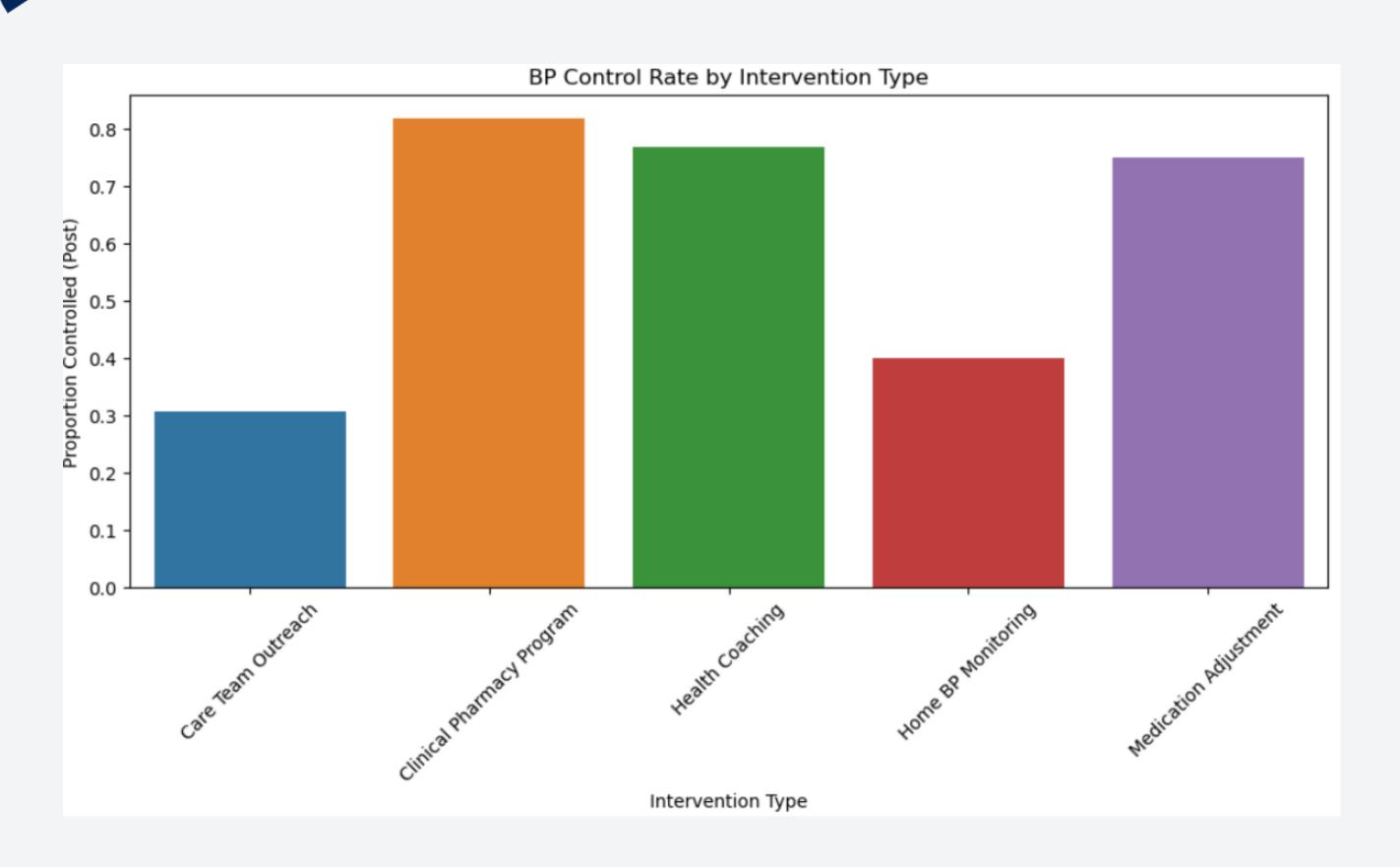
- Average Systolic BP dropped by 8.25 mmHg (~6% decrease)
- Average Diastolic BP dropped by 3.68 mmHg) (~4% decrease)

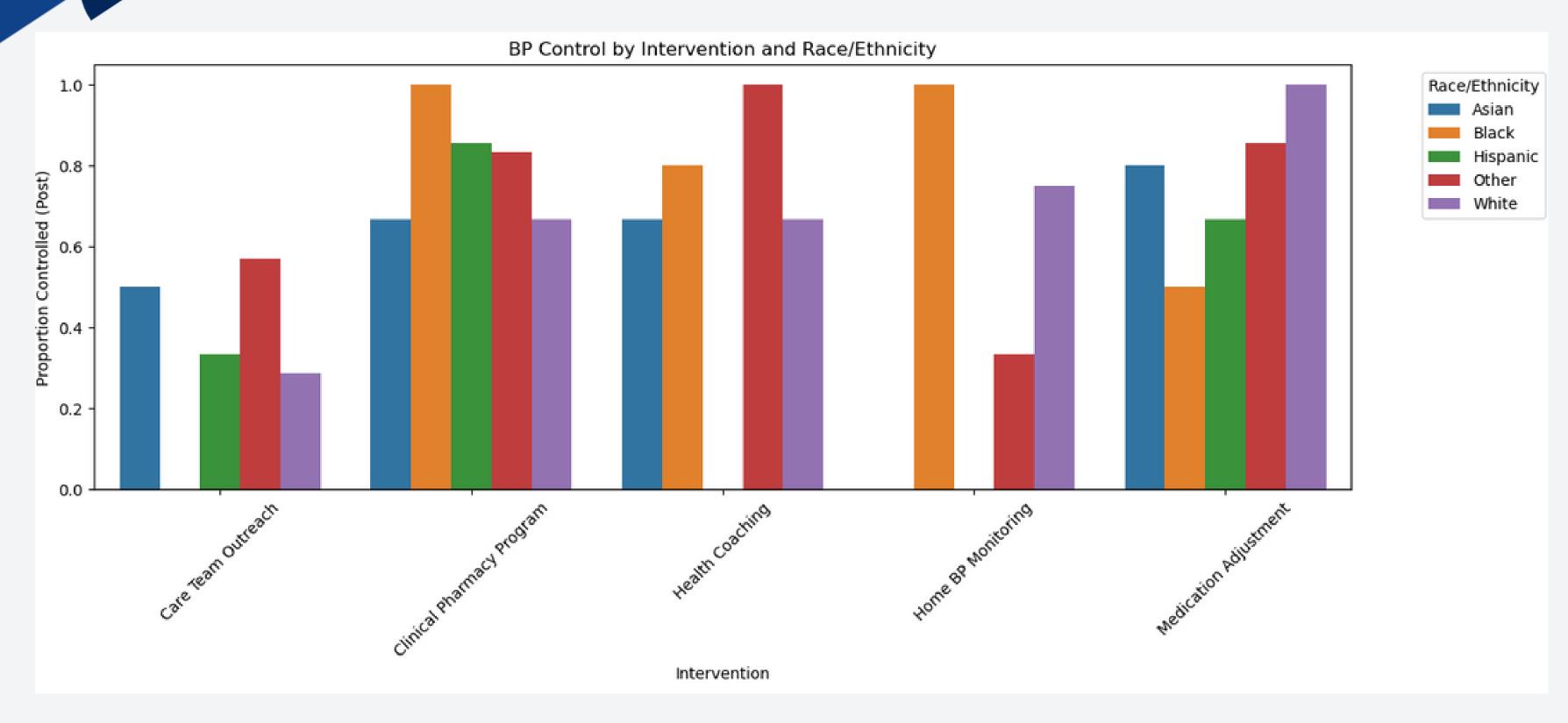
#### **Blood Pressure Improvements by Intervention**

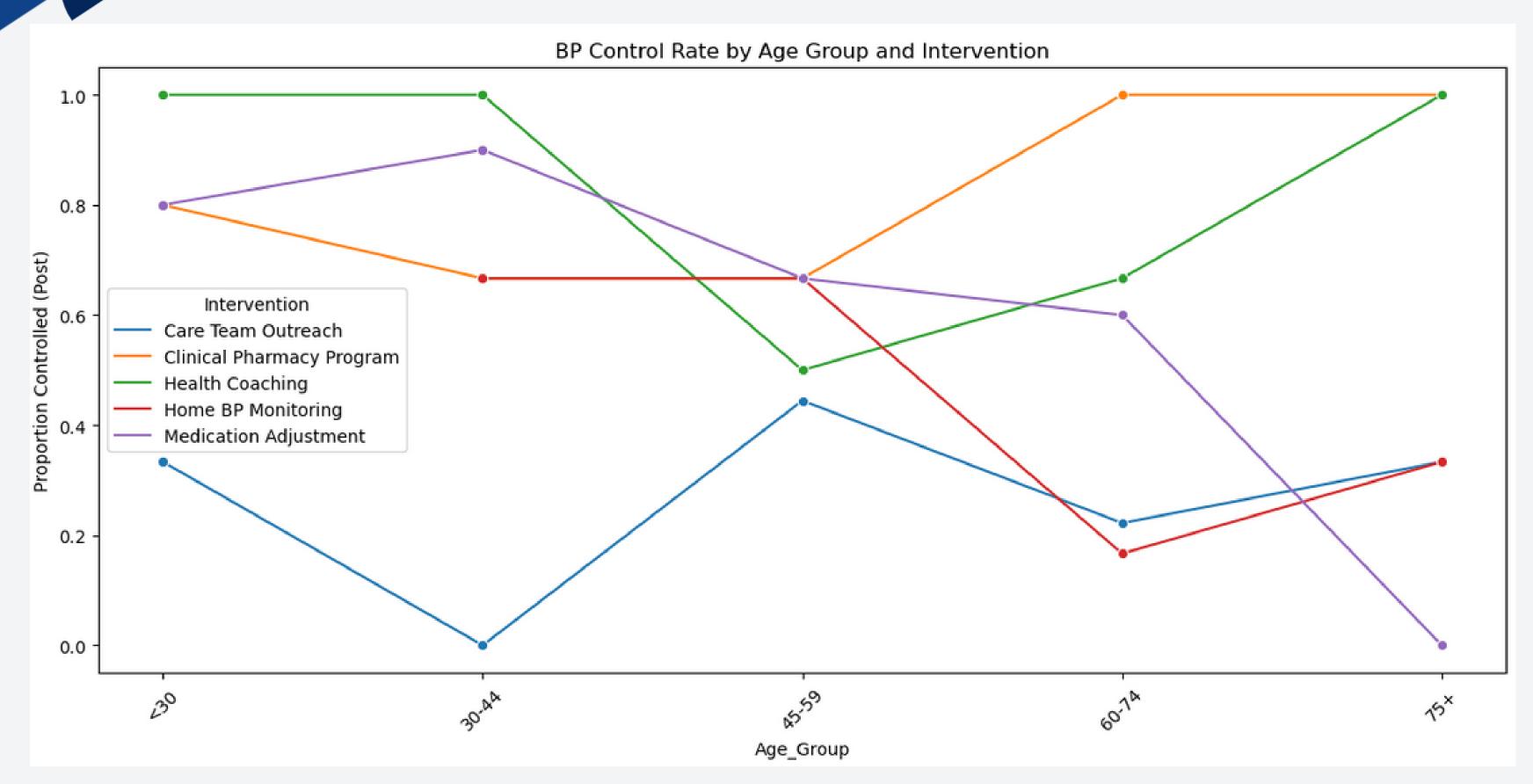
- Clinical Pharmacy Program
  - Systolic  $\downarrow$  **11.00 mmHg** (**8.06**%) and Diastolic  $\downarrow$  **4.91 mmHg** (**5.52**%)
- Medication Adjustment

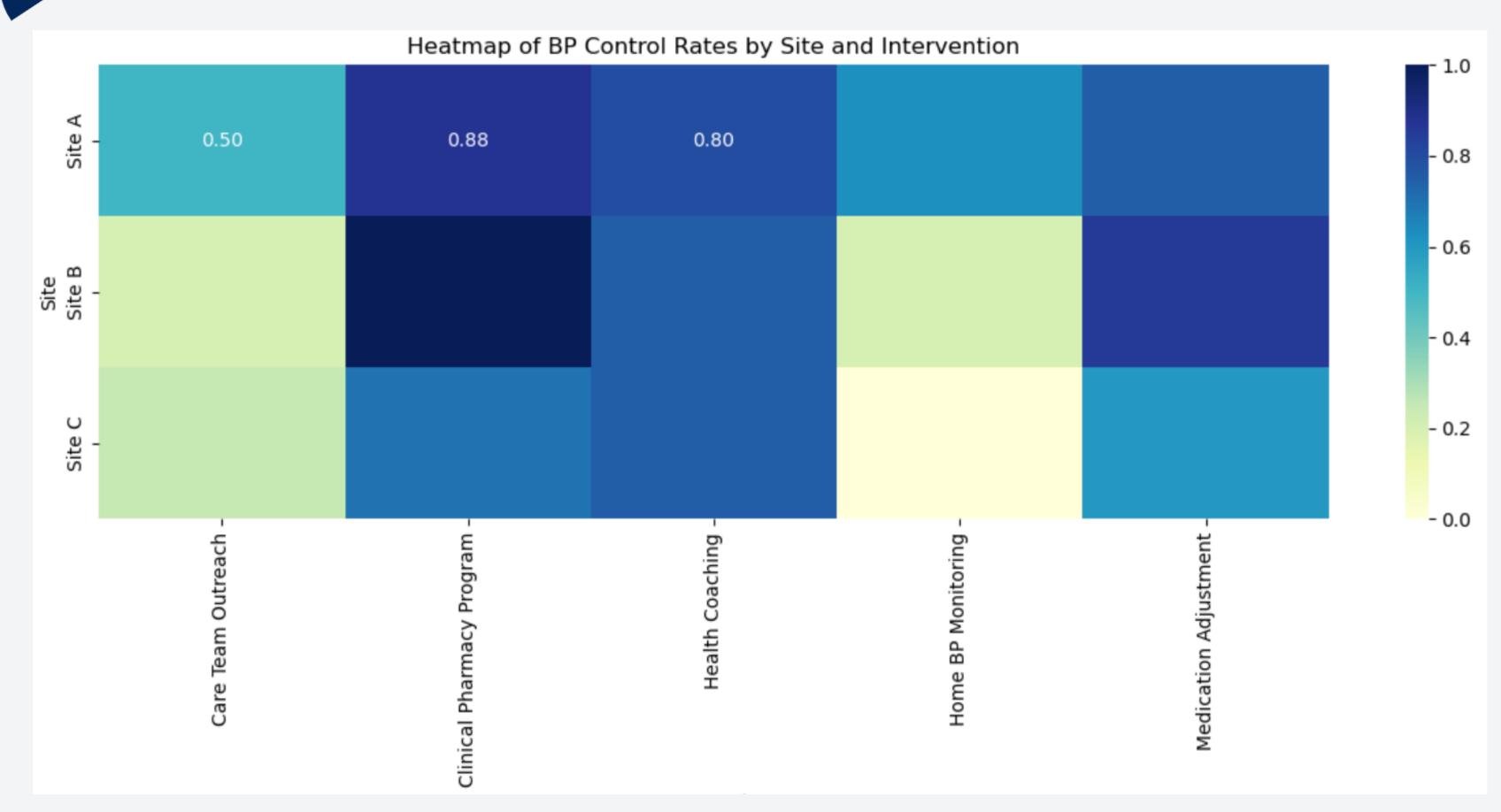
Systolic  $\downarrow$  10.75 mmHg (7.81%) and Diastolic  $\downarrow$  4.58 mmHg (5.11%)

- Health Coaching
  - Systolic  $\downarrow$  **8.77 mmHg (6.26%)** and Diastolic  $\downarrow$  **3.62 mmHg (4.00%)**
- Home BP Monitoring
  - Systolic  $\downarrow$  6.00 mmHg (4.34%) and Diastolic  $\downarrow$  3.73 mmHg (4.18%)
- Care Team Outreach
  - Systolic  $\downarrow$  **4.65 mmHg (3.36%)** and Diastolic  $\downarrow$  **1.81 mmHg (2.01%)**









# EQUITY & DEMOGRAPHICS

#### Who Benefits Most?:

- Males: Higher BP Control (63.8%)
- Clinical Pharmacy Program was effective across ALL race groups
- Medicaid patients: Strong outcomes across most interventions (100% in some)

#### Who Needs More Support?:

- Females: Lower BP control (54.8%)
- BP Control declined with age: 74% in ages 30-44 and 48% in ages 60-74
- Medicare & Uninsured: Lower control (~56%) and less consistent success

# RECOMMENDATIONS

#### 1. Improve Data Quality

Standardize BP control classification across sites to reduce misreporting

#### 2. Expand Access to High-Impact Interventions

- Scale up effective interventions for broader patient reach
- 3. Target At-Risk Populations
  - Tailor interventions for subgroups with lower BP control
- 4. Standardize Best-Practices Across Sites
  - Apply workflows and staffing models from high-performing sites
- 5. Enhance Reporting Metrics
  - Include mean BP change and percent improvement in dashboards for a more complex view of clinical progress

# Q&A/Appendix

View My Analysis Here -> Github

# THANK YOU!