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
- 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%)
 - BP Control declines with age: 74% (30-44 yrs) -> 48% (60-74 yrs)

BEFORE & AFTER RESULTS

Blood Pressure Improvements After Intervention

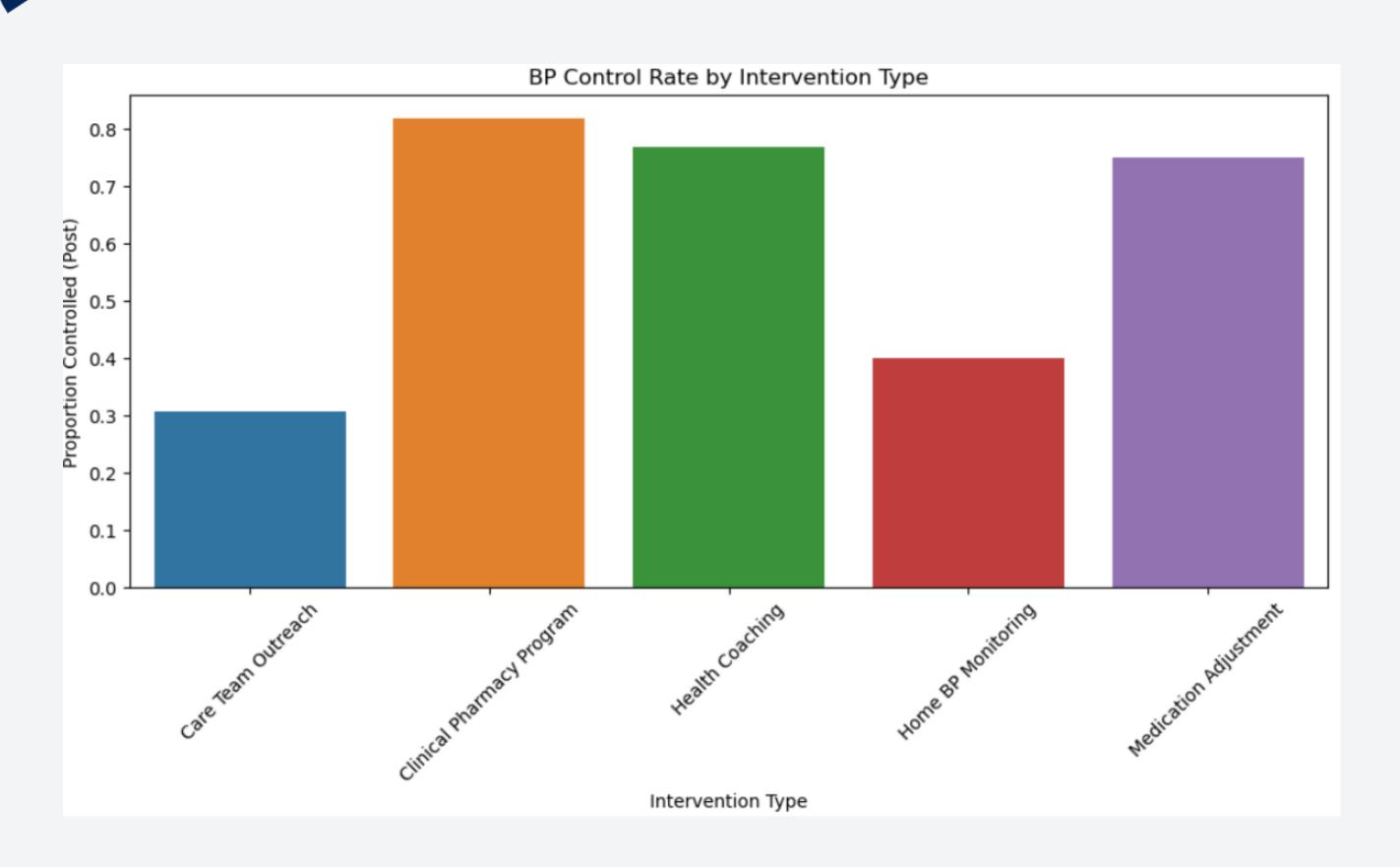
- Average Systolic BP dropped by 8.25 mmHg (~6% decrease)
- Average Diastolic BP dropped by 3.68 mmHg) (~4% decrease)

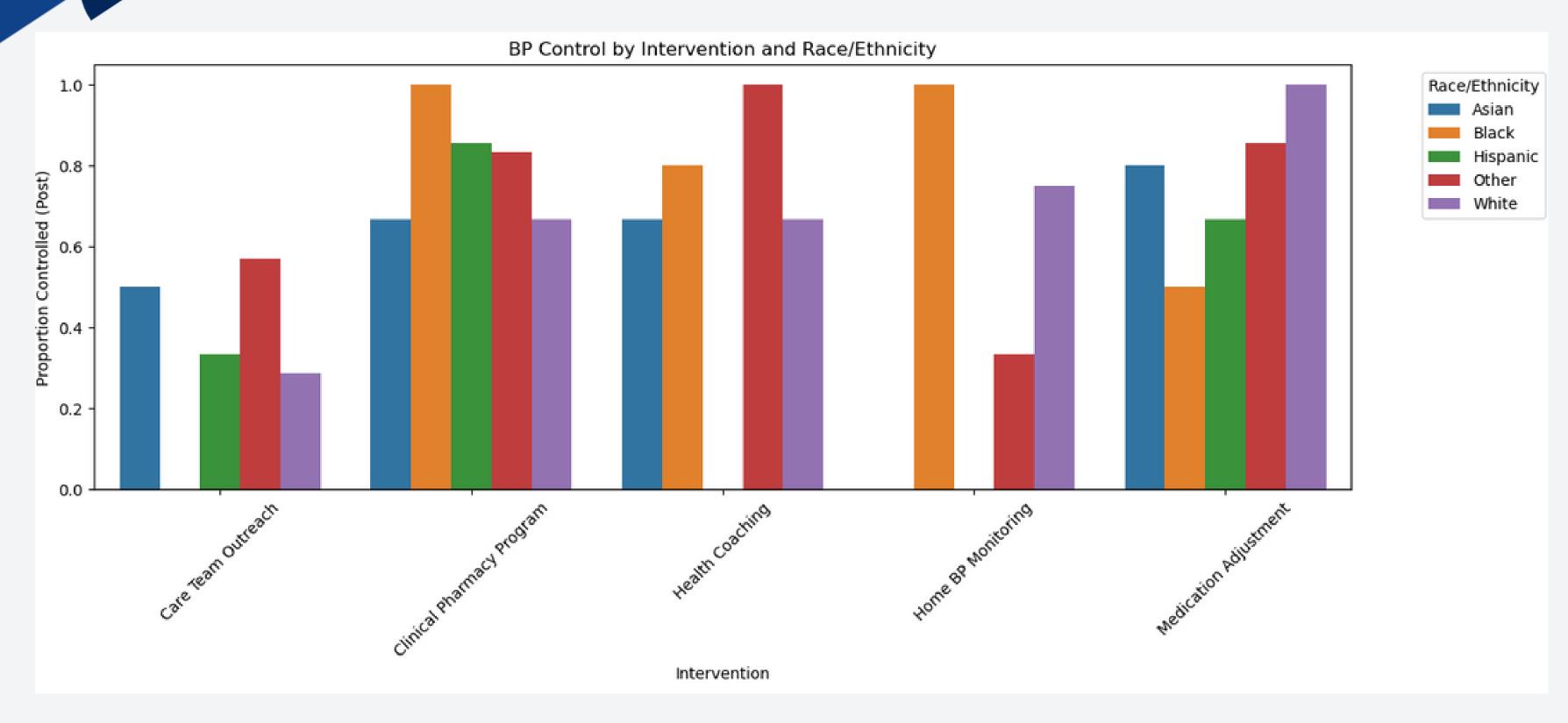
Blood Pressure Improvements by Intervention

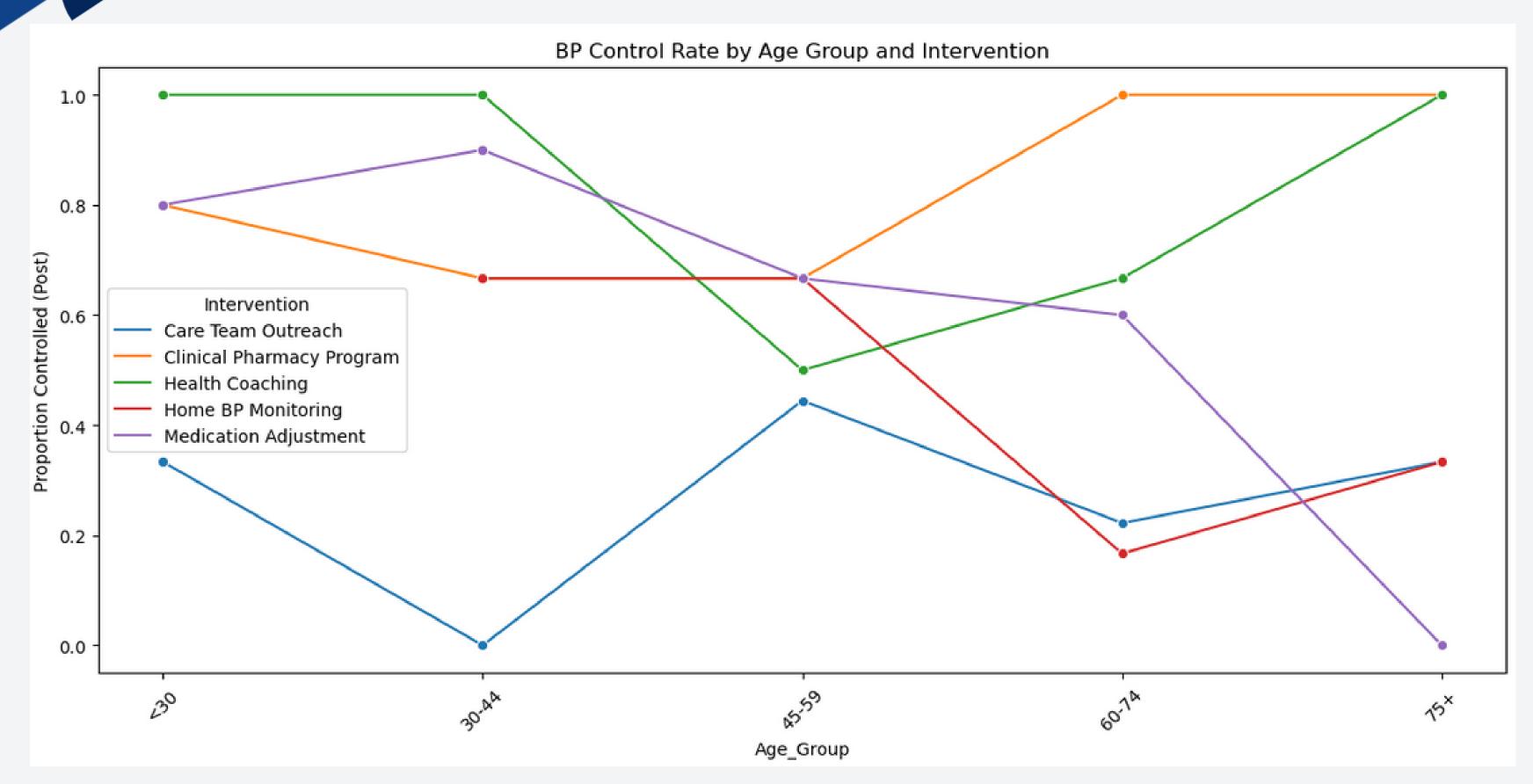
- Clinical Pharmacy Program
 - Systolic \downarrow **11.00 mmHg** (**8.06**%) and Diastolic \downarrow **4.91 mmHg** (**5.52**%)
- Medication Adjustment

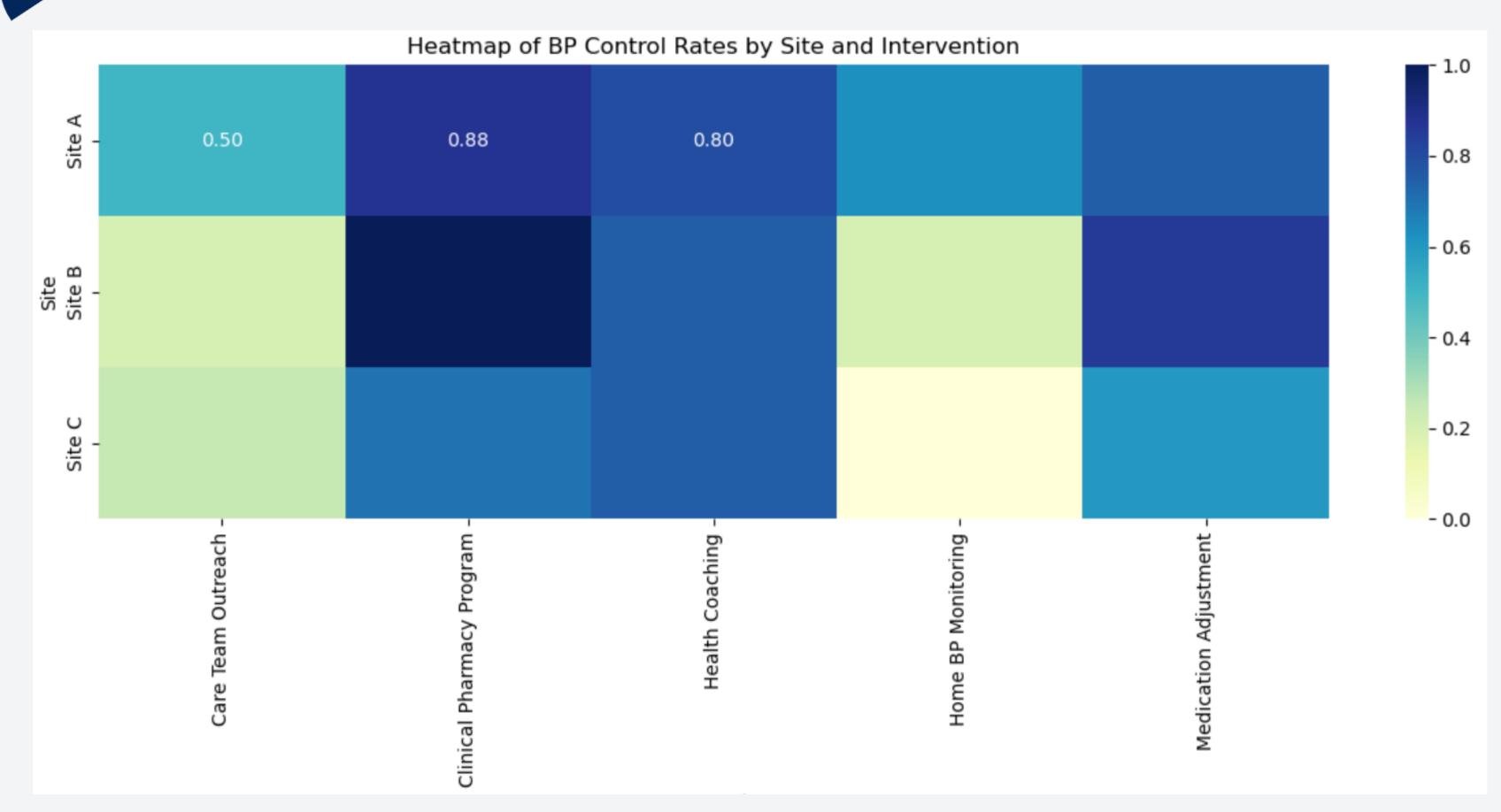
Systolic \downarrow 10.75 mmHg (7.81%) and Diastolic \downarrow 4.58 mmHg (5.11%)

- 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 Full Analysis on Github:

https://github.com/hesanche94/TVHC/tree/main

THANK YOU!