

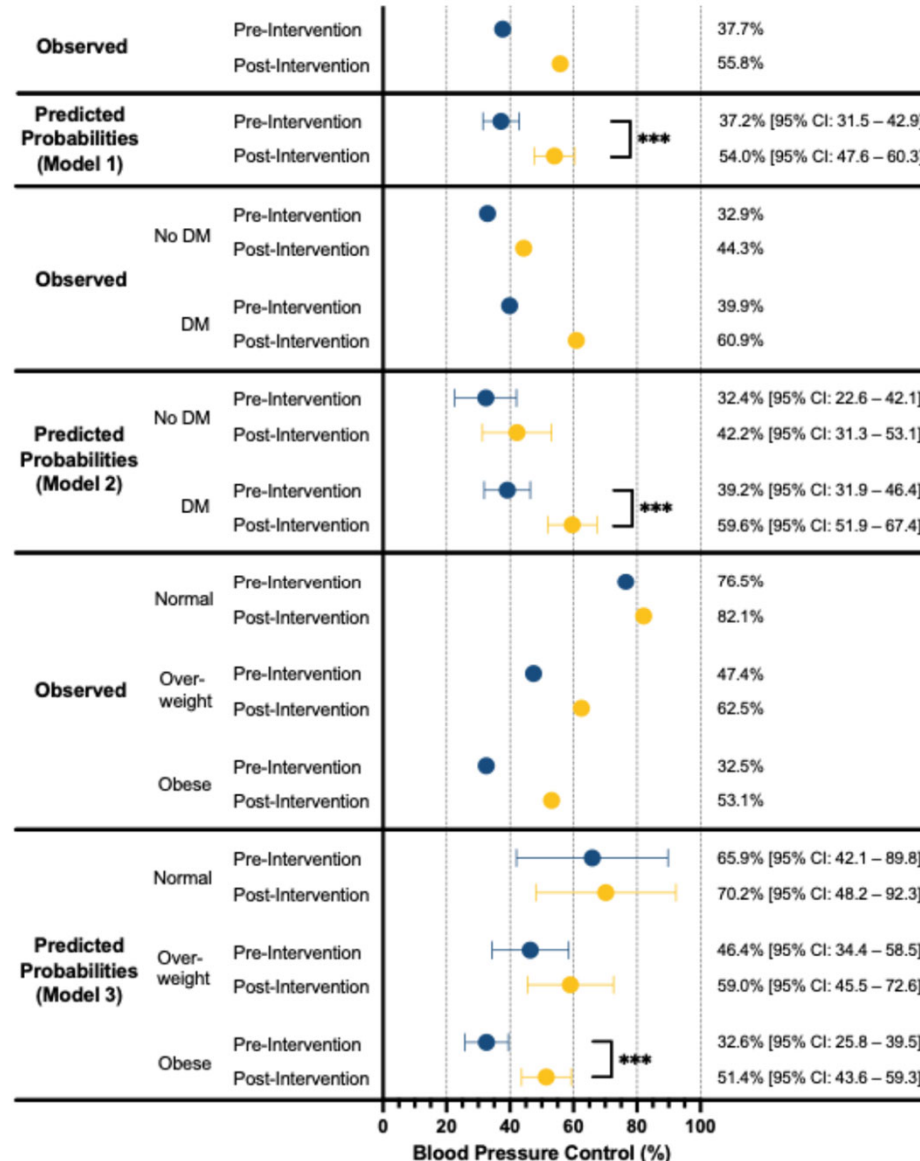
INTRODUCTION

- Hypertension (HTN) is a significant risk factor for cardiovascular disease, which is the leading cause of death in United States.
- HTN is highly prevalent among uninsured and Hispanic populations.
- Evaluate HTN outcomes following implementation of blood pressure (BP) recheck workflow at UCSD Student-Run Free Clinic Project (SRFCP).

METHODS

- Retrospective chart review of primary care encounters (n=851) at UCSD SRFCP from August 2023 to August 2025 among patients with HTN (n=114) one year before (pre-intervention) and after (post-intervention) implementation of BP recheck workflow.
- BP Workflow:** remeasure BP for a second reading after 5 minutes of rest from the initial reading, if not at goal ($\geq 130/80$ mmHg), and for a third reading if the repeat BP remained above goal.
- BP control modelled using mixed-effects logistic regression, adjusting for patient-specific random effects, encounter-level attributes (age, BMI, clinic site), and patient-level characteristics (gender, diabetes mellitus (DM)).
- Model 1** = intervention period with covariates: encounter-level attributes and participant-level characteristics.
- Model 2** = added to model 1 interaction between intervention and DM status.
- Model 3** = added to model 1 interaction between intervention and body mass index (BMI).

Figure A: The observed and predicted probabilities of BP control at primary care encounters determined by both systolic blood pressure (SBP) and diastolic blood pressure (DBP) at goal ($<130/80$ mmHg). *** $p < 0.001$



RESULTS

- BP control increased significantly (all $p < 0.001$):
- Patients with HTN:** from 37.2% pre-intervention (95% CI: 31.5%–42.9%) to 54.0% post-intervention (95% CI: 47.6%–60.3%) vs. 8.0% and 13.9% among uninsured and Hispanic nationally (NHANES 2017–2020)
- Patients with HTN and DM:** from 39.2% pre-intervention (95% CI: 31.9%–46.4%) to 59.6% post-intervention (95% CI: 51.9%–67.4%) vs. 23.3% nationally (NHANES 2017–2020)
- Patients with HTN and Obesity:** from 32.6% pre-intervention (95% CI: 25.8%–39.5%) to 51.4% post-intervention (95% CI: 43.6%–59.3%) vs. 19.0% nationally (NHANES 2017–2020)



3 out of 5
Patients with HTN
and Concurrent DM



3.5 out of 5
Patients with HTN
and Concurrent Obesity

57% 55 86%

Patients with HTN were Female Mean Age (years) Patient with HTN Patients with HTN were Hispanic

KEY TAKEAWAYS

- A BP recheck workflow can be used to improve rates of BP control among patients with HTN at SRFCPs and to exceed national estimates among those who are uninsured, Hispanic, or have concurrent DM or obesity.