

# Evaluation of health disparities and risk factors among hypertensive patients

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# Background

- Hypertension (HTN) affects > 30% of the U.S. adult population<sup>1</sup>
  - HTN uncontrolled in > 50%<sup>2</sup>
- Racial minorities and low socioeconomic status most affected<sup>3</sup>
- HTN is an important modifiable risk factor for CV disease<sup>1</sup>
- HTN contributes to the burden of heart disease, stroke, kidney disease, and premature mortality and disability<sup>4</sup>
- It is well established that health status, access to care, and quality of care are not equal among all populations in the U.S.<sup>5</sup>
- Healthy People 2020 overarching goals include:
  - Achieving health equity
  - Eliminating health disparities
  - Improving the health of all groups
- Reducing health disparities remains a major public health challenge<sup>6</sup>
- Increasing our understanding of disparities in hypertension prevalence, awareness, and management is warranted<sup>5</sup>

## **Objectives**

- To identify patients with diagnosed HTN (ICD 10 code) and undiagnosed HTN (BP > 140/90 mmHg with no ICD 10 code)
- To identify comorbid risk factors among the three participating ambulatory clinics within the UR Medicine Health System

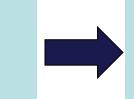
### Study Design: Retrospective analysis

- Study Population: Electronic medical records (EMRs) for all adult patients (≥ 18 years of age) in the three participating UR Medicine ambulatory clinics will be queried from April 1, 2015 April 1, 2016
- Data to be collected:
- Race/ethnicity
- Sex
- Socioeconomic status (median annual income based on zip code)
- Geographic location (zip code)
- Diagnosed HTN (ICD 10 Code: I10, I11.9, I11.0, I12.9, I12.0, I13.0, I13.2, I13.10, I13.11)
- Undiagnosed HTN (BP > 140/90 mmHg with no ICD 10 code)
- Cardiovascular Risk Factors:
  - BMI (≥ 30 kg/m<sup>2</sup>)
  - Elevated total cholesterol (≥ 200 mg/dL)
  - LDL (≥ 130 mg/dL)
  - Triglycerides (≥ 150 mg/dL)
- HbA1c > 7%
- Kidney disease (eGFR < 60 mL/min/1.73m²)</li>
- Tobacco use (yes/no)
- Alcohol use (yes/no)

### Methods

Timeline for Completion:

RSRB Approval June 2016



Data Capture July 2016



Data Analysis August 2016

#### Data Analysis:

- Descriptive statistics will be utilized to report the prevalence of diagnosed HTN (ICD 10 code) and undiagnosed HTN (BP > 140/90 mmHg with no ICD 10 code)
- Univariate logistic regression
  - All relevant risk factors
- Multivariate logistic regression
  - Inclusion of variables with p<0.20 from univariate analysis</li>

#### Conclusion

 It is expected that data generated in this analysis will be instrumental in the development, planning, implementation, and evaluation of interventions designed to improve BP control in the three participating ambulatory clinics

#### EFERENCES:

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**DISCLOSURE:** Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Amber Crowley: Nothing to disclose; Angela Nagel: Nothing to disclose; Nabila Ahmed-Sarwar: Nothing to disclose; Thomas Carroll: Nothing to disclose