

# **Morningside Graduate School of Biomedical Sciences Clinical & Population Health Research Program**

Announces the PhD Thesis Defense of

## **MELISSA GOULDING**

### **ADHERENCE TO CLINICAL PRACTICE GUIDELINES FOR SCREENING AND MANAGEMENT OF PEDIATRIC HIGH BLOOD PRESSURE: A MIXED METHODS STUDY**

Wednesday, June 28, 2023 at 10:30 a.m. in AS9.2072 and zoom

**Background:** Prevention and early detection of pediatric hypertension are crucial due to its negative effects on cardiovascular health across the life course. As such, the American Academy of Pediatrics recommends regular blood pressure screening and follow-up. However, the extent to which their 2017 guidelines have been implemented into practice is unknown.

**Methods:** This dissertation included three projects conducted in a large health system in Central, MA. (1) Electronic health record data from children aged 3-17 years were used to determine the prevalence of guideline adherent screening and differences across child- and clinic-level factors related to social vulnerability, and (2) the prevalence of guideline adherent follow-up and differences across these child- and clinic-level factors. (3) Semi-structured interviews were conducted with pediatric and family medicine providers.

**Main Results:** The prevalence of adherence was 89% for screening and 18% for follow-up. Children with obesity and public insurance had lower odds of receiving guideline adherent screening. Children who were patients at clinics with larger Medicaid populations and larger patient panels had lower odds of receiving both guideline adherent screening and follow-up. Qualitative interviews revealed lack of trust in blood pressure readings, lack of resources, and logistical challenges were barriers to guideline adherence.

**Conclusion:** This mixed methods dissertation identified disparities in blood pressure screening and sub-optimal rates of guideline concordant hypertension follow-up among pediatric populations. Furthermore, through its description of differences in adherence and contextualization of provider perceived barriers, it identifies important targets for future interventions to improve prevention and care in relation to pediatric hypertension.

#### **Mentor**

Stephenie Lemon, PhD

#### **Dissertation Exam Committee**

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