



# AMERICAN ACADEMY OF FAMILY PHYSICIANS

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## F O U N D A T I O N

### **Abstract of Study Funded by the Joint Grant Awards Program in 2013**

#### **Implementation of a Novel Hypertension Clinical Practice Guideline in a Large Primary Care Practice: Process Evaluation, Uptake and Impact on Clinical Outcomes (G1307)**

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#### **Abstract**

Hypertension is a very common but asymptomatic chronic disease that leads to morbidity and mortality related to cardiovascular and renal disease. Family physicians visit with patients more frequently for hypertension than for any other medical condition. Fortunately, adequate treatment can reduce the risk of heart disease, stroke, end-stage renal failure and peripheral arterial disease. Clinical practice guidelines such as the Seventh Report of The Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC VII) are available to help guide diagnostic and treatment decisions but adherence to available guidelines is variable and less than half of patients meet recommended treatment goals. In addition, guidelines such as JNC VII need to be updated regularly with robust evidence from randomized, controlled clinical trials and must be adapted to different practice environments. While some data are available to guide the implementation process for such guidelines, the field of implementation science is relatively new and research is needed to determine the optimal combination of facilitation strategy, context and guideline characteristics to ensure successful implementation. Primary care physicians are faced with many clinical practice guidelines to cover the broad scope of the field. Protocols for disseminating, implementing and reinforcing high-quality guidelines are needed to efficiently and effectively improve adherence to best-practices. Here, we propose to implement a novel, technology-enhanced hypertension clinical practice guidelines (HTN-CPG) and study the uptake and adherence to the guideline in a large primary care office. The intervention will consist of dissemination of the HTN-CPG by didactic lecture, reminders and implementation of four electronic health record (EHR) facilitation elements that will complement the CPG. The primary outcome of this study will be the frequency of self-reported use of the HTN-CPG after the intervention and use of EHR elements. A secondary outcome for this study will be the effect of the intervention on pre- and post-

intervention average blood pressure for a paired cohort of patients. Finally, we will compare the provider-level blood pressure control rate in high- and low-utilizers of the HTN-CPG. Throughout, we will document the implementation process to inform future studies. We hypothesize that, by combining a high-quality CPG, a favorable practice context and effective facilitation, adherence to the HTN-CPG will be high and patient-level outcomes will improve. This study has the potential to impact a large number of providers and patients and will contribute to our understanding of implementation science. Finally, the impact of this knowledge on the field of family medicine, where translating evidence-based medicine into practice is both highly valued and absolutely necessary, will be great.