The prevalence of hypertension is greater than 25% in the United States.\(^2,^4\)
- Treatment is associated with a decreased incidence in coronary artery disease, heart failure, chronic kidney disease, stroke, intracerebral hemorrhage, and peripheral arterial disease.\(^2\)
- Hypertension is one of the leading modifiable risk factors in vascular mortality.\(^2,^4\)
- Even a 3 mmHg reduction in systolic blood pressure could lead to an 8% reduction in stroke mortality and a 5% reduction in mortality from coronary artery disease.\(^1\)
- Hypertension is the primary focus of the American Heart Association strategic plan to achieve a 20% reduction in mortality from cardiovascular disease and stroke by 2020.\(^5\)
- This requires a system level approach to:
  1. Identify all patients eligible for treatment
  2. Effective diagnosis and therapeutic management
  3. Systematic follow up for initiation or intensification of therapy.\(^5\)

### Purpose

The objectives of this project are to:
- Improve blood pressure control from 75% to 82.5% among patients ages 18 and up at Sugarhouse Family Clinic at the University of Utah
  - Blood Pressure Control is defined as:
    - \(<140/90\) for ages 18-59
    - \(<150/90\) for ages \(>60\) without diabetes
    - \(<140/90\) for ages \(>60\) with diabetes
  - Increase standard 2-4 week follow up after elevated BP (AHA recommendation).\(^5\)

### Intervention:

Providers and medical assistants were instructed to use standard 2-4 week follow up after an elevated blood pressure reading via:
- Clinic Quality Meeting announcement
- Medical assistant instruction from nurse RN supervisor
- Provider inbox announcement flyer

### Procedure:

- If patient has blood pressure \(\geq 140\) systolic or \(\geq 90\) diastolic, then
- Medical assistant places reminder card over the patient room computer, and
- Provider alerted by card to address blood pressure during the visit, and
- 2-4 week follow up is scheduled for re-evaluation of blood pressure

### Analysis:

All patients at Sugarhouse Family Clinic at a nurse or provider visit with elevated blood pressure reading (defined above)
- Baseline: 9/1/2015 - 11/30/2015
- Post-Intervention: 1/1/2016 - 4/1/2016

### Outcomes:

- Blood pressure control percentage for clinic
- Percentage of scheduled follow-up appointments
- Percentage of no-shows for follow-up appointments

### Conclusion / Discussion

- Clinic blood pressure control rate initially dropped (possibly due to initiation of more accurate blood pressure cuff machines). However, rates began to approach baseline control rates across the course of the intervention.
- Our intervention did not change the scheduling or completion of follow-up appointments, suggesting that more intensive interventions than flyers and announcements are required for producing behavior change.
- Future interventions may include changing workflow to automatically prompt providers or medical assistants to schedule follow-up visits, reducing personnel burden.

### References