Hypertension Control Challenge

A real world experience at the Joshua Max Simon Primary Care Center
St. Vincent Hospital, Indianapolis
Travis Taylor MD
Interventional cardiology fellow
* I have no financial conflicts to disclose.
The Joshua Max Simon Primary Care Center at St. Vincent

- Major provider of charity care for northern Indianapolis and surrounding counties
- Large Spanish speaking population
- Provides medication with little or no co-pay
- Family Medicine, IM-FM, Internal Medicine, and Cardiology training programs
- >2500 patients with hypertension
Meet the Team

- **Residents**
  - Kevin Ball
  - Phillip Bemiller
  - Samsad Mansoor
  - Brian Smith
  - Maria Solis
  - Zubin Yavar

- **Nursing Supervisors**
  - Stina Antila
  - Emily Patel
  - Jessica Smedley
  - Rebecca Van den Hoven

- **Physician Supervisors**
  - Steve Knaus
  - Curt Ward

- **Pharmacists**
  - Karie Morrical-Kline
  - Amanda Place

- **Schedulers**
  - Tom Greenslade

- **Schedulers**
  - Nicole Meyers
  - Luvonnie Person

- **Tech Support**
  - Michelle Bryant
  - Isaac Jansen
  - Todd Foster

- **St. Vincent IRB**

- **St. Vincent Foundation**

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QI Basics: FOCUS-PDSA

- Find an opportunity to improve
- Organize an effort
- Clarify current understanding of process
- Understand the causes of variation
- Select a strategy
- Plan the improvement
- Do the improvement
- Study the results
- Act to hold the gains and continue improvement
Initiative #1

• Nurses will recheck BP after waiting at least 3 minutes if any component >139/89.
  • Take vitals while patient is seated, legs flat on the floor, arm supported, and after initial nursing intake
Initiative #1

**Nurses recheck BP**

**HTN control rate (<140/90)**
% of time nurses rechecked an abnormal BP

- SBP: -11 mmHg
- DBP: -4 mmHg
- Number Needed to Screen = 3

> 50% nursing staff left their positions
Initiative #2

- Recognize the top-performing residents in front of their peers and ask them to participate in brainstorming how to improve control rates.

**HTN Control All-Stars**

80% Control (<140/90) or better April 2016

<table>
<thead>
<tr>
<th>Doctor</th>
<th>Percent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laura Counsell, MD</td>
<td>100%</td>
<td>10</td>
</tr>
<tr>
<td>Brian C Smith, MD</td>
<td>100%</td>
<td>8</td>
</tr>
<tr>
<td>Maria M Solis-Colegate, MD</td>
<td>100%</td>
<td>5</td>
</tr>
<tr>
<td>Yogitha Potini, MD</td>
<td>100%</td>
<td>4</td>
</tr>
<tr>
<td>Graham D Dollinger, MD</td>
<td>100%</td>
<td>3</td>
</tr>
<tr>
<td>Jason A Stegink, MD</td>
<td>100%</td>
<td>3</td>
</tr>
</tbody>
</table>
Initiative #2

Hypertension control rate (<140/90)

HTN Control All-Stars

Nurses recheck BP

Hypertension control rate (<140/90)
The plateau...

Hypertension control rate (<140/90)

Nurses recheck

BP

HTN Control All-Stars

Nov-15  Dec-15  Jan-16  Feb-16  Mar-16  Apr-16  May-16  Jun-16  Jul-16

Hypertension control rate (<140/90)
Initiative #3

- Problem: Approximately 50% of patients bypass the schedulers (and the cashier) when they leave. Therefore, they don’t make follow up appointments.
- Solution: Query all patients with poorly controlled BP weekly and have the schedulers call them to make an appointment if one hasn’t been made within 30 days.
  - 90% of patients could be reached by phone and about 90% of those actually made appointments.
Initiative #3

Hypertension control rate (<140/90)

- Hypertension control
- 30 day f/u appointments

Nurses recheck BP

HTN Control All-Stars

Hypertension control rate (<140/90)
Initiative #3

Hypertension control rate (<140/90)

Nurses recheck BP

HTN Control All-Stars
30 day f/u appointments

Hypertension control rate (<140/90)
Initiative #3

Hypertension control rate (<140/90)

- Nurses recheck BP
- HTN Control All-Stars
- 30 day f/u appointments

Hypertension control rate (<140/90)
Hypertension control rate (<140/90)

Appx. 500 patients with previously poorly controlled HTN who now have their BP well controlled.