

HOW WELL DOES A STUDENT-RUN FREE CLINIC CARE FOR HYPERTENSIVE PATIENTS?

..... A QUALITY CONTROL STUDY WITH RECOMMENDATIONS FOR CARE

Sojourner Health Clinic - Kansas City, Missouri
Rose Puthumana and Peter Lazarz

ABOUT SOJOURNER CLINIC

- Sojourner Clinic is situated in downtown Kansas City, near several homeless shelters
 - Most patients are middle-aged men who come from the surrounding shelters
- Clinic is held every Sunday from 11-3, average of 15-20 patients
 - Completely mobile clinic constructed in the back room of a church
 - We provide medications and point of care labs in house
- Hypertension is one of the most commonly treated conditions at Sojourner Clinic

STUDY METHODOLOGY

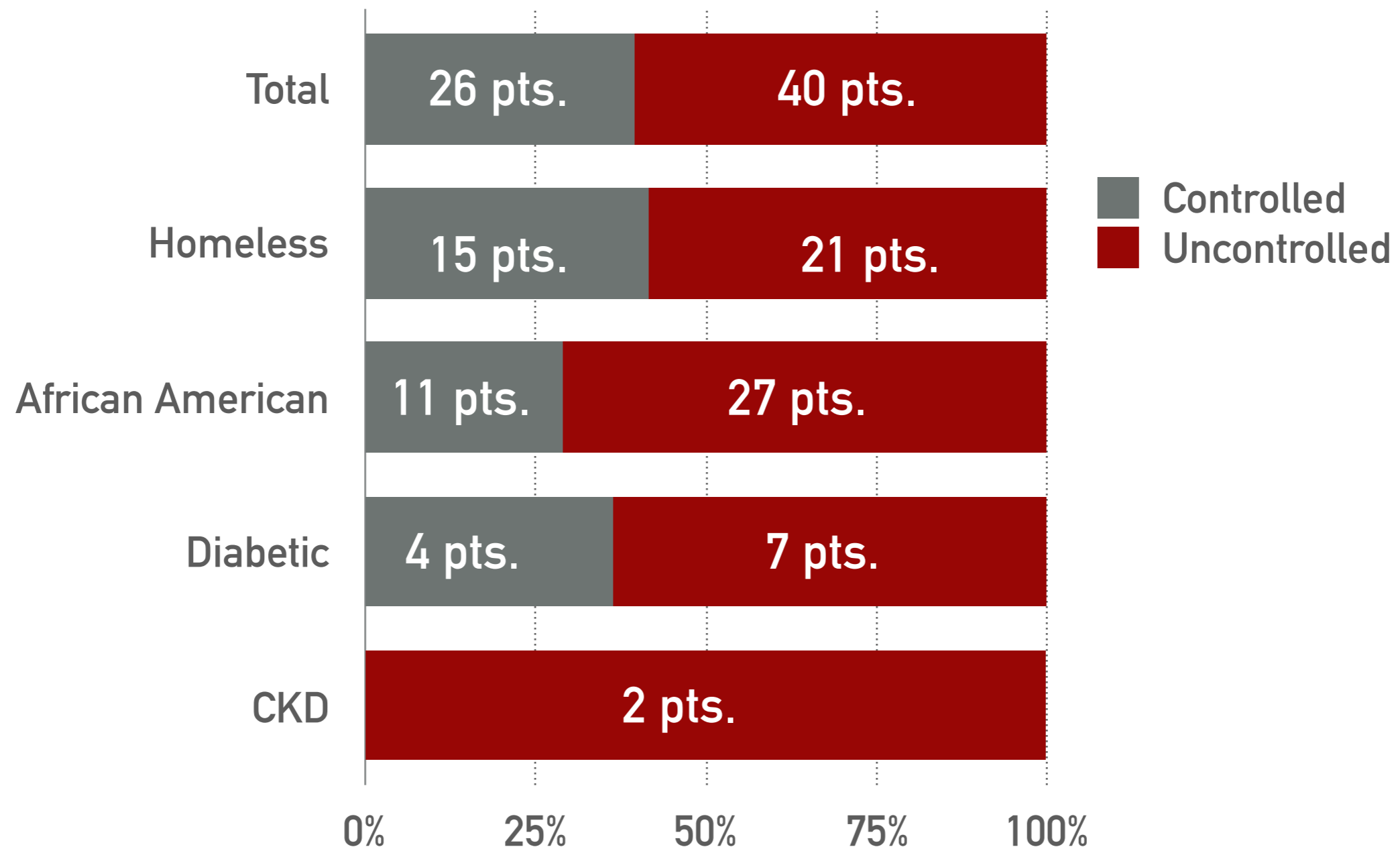
- Chart review of patients seen from 2014-2017
 - Each patient encounter begins with triage information
 - Recorded each patient's residence, age, race, most recent blood pressure reading, average of last 5 blood pressure readings, medication list, and diagnosis of diabetes or CKD
- Compare findings to JNC 8 recommendations

HOW JNC8 DEFINES HYPERTENSION

- ▶ 2 separate readings separated by at least 7 days
- ▶ Ages 30-59
 - ▶ over 140/90
- ▶ 18+ and with CKD or diabetes
 - ▶ over 140/90
- ▶ Ages 60+
 - ▶ over 150/90

RESULTS

- Identified 66 patients who would be considered hypertensive according to JNC 8 guidelines



CONCLUSIONS

- Sojourner's uses paper charts
 - discrepancies in the amount of information recorded
- Lack of stable housing was less of a factor than originally predicted
- Race and diabetic status appeared to increase likelihood of having uncontrolled hypertension
- **There was no clear pattern in the medications prescribed**

OUR AREAS FOR IMPROVEMENT AND RECOMMENDATIONS

- Implement consistent patient education on lifestyle modifications to improve hypertension
- Implement use of JNC8 flow chart to dictate medication choices
- Counseling and follow up on lifestyle modifications

Non-black patients under the age of 60 with or without Diabetes

(goal: 140/90)

STEP 1

Implement lifestyle modifications, prescribe the medications alone or in combo

Thiazides

\$4/10 for 30/90 tablets

- HCTZ: 12.5-50mg at Walmart or Hyvee
- Indapamide: 1.25-2.5mg at Walmart or Target

Using GoodRx Coupon

- Chlorthalidone: 25-50mg 30 tablets for \$18-20

Other

- Bendroflumethiazide

Calcium Channel Blockers

\$4/10

- Diltiazem (not ER): 30-90mg 60/180 tablets at Target
- Diltiazem (not ER): 120mg 30/90 tablets at Target

Using GoodRx Coupon

- Amlodipine: 2.5-10mg 30 tablets for \$6

Other

- Nitrendipine

ACE Inhibitors

\$4/10 for 30/90 tablets

- Lisinopril: 5-20mg at Walmart or Hyvee
- Enalapril: 2.5-20mg at Target

\$4/10 for 60/180 tablets

- Captopril: 12.5-100mg at Target

ARBs

Using GoodRx Coupon - 30 tablets

- Losartan: 25-100 mg for \$6 at Hyvee
- Valsartan: 40-320mg for \$11-17
- Irbesartan: 75-300mg for \$8-11
- Candesartan: 4-32mg for \$33-40
- Eprosartan: 600mg for \$45-90

STEP 2 (if not at goal)

titrate medications to maximum dose, add another medication (Thiazide, CCB, ARB, or ACEI) reinforce lifestyle changes

STEP 3 (if not at goal)

titrate medications to maximum dose, add a second line medication, reinforce lifestyle changes

Beta Blockers

\$4/10 for 30/90 tablets

- Atenolol: 25-100mg at Walmart, Hyvee or Target

\$4/10 for 60/180 tablets

- Metoprolol (tartrate): 25-100mg at Walmart, Hyvee or Target

Other

\$4/10 for 30/90 tablets

- Atenolol/Chlorthalidone: 100/25mg at Target
- Enalapril/HCTZ: 5/12.5mg at Walmart, Hyvee or Target
- Lisinopril/HCTZ: 10/12.5mg or 20/12.5mg or 20/25mg at Walmart, Hyvee or Target

STEP 4 (if not at goal)

titrate medications to maximum dose, add another medication, reinforce lifestyle changes or refer to a hypertension specialist

Black patients under the age of 60 with or without Diabetes

(goal: 140/90)

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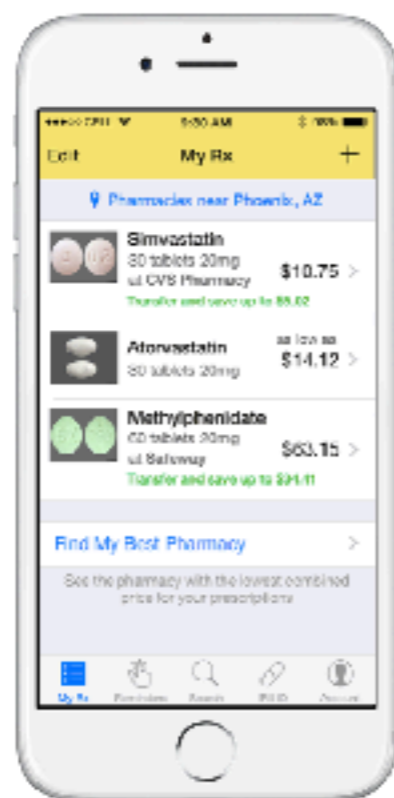
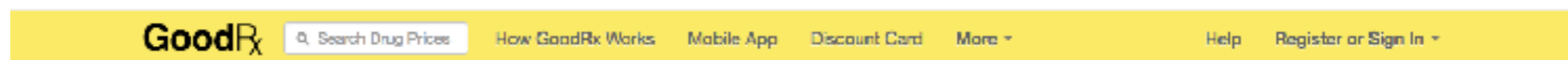
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MAKING THESE RECOMMENDATIONS COST EFFECTIVE

- Utilizing the \$4 list
- GoodRx
- Patient Assistance Programs



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QUESTIONS?

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