

# Enhancing Hypertension Management: Implementing Structured Follow-Ups and EHR Integration to Improve Blood Pressure Control



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## Introduction

Hypertension affects 972 million people globally and 29.1 million in the U.S. [2]. It accounts for ~35% of atherosclerotic CVD and over 8.5% of primary care visits [1],[3]. Poor follow-up adherence is a major barrier, with up to 50% of appointments missed, disrupting continuity and worsening chronic disease control [4],[5]. This QI project aimed to improve hypertension management through structured follow-up.

## Methodology

**Objective:** This quality improvement project aimed to improve blood pressure (BP) control in hypertensive patients by utilizing structured follow-up appointments.

### Methods:

- IRB approved as QI per school requirements
- Adult patients with a diagnosis of hypertension defined by a BP  $\geq 130/80$  mmHg, on two separate readings
- Standardized EPIC SmartSet [Data Systems, Verona WI] at follow-up visits
- After Visit Summary statements enabling consistent tracking of BP control over time
- Run charts were used to assess follow-up BP values, visit attendance, and the monthly proportion of patients achieving control ( $<130/90$ ).

## Intervention

**Guide for Hypertension QI Project**

**Use for:** Adult patients with a diagnosis of hypertension defined by a BP  $\geq 130/80$  mmHg, on two separate readings.

**Search Dr. Bales in SmartSets**

**Choose a follow up visit in 2-4 weeks with Nurse or Provider**

**Patient Instructions**

**REGARDING YOUR HYPERTENSION**

- Your blood pressure is not controlled below your goal of  $<140/90$ .
- I have requested you follow up in the office with our nursing team to have your blood pressure rechecked.
- If your blood pressure is well controlled at this time, your PCP will be notified and routine follow up will be scheduled.
- If your blood pressure is not controlled your Primary Care Team will be notified and determine what adjustments are needed. If your blood pressure is significantly uncontrolled, or any other concerns, you may be asked to have an office visit to determine necessary changes. A copy may be required for this office visit.
- Please check your blood pressure once a day and bring both your readings and the blood pressure cuff with you to the next appointment.

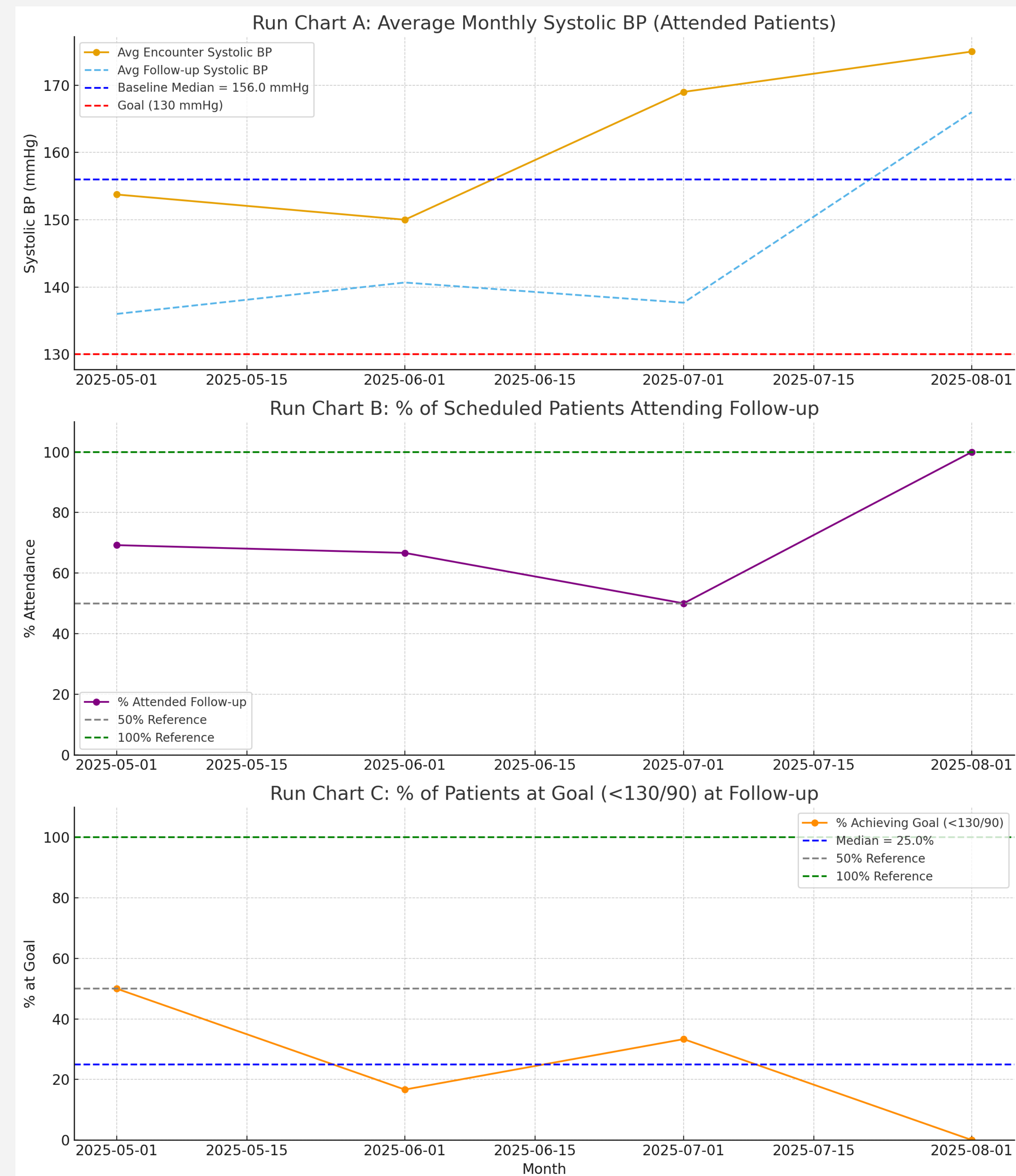
**After Visit Summary**

**Your Medication List**

**Instructions**

- I have requested you follow up in the office with our nursing team to have your blood pressure rechecked.
- If your blood pressure is well controlled at this time, your PCP will be notified and routine follow up will be scheduled.
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- Please check your blood pressure once a day and bring both your readings and the blood pressure cuff with you to the next appointment.

## Outcomes



## Discussion

- 85% of patients scheduled follow-up visit; 87% attended, and 25% achieved BP control ( $<130/90$ ), with 3 of 4 showing improvement.
- Many patients had comorbidities that often took priority over hypertension management.
- Patients who missed SmartSet follow-ups often attended other visits, showing willingness to engage in care.
- Socioeconomic barriers (transportation, work, competing priorities) likely contributed to missed follow-ups.
- SmartSet was well-received by providers, though underutilization limited its impact.

## Conclusion

Structured follow-up using EPIC SmartSets can improve BP outcomes, but greater provider adoption and continued patient engagement are needed. Future efforts will focus on:

- Addressing SmartSet underutilization among providers.
- Exploring barriers to follow-up attendance, particularly socioeconomic factors.
- Determining the optimal number and type of follow-ups (e.g., nurse visits vs. provider visits).
- Ensuring sustained BP control through consistent, structured follow-up.

## References

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