Improving Hypertension Management in Rheumatology Clinic:

A Quality Improvement Initiative Aimed at Improving Care Coordination between Specialty and Primary Care

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Background

- Cardiovascular disease (CVD) is the leading cause of death. Hypertension is a well-established modifiable risk factor for CVD, while various rheumatologic diseases are also nonmodifiable risk factors for CVD.
- Some studies estimate that a majority of rheumatologic patients meet criteria for hypertension, yet a large number of these patients remain undiagnosed or undertreated, representing an area of needed improvement within rheumatology.
- The purpose of this study is to implement a quality improvement (QI) initiative to better identify rheumatologic patients with hypertension and to refer them to appropriate management with a primary care provider (PCP).

Methods

- A QI initiative was implemented at an academically affiliated, urban rheumatology clinic from June - July 2020.
- Plan-Do-Study-Act (PDSA) cycles were conducted in 1-2 week intervals
- The primary outcome was two-fold: 1) the percentage of patients who report being counseled by their rheumatologist regarding their elevated blood pressure, and 2), the percentage of patients who then report making an appointment with their PCP.

Results

- By the end of the study period, 43.1% of eligible patients were correctly identified with the "elevated BP" label. 61.3% of these patients were counseled by their provider to follow up with the PCP to discuss blood pressure management. 36.8% of these patients then report making a follow up PCP appointment.
- Overview of PDSA cycles summarized in Table 1.

Table 1.

Time Interval	Plan-Do	Study	Act
1) June 1 - 5	New clinic protocol implemented: MAs to input visit diagnosis of "elevated BP reading" for patients with RA presenting with ≥140/ ≥90 mmHg	Eligible patients with correct visit diagnosis: 13.3% Patients with correct visit diagnosis who were counseled by rheumatologist: 50% Patients who were counseled who made follow-up with PCP: 100%	Low protocol adoption. Data suggests when implemented correctly, intervention leads to desired outcome.
2) June 6 - 26	Target improved protocol by reminding MAs via e-mail announcement	Eligible patients with correct visit diagnosis: 34.3% Patients with correct visit diagnosis who were counseled by rheumatologist: 83.3% Patients who were counseled who made follow-up with PCP: 60%	Improvement in protocol adoption. Data continues to suggest when implemented correctly, intervention leads to desired outcome.
3) June 29 - June 10	Expanded eligible patients to include all patients seen in clinic	Eligible patients with correct visit diagnosis: 40% Patients with correct visit diagnosis who were counseled by rheumatologist: 65.5% Patients who were counseled who made follow-up with PCP: 38.5%	Similar levels in protocol adoption.
4) July 13 - 17	Target improved protocol implementation by placing protocol instructions on BP monitor carts	Eligible patients with correct visit diagnosis: 43.1% Patients with correct visit diagnosis who were counseled by rheumatologist: 61.3% Patients who were counseled who made follow-up with PCP: 36.8%	Similar levels in protocol adoption, suggesting physical reminders were not an effective intervention.

Conclusions

- Our study was an effort to improve care coordination between a specialist providers (rheumatology) and primary care providers through a quality improvement initiative for patients presenting with suboptimal blood pressure. We chose to focus our intervention on recruiting the aid of clinic staff, specifically medical assistants, to draw the rheumatologists' attention to counsel patients on the importance of better blood pressure control and PCP follow up.
- The main barrier of our intervention was limited adoption of the new protocol.
- One strength of our study was that, for patients who did have the intervention, there were promising signs that this successfully drew providers' attention to the need for counseling. Additionally, our study showed that when patients were counseled, they were likely to follow through and report scheduling a PCP appointment.

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