



**Title:** Optimizing the Primary Care Model: Reducing Clinician Burnout and Improving Patient Care Through Shared Patient Panels

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**Background:** The current practice model in the Mayo Clinic Division of Community Internal Medicine (CIM) in Rochester, MN includes physicians and advanced practice providers (nurse practitioner or physician assistant) (APPs) holding large, independent, and complex patient panels. This contributes to a high rate of clinician (physician and APP) burnout, at 31% and 68% respectively, and challenges with continuity of care. Research demonstrates there is not a defined optimal team approach for providing primary care in internal medicine and shared panels have historically focused on family medicine or specialty care practices. CIM panels are based on an institutional calculation factoring in patient complexity and clinical practice time.

**Objective of the program:** The goal of this project was to implement a primary care clinician co-management model. In this project, a subset of CIM APPs and physicians shared a panel of patients rather than maintaining independent panels and provided autonomous, coordinated care to a population of patients. By implementing this model, we looked to improve clinician burnout, continuity of care for patients, health care outcomes in respect to quality measures, patient satisfaction, and optimize patient panel sizes.

**Planning/research methods:** A comprehensive literature review and analysis of clinician wellbeing and quality measures were completed to determine opportunities to decrease clinician burnout, while improving continuity of care, quality measures for preventive services, chronic disease management, and patient satisfaction. Additionally, internal benchmarking with the Mayo Clinic Health System CIM practice in Northwest Wisconsin and Family Medicine practice at Mayo Clinic Florida was performed. In depth discussions with stakeholders about panel management and measurements of success were completed.

**Implementation methods/sample sizes:** In November 2021, initial pairings comprised of a 2:1 physician to APP ratio and 1:1 physician to APP ratio were established to co-manage existing physician patient panels with the corresponding APP. Two newly hired APPs were selected for pairings since they had not yet been assigned panels. Stakeholders were educated on topics including inclusive language, non-hierarchical clinician relationships, equal distribution of tasks, accurate patient scheduling, and practicing to the top of licensure. There were also opportunities for clinicians to discuss patient complexity and chronic disease management. These activities helped promote collaboration while maintaining autonomy of practice.

We used a mixed methods design integrating qualitative and quantitative data to evaluate the feasibility, acceptability, sustainability, and effectiveness of this pilot. Using a prospective, non-randomized, stepped wedge study design, we compared data for clinicians and patients within a co-management model teams (intervention group) to all other CIM clinicians and patients within the independent panel model (control group). Outcomes were obtained from surveys (patient satisfaction and clinician wellbeing) and EHR administrative reporting tools.

**Results:** The four key measures established to evaluate the success of the shared panel model included:

- Continuity of care had double digit increases each quarter during the first year, averaging 75%
- Reduction of clinician burnout significantly improved for APPs from 68% to 33% but increased from 31% to 36% for physicians. Shared panel physicians reflected the burnout increase was due to other factors
- Key quality metrics had a sustained average increase of 5%
- Patient satisfaction remained unchanged

An additional result, not included in the original measures, indicated a 10% increase in raw panel size. Next steps of shared panels will be to monitor access and continued impact on patient satisfaction over three years as shared panel pairings are expanded.

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