Impact of 'Clinic First' Model on 30-day Hospital Readmission Rates in the Family Medicine Residency

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BACKGROUND AND HYPOTHESIS

In 2019, the Association of American Medical Colleges (AAMC) released a collaborative design initiated by four family medicine residency programs called "Clinic First" model (CFM)[1]. This model of residency training employs alternating two week blocks of continuity clinic with clinical rotations, allowing more immersive participation in both.

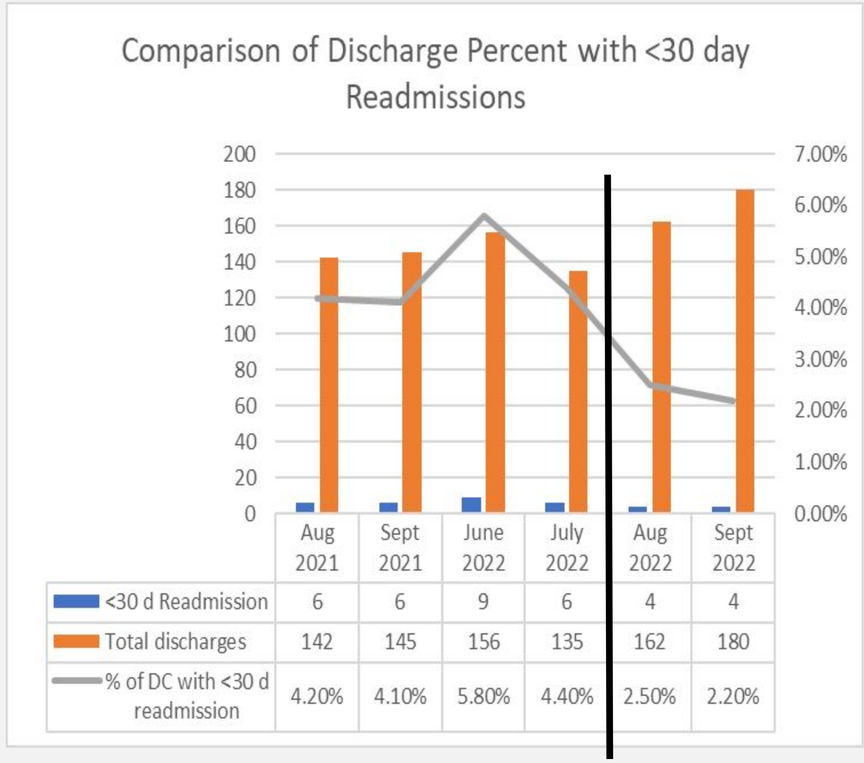
This pilot study explores implementing the CFM at our residency program and investigates its impact on 30-day hospital readmission rates and compliance with discharge follow-up appointments. We hypothesized that heightened focus on outpatient care would result in reduced rehospitalization rates.

METHODS

Our research was designed as a two part prospective cohort study. The setting was established at SIU Quincy Family Practice (QFP) and Blessing Hospital which included faculty, medical residents and nursing staff. Thirty-day hospital readmission rates were provided by the Blessing Hospital Chief Quality and Safety Officer via the Blessing Electronic Health Record (EHR). Outpatient EHR was evaluated to confirm that the patient was seen for hospital follow-up preferably in the clinic within one week, but up to 30 days post-discharge. Hospital readmission rates were compared pre and post CFM implementation. Inclusion criteria included hospitalized SIU established patients or patients establishing care at SIU. Patients from nursing homes, obstetrics, rehabilitation, a SIU-affiliated satellite clinic, and those who left AMA were excluded. Our control group included the patient populations prior to CFM implementation. Total number of discharges included 920, with 578 in the control group and 342 in the study group. Our outcome was 30-day hospital readmission rates.

RESULTS

Hospital 30-day Readmission Rate



	Aug 2021	Sept 2021	June 2022	July 2022	Aug 2022	Sept 2022
<30 d Readmission	6	6	9	6	4	4
Total discharges	142	145	156	135	162	180
% of DC with <30 d readmission	4.20%	4.10%	5.80%	4.40%	2.50%	2.20%

Figure 1.
SIU 30-day hospital readmission rates organized by month from August 2021 - September 2022. Note: Transition to Clinic First Model begins July 2022 which is represented by the vertical line.

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It was deemed by SIU Family Medicine Department Research Committee that this study was exempt from IRB approval.

Contribution credit: Bhatti, Henna; Khan, Adnan; Mesbah, Hossain; Williams, Marjorie.

CONCLUSIONS

Although the effect of implementing the CFM is in the preliminary stages of development, we anticipate that this intervention will decrease hospitalization readmission rates and increase compliance for hospital follow up encounters. Our exploratory data trend toward a decrease in hospital readmission rates when we compare pre and post Clinic First models. This new model hypothetically allowed for succinct transition of care between inpatient and outpatient providers. A meta-analysis showed a reduction in all-cause hospitalization for high-risk chronic conditions and all-cause mortality with the addition of post-discharge interventions [2].The cost of hospital readmissions bear a considerable burden to the healthcare system. Furthermore, hospitals face reduced reimbursement based on higher rates of readmission [3]. For patients with complex medical conditions, a smooth transition of care is essential for osteopathic patient safety and overall health. CFM, which allows for a concentrated focus on individualized patient care improves overall efficiency for both our patients and providers. The occurrence of more available clinic appointments, with patients' individual providers through the CFM program, contributes to continuity of care which improves overall health and wellness. This pilot program could identify and improve the system deficiencies related to osteopathic patient care and safety in the arena of inpatient and outpatient transition of care. With the caveat of limited data, CFM contributes to improved osteopathic patient care, enhanced culture of patient safety, and a cost effective healthcare delivery system.

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