The Evolution of a Transitions of Care Program

Jefferson Health

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Executive Summary

Since the passage of the Affordable Care Act in 2010, healthcare has undergone a paradigm shift from a volume-based fee-for-service to an outcomes-based payment model. For Jefferson Health and other providers employing a continuum of care model (a cohesive care system that guides and tracks patients over time through a comprehensive array of services spanning all levels of care), this transformation has placed an outsized focus on improving an integral part of the patient journey: the transition from one service level of care to the next. Strategic communication is a key driver in effectual and proficient patient care across the healthcare continuum, particularly in transitions of care, with numerous studies demonstrating that effective communication increases patient safety, saves costs, and reduces duplicative work. And so, in autumn 2018, Jefferson Health launched a multidisciplinary effort to develop a comprehensive transitions of care program that would be both replicable and sustainable, address communication challenges, and mitigate fragmentation through the patients' acute care journey. Emphasis was also placed on establishing goals to ensure our program fostered accountability and collaboration in a multidisciplinary service delivery structure that provides the right care, to the right patients, at the right time—to treat each person holistically. While initial improvements in outcomes for patients with ambulatory sensitive conditions were impacted by the COVID-19 pandemic, the team is confident that the comprehensive transitions of care program will rapidly return to pre-pandemic levels of success. The health system now has tools to identify patients discharged from all locations in a timely

manner without our nurse team sifting through spreadsheets and risk scores to locate them. Custom templates were developed in our EHR to guide our staff in consistent evidence-based scripted calls during our transition of care connection. Disease-specific questions and care plans were built to direct our attention to a patients' ambulatory sensitive conditions which included self-management plans, and barriers to follow up care. As members of comprehensive primary care (CPC+), we are tasked with attempting to contact 75% of patients transitioned out of an inpatient, or post-acute setting. As a result of our efforts, our patient population is successfully engaged 78% of the time and we have seen a significant reduction in our Hospital Readmissions Reduction Program (HRRP) year over year with a savings of 18%.

Lessons learned include:

A high-quality transition is achieved when all patient referrals and transitions meet the six Institute of Medicine aims of high-quality health care. From this perspective, referrals and transitions should be:

- **Timely:** Patients receive needed transitions and consultative services without unnecessary delays.
- **Safe:** Referrals and transitions are planned and managed to prevent harm to patients from medical or administrative errors. Care coordination has been defined as "the deliberate organization of patient care activities between two or more participants involved in a patient's care to facilitate the appropriate delivery of health care services."
- **Effective:** Referrals and transitions are based on scientific knowledge and executed well to maximize their benefit.
- **Patient-centered:** Referrals and transitions are responsive to patient and family needs and preferences.
- **Efficient:** Referrals and transitions are limited to those that are likely to benefit patients and avoid unnecessary duplication of services.
- **Equitable:** The availability and quality of referrals and transitions does not vary by the personal characteristics of patients.

The journey through our transition of care program has shown there are numerous steps to success as well as a great many patient outcomes to measure. Initial focus was on identification of patients to outreach. We quickly learned that it is the quality of the outreach and defining a successful outreach that adds impact.

Define the Clinical Problem and Pre-Implementation Performance

Transitions of care have become an important target for the Triple Aim of improving care quality and the patient care experience, improving the health of our population, and reducing cost. Most research to date has focused on hospital-to-home care transitions, and numerous studies have shown major gaps in care during these transitions. For instance, communication across sites happens infrequently, follow-up needs are not consistently identified, and few patients have timely outpatient follow-up care after hospital discharge. More recent studies have shown that most patients do not meaningfully benefit from early outpatient follow-up. Transitional care resources would be best allocated toward ensuring that highest risk patients receive follow-up within 7 days.

Given Jefferson Health's robust annual patient volumes (approximately 127,000 admissions and 517,000 ED visits), the evolution from a fee-for-service to an outcomes-based payment model put in stark relief the need to close any gaps that may exist in transitional care across the health system. One area of increased focus was the identification and prevention of readmissions for ambulatory sensitive conditions. These readmissions are frequently related to the index admission discharge and represent a poor outcome for the patient. CMS also imposes heavy fines on hospitals who perform poorly in this area. Additionally, as insurers develop utilization management (UM) policies that deny payment for these services, these readmissions also have a negative fiscal impact on the health system's bottom line. Performance for 30-day readmission rate of ambulatory sensitive conditions was 11.88% in 2018 prior to implementation. Our readmission rate goal for our commercial population is 10.2 to achieve top quartile.

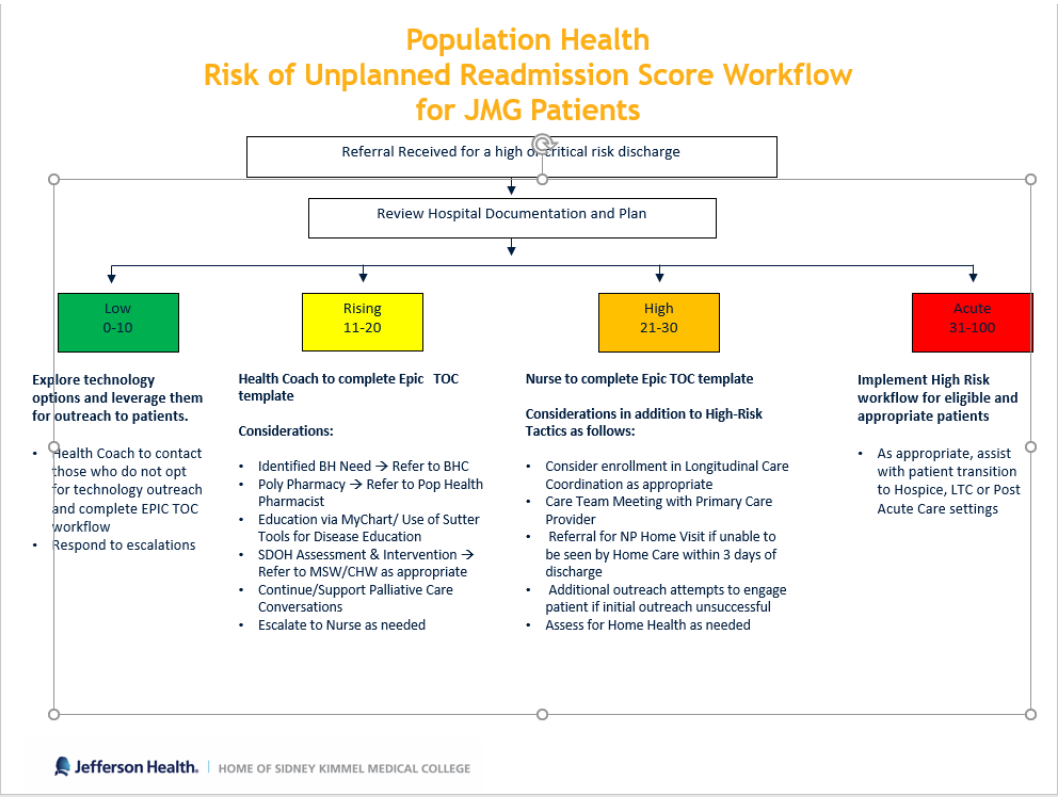
Prior to developing a comprehensive transitions of care system, Jefferson did not have a consistent method of identifying these patients, nor did we have templates that allowed our team to address the specific needs of these extraordinarily complex patients. Our EHR limited the discharges we could see to inpatients from our hospital system, excluding those patients who were being discharged from outside hospitals. As a result, the health system lacked insight into what was happening in these situations. In 2020, we reached or attempted to reach only 72% of our patient attributed to primary care. Although we attempted to reach 72%, only about 30% of patients followed up with a physician within 7 days, due to factors such as lack of transportation, lack of patient awareness to importance of follow up, and appointment availability.

Design and Implementation Model Practices and Governance

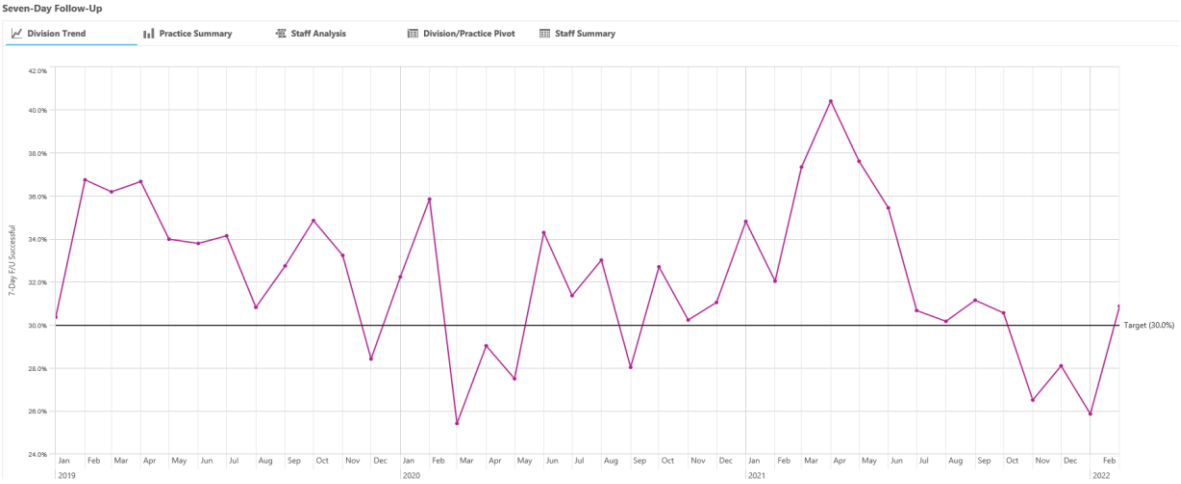
One of the major goals of Jefferson's Population Health department has been to unite teams and services under one common reporting structure. We needed to

share what we learned, replicate what worked in our division, and listen to new enterprise teams who suggested changes.

In spring 2021, Jefferson Population Health brought together a team of healthcare professionals to form three temporary action groups all centered on transitions of care and preparation for the excess days in acute care measure. Analytics was able to provide us with our baseline EDAC scores for the subset of patients with a Jefferson primary care provider. Using this information, we set out to quickly make actionable changes to improve our performance. Our (TAG) deliverables were to improve technology to monitor and optimize transition of care workflows, identify barriers, adjust processes and leverage digital health to expand capacity. We transitioned our team to leverage two new risk adjustment models in support of transitions of care activities. The population health team worked directly with our Jefferson hospitals inpatient care management team to create a standard of care and communication across the care continuum based on highest risk and utilization of patients. The Director of Care Coordination and her team of early adopters offered ongoing support to new teams, employees, and service lines, which allowed for growth and system integration. In January 2019, a standard Epic playbook for transitions of care and care coordination documentation was built and distributed for education. This playbook was also updated with changes and upgrades.



With this new enhanced process in place, it was our aim to increase the proportion of our patients with a follow up appointment within 7 days and further decrease our significant readmission costs.



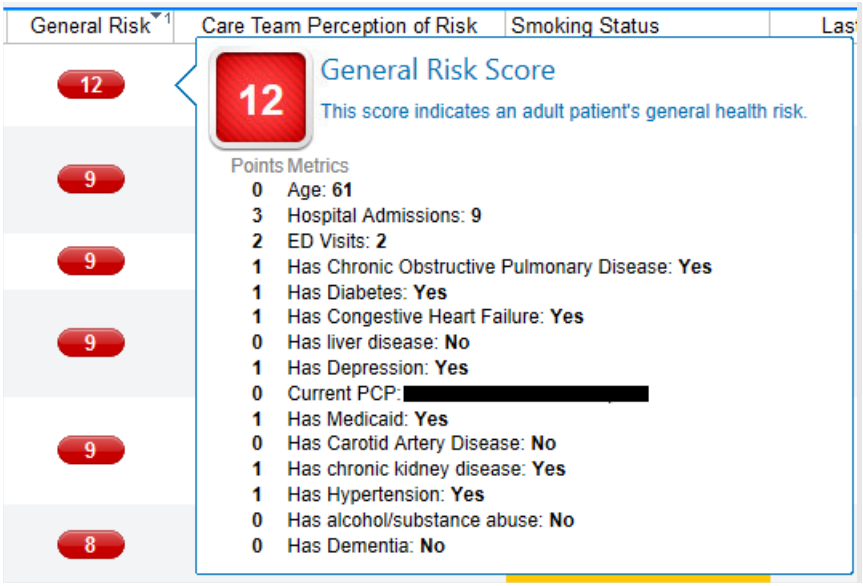
Clinical Transformation enabled through Information and Technology

Jefferson's transitions of care program utilizes a three-phased approach: Risk, Screening, and Transitioning.

In the Risk phase, EPIC at Jefferson utilizes a two-step risk stratification process that incorporates (1) an algorithm-based method, which uses data such as demographics, utilization, co-morbid conditions, and other metrics; and (2) care team perception of risk to segment the population into three risk tiers (High, Medium, Low).

The algorithm-based method utilizes the metrics shown in the screenshot below to calculate a General Risk Score. These metrics include demographic information such as age and insurance type, utilization including a hospital admission or ED visit within Thomas Jefferson University Hospitals, Inc. (TJUH), the existence of co-morbid conditions including COPD, Diabetes, CHF, Liver Disease, Depression, CAD, Hypertension, and chronic kidney disease, and other metrics that have been shown to increase readmission risk such as substance abuse and dementia. Risk scores are automatically and continuously calculated as soon as information is entered and/or changes in a patient's record (i.e., new hospital admission to TJUH).

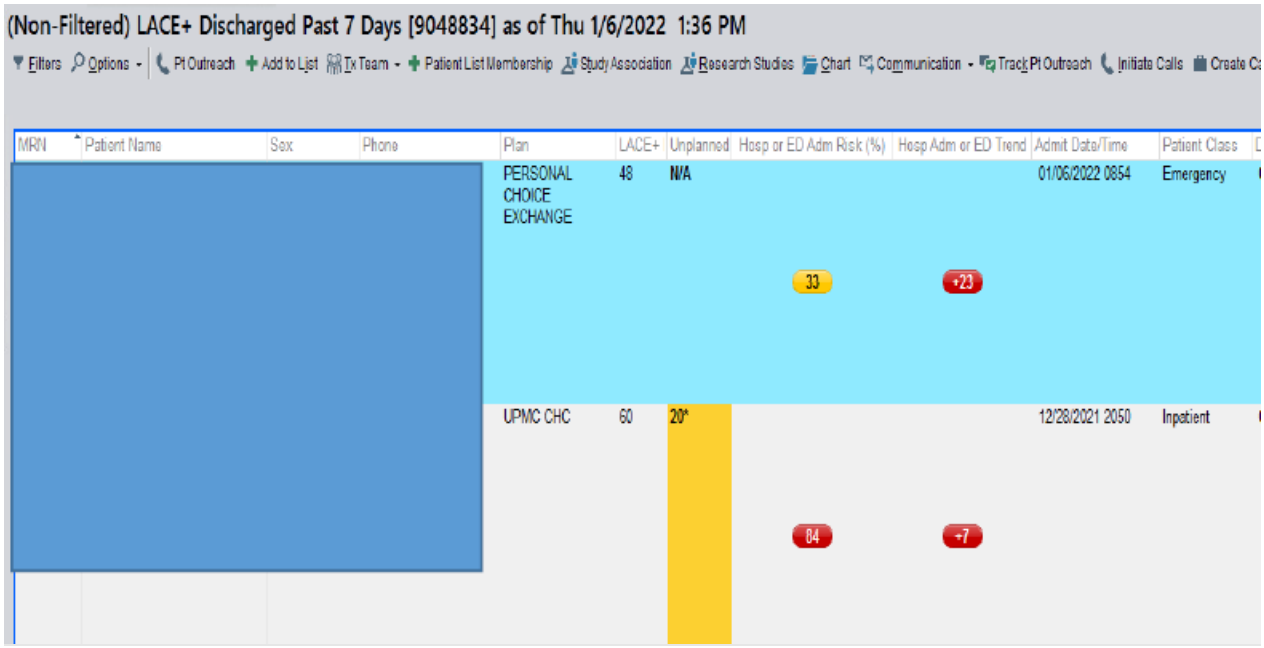
The risk tiers are determined based on the following points:
- 0 – 3 points: Low Risk
- 4 – 5 points: Medium Risk
- 6 – 9 points: High Risk



The second step of the Risk phase includes the ability to refine the risk score based on a practitioner and/or care team's information or clinical intuition. EPIC at Jefferson utilizes a Smart Phase to allow both the Primary Care Provider and the RN Care Coordinator to change a patient's risk score.

Jefferson Hospital Center City Division also calculates a LACE+ score on all inpatient and observation discharges. Like the general risk score, this score is based on demographics, utilization, co-morbid conditions, and other metrics. Jefferson chose to utilize the LACE+ score due to its power to predict death or urgent readmission post hospital discharge.

Patients from Jefferson affiliated hospitals with a LACE+ score of 59 and above are placed on the registered nurse care coordinator caseload. Lower risk patients with a Lace+ score below 59 are placed on the caseload of a transitions of care focused health coach. These health coaches are certified medical assistants with training in TOC, appointment scheduling, primary care quality, and social determinants of health.



To identify the patients with a Jefferson primary care provider appropriate for the transitions of care outreach, the analytics team developed a report of all available acute or post-acute discharges. This reporting combined Epic-sourced discharge information with admission, discharge, and transfer (ADT) notifications provided through Jefferson's participation in the regional health information exchange. Each discharge was then assigned to the appropriate care team member based on the patient's primary care provider and risk score. The assignment of discharges is automatically sent directly to the team for outgoing calls, via a daily morning email.

Type Flag	MRN	First Name	Last Name	DOB	Source Facility
IP					Bryn Mawr Hospital
ED					Lankenau Medical Center
ED					Jeanes Hospital
ED					Lankenau Medical Center
ED					Pennsylvania Hospital
ED					Bryn Mawr Hospital
ED					54th and Cedar – Hospital of the University of Pennsylvania
ED					Hospital of the University of Pennsylvania
ED					Crozer Delaware County Memorial Hospital
ED					Tower Health Chestnut Hill Hospital
ED					Lankenau Medical Center
ED					54th and Cedar – Hospital of the University of Pennsylvania
ED					Lankenau Medical Center
ED					Tower Health Chestnut Hill Hospital

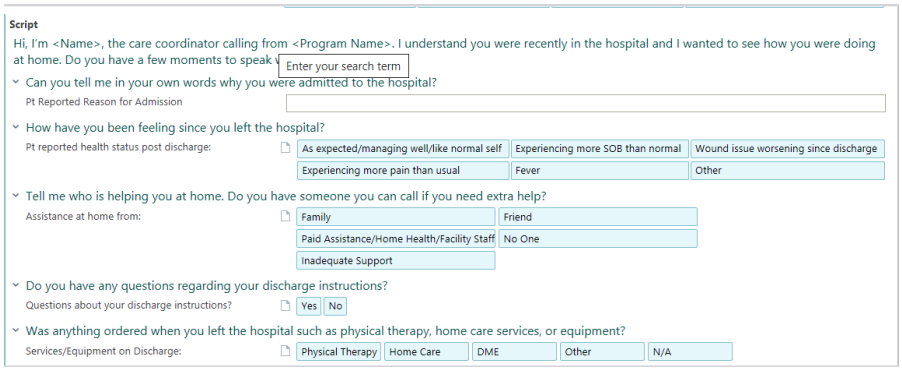
The Screening phase focuses on the review of key information related to an individual's health situation to identify the need for health and social services. The care coordinator's objective in screening is to determine if a client would benefit from such services. In such situations, a care coordinator or care coordination assistant reviews the medical record—to the extent possible—relevant to the "Four Domains": Social Support, Chronic Disease and Self-Management, Mental Health, and Health Trajectory.

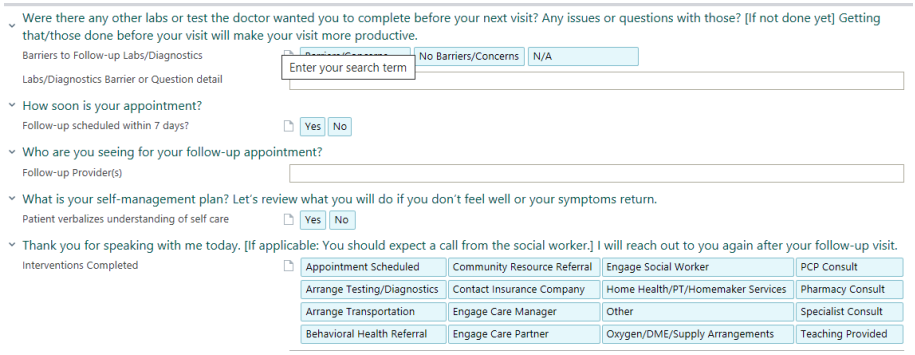
The Transitioning phase focuses on moving a patient across the health services continuum safely. To maintain continuity of care, this phase's activities entail the complete execution of the patient's level of care transition through communication with key individuals at the next level of care or setting, the patient, caregiver, and members of the healthcare team. Care transition contacts are excellent opportunities to assess patients for greater needs and help through care coordination services. Now, it is standard practice for staff from Jefferson's Care Coordination team to reach out to the patient within two business days of discharge from an acute or post-acute setting. Services provided in this stage include but are not limited to

- Summarizing what happened during an episode of care
- Assisting in securing durable medical equipment (e.g., glucose meter, scale, walker)
- Assisting in scheduling transportation services (if needed)
- Conducting a medication review
- Conducting an in-home needs assessment
- Coordinating/scheduling follow up appointments within 7 days of discharge (Primary Care, Specialist, Ambulatory services)

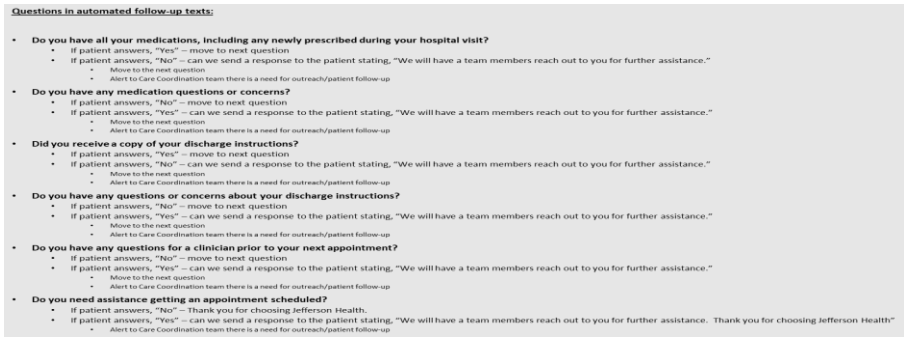
Four key focus areas of review and teach back for the patient and/or patient's support system include:

- Medication changes and adherence
- Patient self-evaluation tools for signs and symptoms
- Stressing the importance of provider follow up
- Discussion on how and when to communicate changes/issues with your primary care provider





In October 2021, we implemented the use of Epic MyChart Care Companion to electronically contact our lowest risk patients post discharge for individuals who have a chart account. This change was implemented so that the existing team could reach more patients and provide a greater focus on the "rising risk" patient population. As an example, a series of questions would appear as follows:



When patients answer these questions and screen positive for needing assistance, a best practice advisory alerts the nurse. This patient will then receive a direct phone call to assist them in their need.

Improving Adherence to the Standard of Care

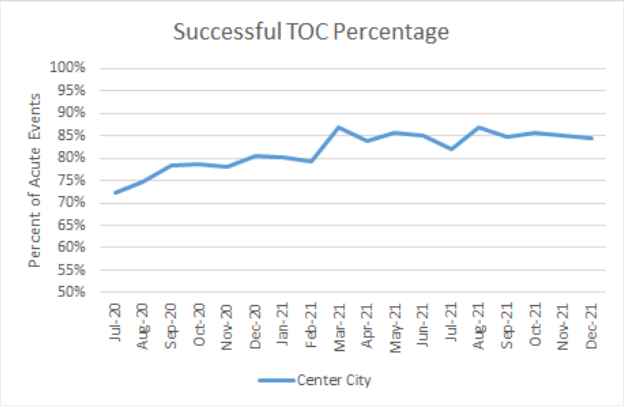
Throughout the evolution of Jefferson's transition of care program, two key areas of focus were (1) the team's ability to contact patients and (2) for the team to make a reasonable effort to do so.

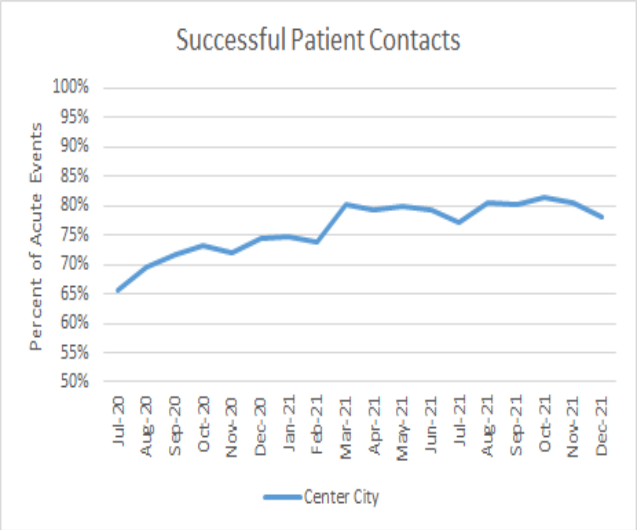
Currently, it is our policy to make two attempts to contact the patients post discharge. For high-risk patients, this is primarily done by a phone call. However, patients can indicate their preferred method of communication. Each practice's outreach attempts and successes are tracked and distributed monthly. We use this data to look for issues with workload, documentation, or report errors. Monthly distribution makes it possible to identify issues quickly and easily.

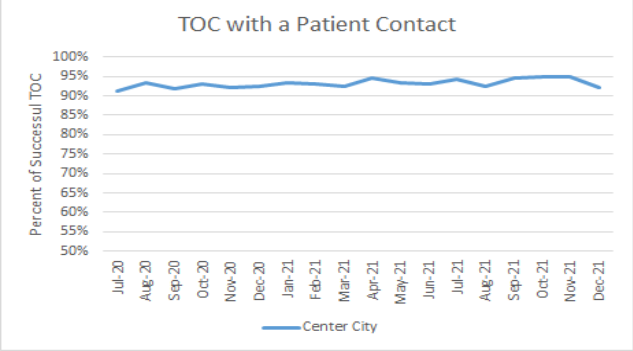
CAMPUS	PRACTICE_ID	PRACTICE_NAME	IPNUM	IPDENOM	IP %
Center City	T1PA2140	Jefferson Internal Medicine Chinatown	51	73	69.9%
Center City	T1PA2145	Jefferson Internal Medicine Associates At Bala	100	125	80.0%
Center City	T1PA2219	Jefferson Women's Primary Care	95	108	88.0%
Center City	T2NJ2211	Associates In Jefferson Primary Care	129	155	83.2%
Center City	T2PA0622	Jefferson Family Medicine Associates	926	1,136	81.5%
Center City	T2PA2121	Jefferson Health Art Museum Area	215	242	88.8%
Center City	T2PA2226	Jefferson Internal Medicine Associates	768	930	82.6%
Center City	T2PA2227	Jefferson Primary Care — Navy Yard	419	466	89.9%

Today, with enhanced reporting capabilities that show not only the number of calls made but also the percentage of those calls that are successful, our analytics team monitors:

- Successful TOC Percentage (Based on the CPC+ Definition)
- Successful Patient Contacts (As a Percent of All Acute Events)
- Successful Patients Contacts (As a Percent of Successful TOCs)







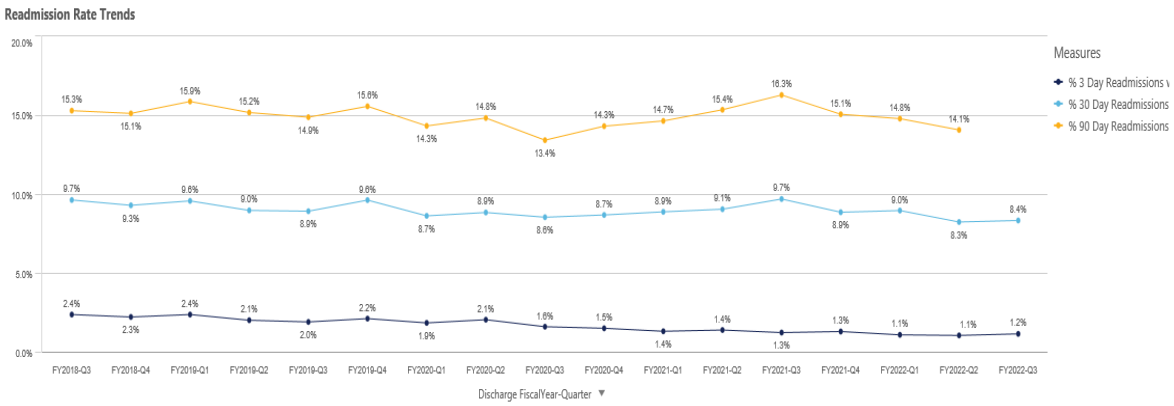
Improving Patient Outcomes

Transition of care interactions and seven-day follow–up visits with a primary care provider or specialist position have been shown to decrease hospital readmissions and increase positive patient outcomes. Our patient population is successfully engaged 78% of the time. During our initial TOC contact and 7-day follow up visit, we frequently uncover issues or "good catches" that could correlate to poor patient outcomes.

While it is difficult to link these actions to reduced readmission rates in the time of a global pandemic, we achieved a decrease in 30-day readmissions from 9.7% in FYQ3 2018 to 8.4% currently. Additionally, we have seen a significant reduction in our hospital HRRP penalty year over year. This is primarily due to the increased complexity of the ambulatory sensitive patients served and not a decrease in average readmissions. The team is dedicated to delivering safe transitions of care and are always looking for the latest processes and data to deliver excellent care to our patients. We will continue to monitor these

initiatives as well as the new excess days in acute care measures to ensure we are providing a valuable service to our patient population.

Total Population



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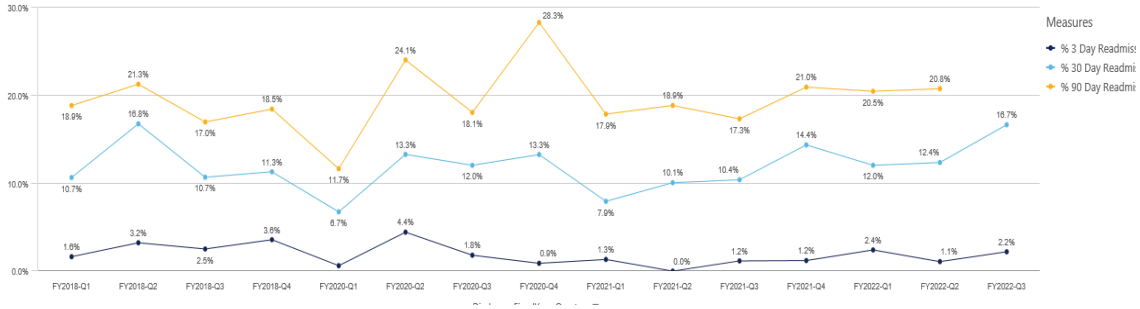
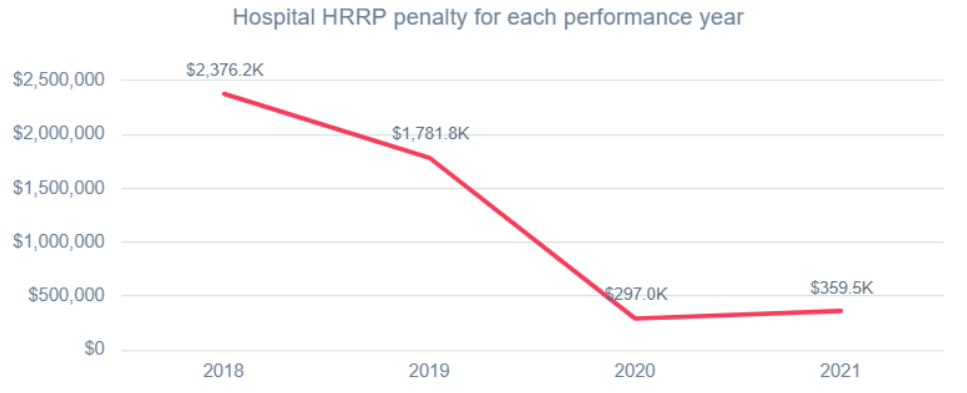
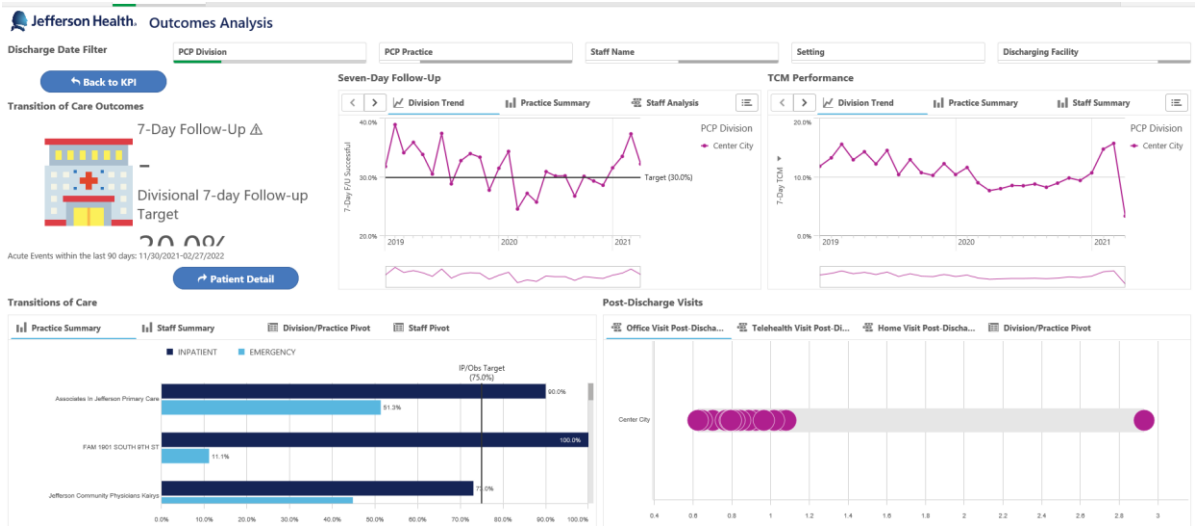
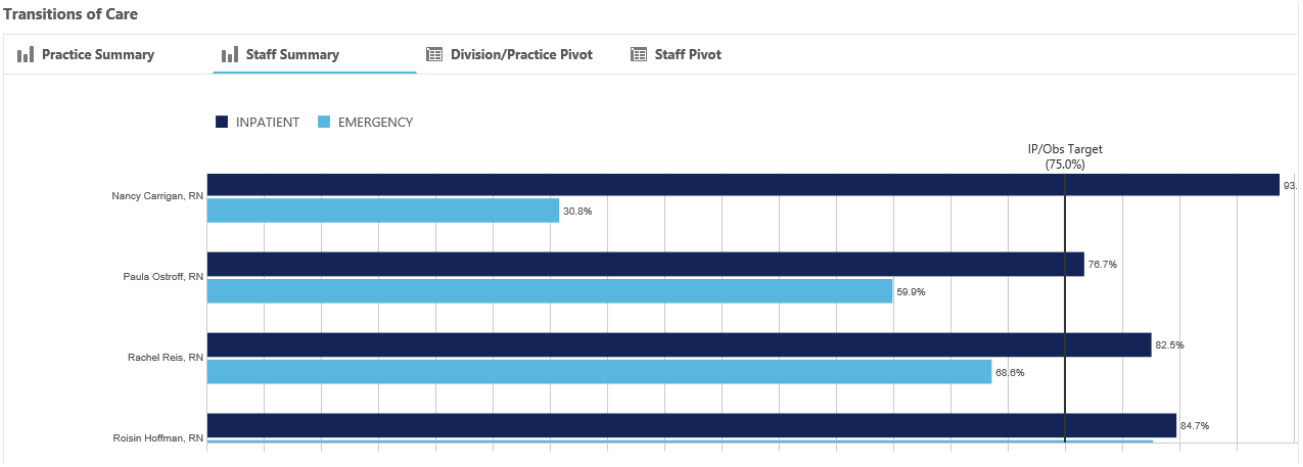




Accountability and Driving Resilient Care Redesign

To increase the transparency in our performance throughout the transition of care continuum, a dashboard was developed using the Qlik visualization software. This dashboard summarizes near real-time Epic information and allows population health leadership to be able to monitor performance from patient outreach to successful contact and eventual follow up visit. This data is initially presented in aggregate with the ability to drill down to the individual patient level in support of identifying areas of further process improvement. Clinicians can use this data to identify high utilizers and increase surveillance of those individuals. Our population health nurse practitioners can be deployed to see high utilizers in home to offer real-time interventions. Having this information readily available has not only provided insight into the outcomes of our current process, but also allowed us to rapidly evaluate the impact of workflow changes. This ability has given our team the ability to adapt at the speed of business, ensuring we are optimizing our processes to care for the patients we serve.




Transitions of Care
Practice Summary
Staff Summary
Division/Practice Pivot
Staff Pivot
INPATIENT
EMERGENCY
IP/Obs Target
(75.0%)
Nancy Carrigan, RN
30.8%
Paula Ostroff, RN
76.7%
59.9%
Rachel Reis, RN
82.5%
68.6%
Roisin Hoffman, RN
84.7%

HIMSS Global Conference Audience Guidance (This will not be published)

Topic Guidance: Check three which apply to this case study

Clinical Informatics and Clinician Engagement

Clinically Integrated Supply Chain

Consumer/Patient Engagement and Digital/Connected Health

Consumerization of Health

Culture of Care and Care Coordination

Data Science/Analytics/Clinical and Business Intelligence

Disruptive Care Models

Grand Societal Challenges

Health Informatics Education

Health Information Exchange

Interoperability

Data Integration, and Standards

Healthcare Applications and Technologies Enabling Care Delivery

Healthy Aging and Technology

Improving Quality Outcomes

Innovation, Entrepreneurship, and Venture Investment

Leadership, Governance, and Strategic Planning

Population Health Management and Public Health

Precision Medicine and Genomics

Process Improvement, Workflow, and Change Management

Social, and Behavioral Determinants of Health

Telehealth

User Experience (UX)

Usability

User-Centered Design