ABSTRACT: 2019 Faculty Launch Faculty Leadership Impact Project

Project Title:

Optimization of Patient Satisfaction and Treatment Outcomes at the Drexel Infusion Center

Name and Institution:

Drexel University College Of Medicine, Philadelphia, PA

Collaborators and Mentors:

Humaira Khan, MD; Tanya Allawh, MD; Vivek Joseph, MD; Karen Coar, RN

Mentors: Mary Anne Delaney, MD; Ana Nunez, MD

Topic Category: Clinical

Background, Significance of project:

Infusion medicine and infusion centers have become integral to the practice of Medicine, especially Rheumatology, with the expansion of new biologics. Drexel Infusion Center provides immunomodulating therapies for autoimmune diseases including rheumatoid arthritis, lupus, vasculitis, myositis, sarcoidosis, inflammatory bowel disease, and other conditions. Currently there are no standard guidelines for the operations of Infusion Centers, with the exception of standard drug protocols. As a result, there is significant potential for errors and actual harm to the patient, especially due to high interpersonal expertise and fluctuating patient volumes and workloads. Currently no standardized practices or guidelines exist in the pre-infusion evaluation and assessment of patients, which could help maximize effective flow, efficiency, safety of infusions, and improve patient outcomes and satisfaction. Overall patient satisfaction and compliance is low, and this negatively impacts the future growth of the center and expected revenues

Purpose/Objectives:

To improve patient satisfaction and outcomes among patients treated at the Drexel Infusion Center, by using a standardized and patient-centered approach to management, and to improve communication with referring providers

- 1) Develop a standardized pre-infusion checklist and guidelines that need to be completed prior to every infusion administration
- 2) Improve communication with referring healthcare providers and establish a strong referral base
- 3) Minimize revenue loss due to pitfalls associated with insurance verification and eligibility determination prior to infusion visit

Methods/Approach/Evaluation strategy:

- Interdisciplinary meetings with infusion team (providers, infusion RN, medical assistants, infusion coordinator, office manager, staff, etc) and information technology personnel for assessment of needs and applicability of guidelines and procedures
- 2) Pre-infusion checklist formulated to incorporate essential screening elements (labs, immunization status, ROS, medication reconciliation, etc)
- 3) Incorporation of pre-infusion checklist into electronic medical record for ease of access, reproducibility, and to establish as standard of care
- 4) Utilize software to help streamline the flow and procedure of infusion delivery from start to finish. This was identified in collaboration with Infusion Centers of America, which is the national association of Infusion centers

ABSTRACT: 2019 Faculty Launch Faculty Leadership Impact Project

- 5) IT team brought on board for incorporating the infusion software and affirming its compatibility with our current electronic medical record. Currently training demonstrations on-going with staff and providers. Plan for continued IT support during launch
- 6) Created satisfaction surveys for infusion patients to be completed before and after introduction of the new guidelines. This will help identify areas for improvement. Approximately 30 satisfaction surveys have been completed over a period of 1 month, and the process is ongoing. So far, on preliminary review, continuation of care at infusion center and communication with referring providers identified as potential targets for improvement.
- 7) Monitor compliance with pre-infusion checklist use and completion prior to infusion. This can be utilized as a Quality Improvement project for our trainees (fellows, residents, etc) and will give valuable information on future practices
- 8) Complete patient surveys after each infusion to evaluate satisfaction and likelihood of returning to infusion center for continued care
- Send provider surveys on satisfaction with services and communication provided by Drexel Infusion Center
- 10) Profit and Loss (P&L) Report analysis after software activation, to assess costs and savings

Outcomes/Results:

Short term outcomes:

- 1) Conduct patient surveys over 3 months with target of 100 participants to identify areas of improvement in patient satisfaction and outcomes
- 2) Create a standardized checklist for access within electronic medical records
- 3) Utilize software to confirm insurance and eligibility prior to infusion visit in effort to minimize revenue loss due to non-covered services

Long term Outcomes:

- 1) Provide patients access to a tablet device for check-in, review eligibility, and to provide a source of education and entertainment while undergoing infusion treatment
- 2) Increase future referral of patients from providers that will enhance the growth and expansion of the infusion center and its provided services

Discussion/Conclusion with Statement of Impact/Potential Impact:

- 1) With the incorporation of a pre-infusion checklist the quality of care delivered by our infusion center will improve. All elements of the checklist have to be met before the infusion is started which includes confirmation of stable labs, TB and hepatitis screening, immunization status, etc. This will establish a high standard of care for the infusion center, that can be adopted by other infusion centers in the region.
- 2) Utilization of the infusion software will streamline the process of insurance approval and eligibility prior to the infusion visit, and prevent any loss of revenue due to uncovered services. The increased revenue can be utilized to increase the size and expand the services provided by the infusion center, with recruitment of additional nursing staff
- 3) Use of tablet devices during infusion can be used as an opportunity to providing education, and can be instrumental in increasing awareness of disease state and infusion medications among patients, which will improve outcomes
- 4) Use of compliance measures and surveys as a supplement to PDSA cycles, will help further the goals of the infusion center to perform as a center of excellence in the region