

Development of Home Infusion Pharmacist Outpatient Parenteral Antimicrobial Therapy Collaborative Practice Agreement within a Health System Setting



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BACKGROUND

- Froedtert Home Infusion (FHI) is a home infusion provider imbedded within the Froedtert & the Medical College of Wisconsin (FMCW) health system
- Froedtert Home Infusion services were developed in July 2017
 - Staff have access to shared electronic health record (EHR) with health system providers
 - The majority of FHI referrals are received from within the five hospital system and clinic locations (94%)
 - The majority of FHI patients on service receive antibiotics (70.6%)
- As part of FHI services, it is the intent to have pharmacists involved in clinical interventions, and to serve as a liaison between providers, patients, and home care agencies
- Patients going home on Outpatient Parenteral Antimicrobial Therapy (OPAT) within the Froedtert system are followed by the Infectious Diseases (ID) Clinic at Froedtert Hospital upon discharge
- Froedtert Home Infusion pharmacists works closely with the ID Clinic to help coordinate patient care and manage patient cases.
 - Pharmacists were *not* able to order changes to dosing, length of therapy, labs, or other orders
- Management of patient care by both the FHI team and ID Clinic created duplication of work, inefficiencies in operations, and non-standardized process (i.e. pharmacokinetic dosing)
- A collaborative practice agreement (CPA) is a legal document in the United States that establishes a legal relationship between clinical pharmacists and collaborating physicians that allows for pharmacists to participate in collaborative drug therapy management (CDTM).
- In the state of Wisconsin, pharmacists are permitted to practice under a collaborative practice agreement (CPA) with individual physicians
- Froedtert Home Infusion was approached by the ID Clinic to develop an ID OPAT CPA in June 2019

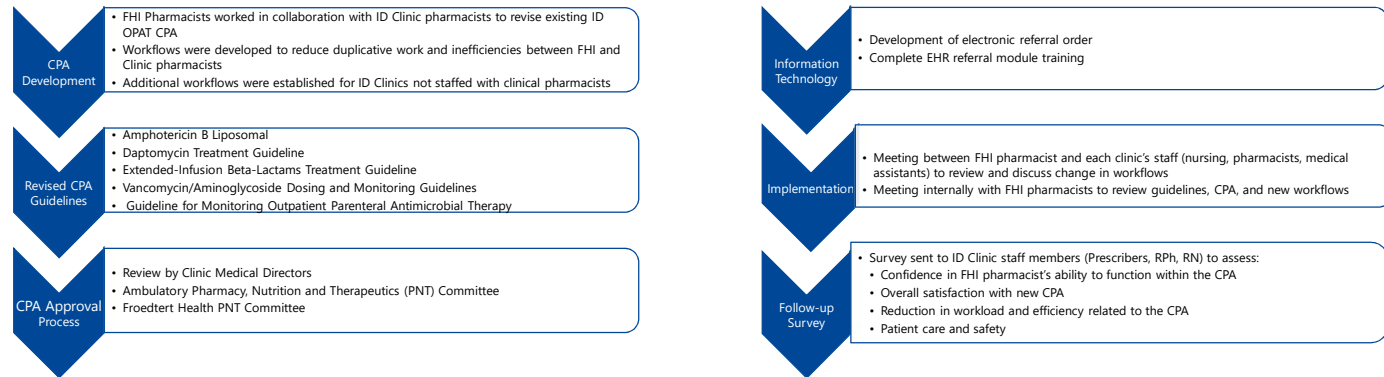
OBJECTIVES

The purpose of this clinical improvement project was to develop an Infectious Disease Outpatient Antimicrobial Therapy Collaborative Practice Agreement and corresponding workflows for Froedtert Home Infusion pharmacists. The goals of the ID OPAT CPA include:

- Standardize the monitoring and dosing of antimicrobials
- Increase the safe and efficacious use of antimicrobials
- Assess and manage adverse side effects associated with antimicrobials
- Reduce provider workload as related to monitoring and adjustment of antimicrobial therapy

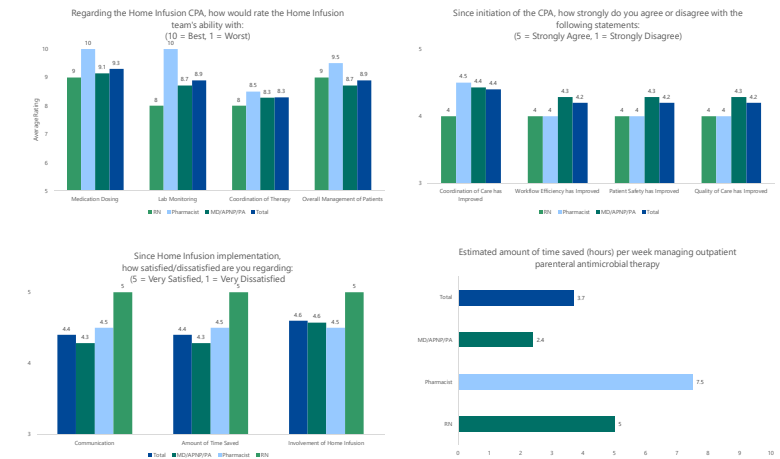
METHODS

- Froedtert Home Infusion was approached by the ID Clinic pharmacists and providers to help develop an ID OPAT in June 2019



RESULTS

- The Collaborative Practice Agreement was approved starting October 1, 2019
- FHI served 282 under the CPA between October 1, 2019 and March 31, 2020
- Anecdotal feedback has been very positive from ID clinics, inpatient healthcare providers involved with the discharge process, home care nurses and FHI pharmacists
- Survey collected from ID Clinic staff (n=10; MD = 7, RPh = 2, RN = 1)
- Clinic staff rated FHI abilities very highly (10 = best):
 - Medication Dosing (9.3)
 - Lab Monitoring (8.9)
 - Coordination of Therapy (8.3)
 - Overall Management of Patients (8.9)
- Clinic staff generally agreed that FHI (5 = Strongly Agree):
 - Coordination of Care Improved (4.4)
 - Workflow Efficiency Improved (4.2)
 - Patient Safety Improved (4.2)
 - Quality of Care Improved (4.2)
- Clinic Staff were satisfied regarding Communication, Time Saved, and Involvement
- Clinic Staff estimated they saved on average 3.7 hours of time per person related to OPAT



DISCUSSION

- Froedtert Home Infusion pharmacists were incorporated into the system wide Outpatient Parenteral Antimicrobial Therapy Collaborative Practice Agreement in October 2019.
- In the state of Wisconsin it is legal to for a pharmacist to perform any physician delegated tasks, such as pharmacokinetic dosing and monitoring for IV antibiotics.
- Implementation of the collaborative practice agreement took approximately four months of work, but this may vary depending on the organization's structure and current antimicrobial stewardship and collaborative practice infrastructure.
- Workflows to develop a CPA may differ for home infusion pharmacies that are not part of a health system structure or those in other states.
- A post-implementation survey (n=10) showed that utilization of home infusion pharmacists lead to many positive outcomes including improved care, efficiency of workflow, and staff satisfaction.
- Additionally, the CPA allowed for staff in the ID Clinic to reduce the amount of time spent coordinating OPAT, and reassigned it to the Home Infusion pharmacists who communicated with these patients on a more frequent basis and may be more aware of patient-specific details such as missed doses, dosing times, and lab draw issues.
- The post-implementation survey does have low validity due to a small number of responders. The survey was collected during the month of February 2020, as COVID-19 was becoming a focus.
- Froedtert Home Infusion plans to look at other areas that may be amenable to collaborative practice agreements, allowing pharmacists more independence in managing patient care meanwhile improving workflows and efficiency in respective clinics. One such example may be parenteral nutrition therapy with the Gastroenterology Clinic.

Wisconsin Ch 450.033
 Services delegated by physician
A pharmacist may perform any patient care service delegated to the pharmacist by a physician.