

Optum @ HackIllinois

BrioRx Infusion Services & Specialty Pharmacy



Our Challenge:

Smart Healthcare: Helping people live healthier lives

Description:

Develop a solution that enables the treatment and/or care of patients suffering from complex health conditions.

Overview:

Part of OptumRx's business focuses on managing treatment of patients who suffer from complex conditions. Many of these conditions, such as hemophilia or MS require constant & careful management along with drug infusion therapy. OptumRx's Infusion Services group begins new patient treatment with a nurse visit, who will come to the patient's home, teach the patient how to self-administer and manage their condition, measure certain health metrics, and provide any helpful resources/tools. Depending on the condition, patients will either self-administer their medication or schedule recurring nurse visits.

Your solution should support the Home Infusion process, by either creating value for our nurses or the members themselves.



Opportunities:

There are many opportunities for improvement in the Infusion Services & Specialty Pharmacy space. Below we will outline some of the current areas where Open Source innovation can help us make a real impact in our field nurse to patient interactions:

The Nurse:

Optum's Infusion Services employees registered nurses to provide top quality care to our patients.

The day begins with the nurse pulling up their schedule for the day to see which patient(s) they need to visit along with the type of appointment it will be (just a checkup, infusion, etc.). Once they arrive at the patient's home, they begin their workflow. During infusion sessions, nurses often handle many things all at once. These include setting up infusion equipment, taking patient assessments, and monitoring infusions. Giving attention to patient should be a nurses' first priority; however, having to do equipment set up while having to take down information/notes can take away from the nurses' connection with the patient. Is there any way we can innovate to help make the nurses' job easier and allow them to focus more on the patient?

Some ideas:

- Optimize how field nurses' appointments are scheduled (logistically).
- Utilize voice recognition technology to relieve nurse of having to enter information manually.
- Development of a way to manage dynamic electronic forms.

The Patient:

Although nurses are there to help a patient understand how to perform an infusion, patients don't always have one-on-one access to a nurse. One can imagine how difficult it could be for a patient to perform an infusion on themselves. There are a lot of steps to memorize, and it can sometimes be hard to remember and execute the steps correctly. There can be many ways we can innovate using Open Source to help make the patients' lives easier.

Some ideas:

- Create a dynamic template (web-based, mobile, etc.) that allows users to easily create step-by-step tutorials with voice interaction.
- Enablement of self-assessment submission through the use of a patient portal or mobile application.
- Setting up 2-way video communication with an emergency contact nurse to help with infusion therapy
- Virtual assistant to help guide through infusion therapy when nurse is not with them
- Easy way to measure drip rate