Problem: Nurses spend 35% of the time on documentation and 20% on coordination.

Only 9% of the time is spend diagnosing patients.

In addition, nurses have to record data of patients manually and bring it back to the office for manual entry.

(waste of time and less effective method)

Customer: Hospitals and other healthcare professionals will find this product essential

in better allocating resources and eliminating inefficiencies within a hospital setting.

Additionally, this product will serve as a stronger tool for doctors and nurses to monitor and observe their patients.

Product: The smart IV drip chamber contains the typical components of a drip chamber,

but has additional parts to revolutionize the hospital setting. With the addition of a flow sensor to the IV drip chamber, both the fluid level and the drip rate of the IV fluid can be accurately measured without a nurse. These sensors will help to detect abnormalities within the drip chamber.

The attached Spark Core will send this information to a central server,

which processes the data and detects anomalies in IV operation. When it senses an abnormality,

the server then sends a notification to nurses who are either in a central location,

or on their rounds and can receive notifications on a handheld device. With this,

nurses can immediately react to any issues with the IV drip chamber. Additionally,

the Spark Core can send data from the drip chamber to a patient’s electronic health

record for a more comprehensive look into their medical history.

Progress: We are trying to buy some supplies such as medical appliances

that we need through ebay and start to make an actual product. Along with building the connected drip chamber,

we are planning to visit several local hospitals in order to gather real potential customers’

opinions and revise our ideas and the product, as well as appeal for possible funding.