# Time-Use Surveys and the Potential Use of Ubiquitous Computing Solutions in a Pharmacy Environment

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# The Problem

Pharmacy is a highly stressful career that requires constant communication, alertness and great attention to detail.

Our goal is to utilize time-use surveys in order to identify daily pharmacy activities that can potentially be improved through ubiquitous computing solutions.

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# The Big Picture

- **Compare the activities between commercial pharmacists and hospital pharmacists.**

    - a possible significant variance in the type of activities performed by these two types of pharmacy doctors?
    - Hypothesis: commercial pharmacist perform activities that require more interaction with patients than hospital pharmacists.

- **Possibly interview patients to gain a different perspective**

- **Analyze our results and break down general activities (Tier 1) into more specific activities (Tier 2).**

- **Discuss and recommend possible improvements to some of the Tier 2 activities using ubiquitous computing solutions.**

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# Project Update

**We have created the classifier for commercial pharmacists**

**Tier 1 Activities**

Time w. Patients
Time w. Doctors
Drug Prescriptions
Data Entry
Prepare IV's
Training
Eating & Drinking
Socializing

**Tier 2 Activities**

OTC Consultations
Telephone Consultations
Vaccine Administration Duties
Answer Insurance Related Questions
Ring up the patient

Verifying New Prescriptions
Verifying Refill Prescriptions
Physically Filling Prescriptions
Taking Prescription Orders

# Project Update (cont)

**What still needs to be done:**

•**Finish gathering all the survey data & conduct additional surveys if needed**

•**Analysis of the data collected**

•**Design an ubiquitous mobile solution**
- – The application will at least improve prescription order time by allowing patients to take a picture of the prescription and send it to the pharmacist.
- – Will also support location-based search of nearest pharmacies.
- – Additional features based on data analysis results

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