

Takeda Research Challenge



Medication Adherence In the Elderly

Cedella Breitenstein, Charlotte Melcher, Isabel Carson, Hallie Voss, Lila Wine

Problem

→ How can we improve medicine adherence in patients treated for depression?

350 million:

Number of people worldwide who suffer from depression.



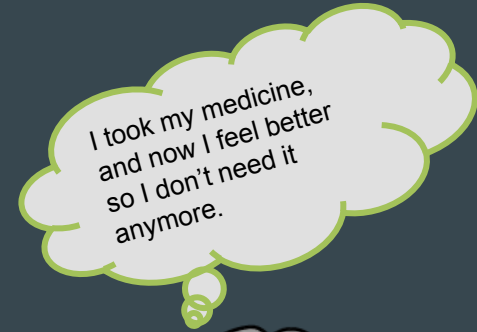
16 million:

Number of U.S. adults who had at least one major depressive episode in 2012.

Women are more likely to be diagnosed with depression than men.

Research Process

- We first narrowed our focus to the elderly (65+)
- We then narrowed our question to deal with self-prescribed stopping and/or misuse of medication.



Research Process

- After narrowing our focus we researched why the elderly would misuse or stop taking medication:
 - Unpleasant side effects
 - The half-life of the medication can alter perceptions of the medicine's effectiveness
- Our motive to prevent these issues led us to focus on visits to the pharmacy.

What is half life?

- Half life refers to the amount of time it takes for a drug to build up until the effects are felt.
- How long it would take before one feels a recurrence of the negative symptoms after they stop taking the medication.

Solution

- An “active listening” questionnaire sheet that all pharmacies would be required to use when dealing with elderly patients



How will this work?

- When picking up his/her medication, the patient will be taken aside by a pharmacist to fill out the question sheet.



What will this do?

- Our solution provides a simple way for elderly patients to actively retain information about their medication that would not otherwise be accessible.

Patient Name: _____

Name of Medication: _____

Medication Check-In

1. What does this medication do?
2. How often do I take my medication (at what time)? Will it affect my sleep routine?
3. About how much time will it take before I begin to feel the effects of my medication?
4. If I were to stop taking my medication because I feel better, about how much time will it be before the negative symptoms come back?
5. What are the most common side effects? Will they interfere with my daily routine and/or become life-threatening?
6. Will I feel the side effects of my medication before I feel the positive effects of the medication? If so, about how long after I feel the side effects will I feel the benefits?

Next Refill Pick-Up Date: _____.

Caveats

- Patients unwilling to fill out form
 - ◆ Not convinced that it is necessary
- Patients have too many medications to keep track of
- Time constraints for pharmacists and patients

This is a waste of time and I don't need to be doing this.



Our Response

- Kiosk separate from the line
- Complete questionnaire while waiting for pickup
- Active listening sheet required for pickup
- Refill medications separately
 - ◆ Can provide a chart for easy organization

The future of our product

- Our product can not only improve medication adherence, but it also offers a **simple** and **inexpensive** way to incorporate adherence support into pharmacies.

