Give It Your Best “Shot”
Paper Prototype for Helping Children with Fears of Vaccines

Adrian Oyola, Peter Lepper, Robert Smieja, Christina Webb
Worcester Polytechnic Institute
IMGD 4600 – Serious Games
C-Term 2015

Needs Analysis/Motivation

- Educate kids on a doctor’s purpose
- Educate kids on the benefit of the doctor’s office
- Educate kids on what happens during a typical vaccination visit
- Teach behaviors that help reduce stress and anxiety during vaccinations
Task Analysis

- Teach definitions of a doctor’s office
  - examples
  - teaching agent

- Provide resources for the player to interact with

- Procedural challenges of getting a vaccination

- Use positive reinforcement to encourage the retention and repetition of the challenge

Gameflow and Gameplay

- The game takes place over the course of 3 “scenes” or areas:
  - Waiting Room
  - Doctor’s Office
  - Shot Mini-Game
- Player is allowed to explore waiting room and interact with objects
  - Magazines
  - Other patients
  - Posters
Gameflow and Gameplay

- After 3 objects examined player is allowed to progress into the Doctor's Office, or finish examining all the options
- After 3 objects in the Doctor's Office, the player begins the Shot Mini-Game
- Shot Mini-Game walks the player through the process of getting a shot
  - Player follows procedure on a doll
  - Clean the area
  - Insert the needle
  - Place a Band-Aid

Assessment/Evaluations

- Pre-test and Post-tests of knowledge and player opinions
- Compare using a control group
- Use observational data
- Test it on target age group
Prototype

Playtesting Session Results

- Game wasn’t perfect:
  - Winning or Losing wasn’t clear
  - Could have been solved with an introduction
- Room for improvements:
  - Superhero
  - Address the pain of the shot directly
- Video:
Discussion Questions

- Should the game be expanded to cover additional medical fears?
- Where does the game benefit from additional interactivity?
- Would additional characters be beneficial to the game?
- What types of characters would be beneficial to the game?