Neonatal Assist
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Problem space

- **Neonatology** is a subspecialty of pediatrics that consists of the medical care of newborn infants, especially the ill or premature newborn infant.

- Working with such tiny patients requires special care and performing procedures quite differently than are done on older (and larger) patients.

- Often rely on memory to perform tasks: saves time, but increases the likelihood of error.
Project description

- A tool, with all pertinent neonatal references in one user friendly, beautifully designed mobile application.

- Create an android supported mobile app using some tools provided by ODK Survey.

- Requirement: must be safer and more efficient than paper and pen.
Design Objective

- Educate
- Maximize Efficiency
- Minimize User Error
Findings so far

- General content and proposed features have been provided by Jocelyn Kirk.
  - There are specific tools that neonatal nurses every day.

- Nurses are lacking fast access to current reference information while at the bedside.

- Lo-Fi prototype informed by preliminary research based on Jocelyn’s proposed content.
Home Screen

Features:
9 Primary Categories
Text Search
Audio Search
Favorites
Scanner
Featured List

- Intubation Procedure
- Procedure
- Procedure
- Procedure
- Procedure

Procedure Demonstrations

- procedures step-by-step
- Watch a Video
- See a Diagram
- Use Simulaid
Maximize Efficiency/Minimize User Error:

Audio Function:
- Search
- Record
- Transcribe

Large Icons:
- Prevent input error
- Minimal Design Noise
- Intuitive Function

Unique Tools:
- Effective
- Efficient
- Accurate
Related Work

Several apps exist that contain neonatal reference material.

Pros: Easy Scrolling, Aesthetic UI, Good Design

Cons: Too much information, Lacking some important information, Difficult to navigate.

Thursday, March 28, 13
Architecture (X)

Basic Components:
- Calculator
- Audio Search/Transcribe
- Video Links
- Scanner

Sketch Design

How do they interact?

Low Fidelity Wireframe
Design and Evaluation (X)

- Iteration and Evaluation through usability testing.
  - Arrange meetings with nurses to test usability.
  - Based on feedback, design may change in order to improve.
  - Challenge of UI will be ensuring the flow of information reflects nurses work-flow.
Plan for next quarter (X)

- Week 1 - 3: (Development)
  - Android device install ODK Collect.
  - All 9 icons on Home Screen:
    - Procedure, Diagnostic, Nutrition, Normal Newborn, Meds, Labs, Head-To-Toe, Gestation Age.
  - Audio recording (quick search) / transcribe notes.
- Tools: ODK calculator, Audio Recording.
Plan for next quarter

- Week 1 - 3: (User Research)
  - Research Goals: Meetings arranged through Jocelyn
  - Contextual Inquiry, Directed Interviews at UWMC
  - Discuss Information Architecture
  - Create Complete Prototype
  - Iterate Design / Implement UI
Thank You!

Any Questions?