HISI Bursary Award

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• Bursary Award Description & Work to Date
• Current Work in HRB Centre
“Playful Health - a platform for ICT interventions with young people”
A platform for...

- Child friendly delivery of medical information
- Generalisable for different conditions/areas
- Pilot looking at reduction of preoperative anxiety in children
  - Research Project in DCU
  - Sara Raftery (DCU), Paula Hicks (TCD), Dr. Veronica Lambert (PI) (DCU)
  - Future RCT
Rationale

• ICT can facilitate the effective delivery of information to many people at a low cost [1]

• ICT can address children’s needs prior to an operation [2]


Design

• Validated scales (before/after)
• Gameplay - playable across age ranges
• Knowledge through Gaming - quizzes etc
• Extras - randomisation
• User-centred design process
Pilot Design

- Exploratory Pilot Study
- Children about to undergo an operation
- Potentially reduce anxiety levels by increasing knowledge
- Access to study website before operation
- All participants - Scales before/day of operation (Anxiety Levels)
- Intervention - Scales + Game
- Game to impart knowledge + quiz

[Raftery, Lambert, Glacken, Hicks, 'KIDOPS': Developing an Online Intervention to Prepare Children for Elective Surgical Procedures: An Informant Design Approach. Medicine 2.0 Conference, London 2013]
Game Design

• “Hero’s Journey”/ Monomyth
• Mentor Character - guidance
• Website Login
• Learning through gameplay
• Quiz after each section
• From http://en.wikipedia.org/wiki/Monomyth
Initial Design

- Sketches
- Digital Characters
- Level Design
- Feedback from Children
Initial Design
Initial Design
Today is your day to have your operation
Design Elements

• Journey to/from hospital: game levels
  • Gameplay to reinforce information
• Home/Hospital: narrative
  • Presence of mentor/parents/clinicians
• Quiz
• Backpack
Current Status

- Game built
- Randomisation Engine Built
- Initial feedback from users
- 2nd Workshop to do
- Pilot Trial as part of RCT.
Future Work

- Second workshop.
- Run Pilot - Hospital identified and ethics granted.
- HISI 2014
- Extend to other areas?
Current Work

- Post-Doctoral Research Fellow in HRB Centre for Primary Care Research
- Clinical Decision Support Systems
- Computerisation of CPRs
- Medicines Reconciliation across transitions of care
Thanks and Questions

• Dr. Mark Matthews (Cornell), Sara Raftery (DCU), Paula Hicks (TCD), Dr. Veronica Lambert (DCU)