A CALL FOR SAFE POST-OPERATIVE SURGICAL CARE
Innovative mobile information services can improve:

- post-operative care & follow-up
- patient safety and quality of management
- research and outcome evaluation

Your role...
is to first identify a surgical area of need in a LMIC that could benefit from an mHealth intervention

- Uganda
- Rwanda
- Liberia
The Public Health Agenda:

- Analyze the needs and requirements of post-operative decision support and data-collection for patients, community health workers, doctors and research teams
- Describe the role of a smart-phone based application system in this context
- Identify barriers and how these barriers could be addressed
- Intervention SWOT-analysis (Strengths and Weaknesses - Opportunities and Threats)
- Identify how data-entry can be made valuable for the person entering the data
- Defining the implementation and how to document the implementation process
- Define how to measure performance and impact
The Engineering Agenda:

• Technical prototype of an information system. 
  *The Sana platform will be available.*
• Development of a series of apps with post-operative forms
• Test outcome and compare to public health agenda
Inclusion non-RCT
<15 years scheduled for emergency in-patient surgery for perforated bowel
<15 years scheduled for elective surgery for inguinal hernia

Data-entry 1. At admission
Patient characteristics

Data-entry 2. At surgery
Perioperative complications

Data-entry 3. At discharge
Post-operative in-hospital complications

Inclusion RCT
Parent access to mobile phone
Parent can use follow-up tool

Randomization
Blocking for diagnosis and hospital
Intention to treat

Data-entry 4. At clinical visit (planned or unplanned)
1st outcome
2nd outcomes

Data-entry 5. Mobile phone surveillance data
2nd outcomes

Data-entry 6. At outreach visits
Validation
Non-responders

Data-entry 7. At 30-day phone interview
1st outcome
2nd outcomes

No mobile phone follow-up
Same discharge training
No feedback

Mobile phone follow-up
Daily surveillance
Feedback
Timeline:

• Project plan discussion March 2, 2012
• Project oral presentation on March 16, 2012
• Project written check-in after spring break, 2012
• Oral presentation May 11, 2012
• Written final report/Software on May 11, 2012
Project Manager Hours:

- Office hours 8.30-9.30 every week by appointment
- Skype sessions with Dr Hagander via appointment
- Tele/videoconference with surgeons in LMICs