1. Design Decision to Make

• Clipping cell phone on the eyepiece of endoscope

- Could be similar to existing Clear Sight design. <u>http://www.anthonyproducts.com/store/p-1113-clearsight-smartphone-adapter.aspx</u>
 - A frame snaps onto the phone.
 - Between the frame and endoscope there are optical lens to workout optics.



- What can we improve?
 - Use smart phone's flash light as a light source?
 - Would it be suitable design for iPad?
 - Image quality
 - What was the problem with Clear Sight's design?

• External camera

- Two design possibility
 - An affordable camera control box / image processor that can interface with a phone
 - Use cell phone's processor to process camera data
 - Interfacing with camera might be tough. Especially, the medical ones.
 - Cell phone's internal camera probably already has its own camera processor.

• Improved Image Share Method

- Currently, clinicians take pictures of patients with their cellphone and share the images by emailing. Or uploading it to SharePoint drive. Privacy/security issues.
- There is no centralized data base in use. But with increasing use of Epic, they might have the ability to do this.
- Software solution can begin almost as sub/separate project to address the problems listed above.

2. Decided

- We will use an Android phone because Android is easier to learn than Apple.
 - Do we have a spare phone?

3. Proposal Presentation

- Timeline?
- Deliverable
 - Expected: proof of concept, working version of hardware + software piece that is compatible with one designated kind of a phone
 - Deepak suggested that for maximum deliverable we could do compatibility test with multiple models.
 - Maximum: Dr.K suggested that some kind of blind test: image processed by tower vs. cell phone version

4. Administrative Stuff

- Wiki page: email your JHED ID to Nisikant
- Budget: We need to submit our proposal to Dr.K/Dr.Best.
 - Nasir Bhatti: Faculty member who does educational research. Maybe budget from him
 - Dr.K also mentioned that he can possibly donate us attachable endoscope camera.
- Presentation date?
- Team meeting date / with Kevin / with Clinicians?
- Communication: email/google group?
- Role assignment. What's your strength?