

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Womb Ox

Question 1: Will this device have light visualization / camera @ end?

Question 2: What risk is there for harming the fetus & what will you do to overcome this risk?

Team Name: Joey 101

Question 1: Will the alerting device be tailored to mom/baby pair or generalized for repeated use? (Also, battery / device lifetime, etc.)

Question 2: What other factors are relevant to understand if KMC is working?

Team Name: Atriumph

Question 1: Does AF affect children? If so, how ^{could} does your device grow/change with the patient?

Question 2: What power sources have you / will you explore for use? How will you prevent them from interfering with other electrical devices?
(future thoughts)

Team Name: Flowmasters

Question 1: How to measure fluid rates that are low / irregularly occurring?

Question 2: Explain Market Segment more: disposable vs. device
is this your responsibility? →

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: WombOX

Question 1:

If your device is the only one on the market w/ no competing devices why is the market share so small at 10%?

Question 2:

Why can't surgeons use the Wellcore through the small incision made during surgery?

Team Name: Joey 101

Question 1: You've mentioned many problems w/ Kall, but what is the number 1 design challenge your group is specifically approaching?

Question 2: How do you plan to balance having all of these function (using electronics) and keeping the cost under \$10?

Team Name: Triumph

Question 1: You talk about safety from a biocompatibility viewpoint, but what about the safety of using electronics in/with a patient?

Question 2: What is the minimum size of clot you seek to detect?

Team Name: Tube Much

Question 1: What are the major aspects of the design that are problematic / that you are trying to fix?

Question 2: ~~How is the collapsed/opened~~ Is the collapsed/opened device going to have opens or will the inside of the tube be sealed off?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Wombox

Question 1:

How to make sure you can get to finger?

Question 2:

How long will you need to measure pulse ox?
During whole procedure/outside procedure?

Team Name: Joey lol

Question 1:

How will you measure skin to skin contact? Your device would be in the way, right?

Question 2: How are you ~~going to design~~ addressing the issue of low adoption of a monitor?

Team Name: Triumph

Question 1: Why do you need LAA? Could you just get rid of it?

Question 2: How/ where will you implant the device/ how does that play into measuring the clot size?

Team Name: FlowMasters

Question 1: How will you measure ~~flow~~ fluid rate? Ideas?

Question 2: Threshold for too low urine output?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Womb Ox

Question 1:

Will you make more incisions than the fetoscope's incision?

Question 2:

How does your device interact with the fetoscope?

Team Name: Joey 101

Question 1:

What electrical components will you utilize in your low-tech environment?

Question 2:

If you indicate successful operation using a light, where will you place this indicator?

Team Name: A triumph

Question 1: What kinds of information would your user-friendly interface show?

Great job!

Question 2:

How large must the dot be for your machine to detect it?

Team Name: Filow masters.

Question 1: How do you plan to get an accuracy that is higher than the current competitor?

Question 2:

~~What is your~~ How will you measure very small fluid rates?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Womb OX

Question 1:

Why has this not been addressed yet? Is it just because fetal surgery is so new?

Question 2:

Have you considered altering the surgical procedure to suit the device (like adding a second port to free up space in the original trocar).

Team Name: Joey lol

Question 1:

What is the difference b/w kmc and just wrapping the baby in a blanket?

Question 2: Can you quantify low cost?

Team Name: Atriumph

Question 1: Possible sensing modalities?

Question 2: Minimum clot size for detection

Team Name: Tube Much

Question 1: Why has no one tried to improve on endotracheal tubes? What is so difficult about improving this process?

Question 2: Could you justify a small price increase above \$3 for an improved design?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: WomboX

Question 1: How do you account for movement of the fetus?

Question 2: What will be the greatest hurdle in designing and implementing this device?

Team Name: Joey 101

Question 1: How would the device detect proper knee administration?

Question 2: How are you ensuring skin-to-skin contact in your design?

Team Name: Attnumph

Question 1: How do you plan on powering this device?

Question 2: How invasive is it?

Team Name: Flowmasters

Question 1: Is there any way for your device to detect rate changes $< 5 \text{ min}$? Or is that not physiologically relevant?

Question 2: Is there a need for any type of calibration for your device?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Wombbox

Question 1: How will this device interface with other surgical devices?

Question 2: At what stages of pregnancy is this device safe to use?

Team Name: Joey 101

Question 1: What about KMC allows for improvement of development? What are the chemical (?) processes occurring within the body to evoke this?

Question 2: ~~What type of data will be sent to Malawian physicians for feedback?~~ What type of info (from testing) will be sent to Malawian physicians for feedback?

Team Name: Atriumph

Question 1: Are there any current devices to monitor Atrial fibrillation?

Question 2: What size ~~clot~~ clot could the device detect?

Team Name: Tube Much

Question 1: How did you decide on 15% market share?

Question 2: Is your device only addressing diameter issue?

Team Name: Flow Masters

Question 1: What are the costs ~~for~~ for competitive products? Will a \$150 price appeal to user/payer?

Question 2: Can the device measure a large range of flow rates?

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: WombOX

Question 1:

How do you plan on testing it?

Question 2: Are you worried about lack of space for insertion when there

Team Name: Atriumph

Question 1:

Will there be some sort of interface that tells the patient if the device is failing?

Question 2: How will you test this? What about long term testing?

Team Name: Tube Much

Question 1: What do you mean by 'collapsible'? are you worried about it collapsing in a patient?

Question 2: Are there anatomically accurate models to test on?

Team Name: Flow Masters

Question 1:

Do people die from the 26% accuracy error? Or is it just not ideal?

Question 2:

How do you plan to sync your app/code/etc with various electronic records? Do you have to work with the companies

Team Name: _____

Question 1:

that own these record systems?

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Wombbox

Question 1: Why are there no fetoscopic pulse oximeters currently?
(ones that are made specifically for fetoscopic surgery)

Question 2: Is your cost < \$1000 per use ^{or} total?

Team Name: Atriumph

Question 1: Would the permanent implant require surgery to be implanted?
Doesn't that raise costs?

Question 2: ~~Would there~~ Would there be a way to check the accuracy of device readings/calibrate the device after it's already implemented?

Team Name: Tube Much

Question 1: How will you test the device?

Question 2: ~~How will you~~ How will you make sure your device doesn't accidentally collapse?

Team Name: Flow Masters

Question 1: Would it be helpful if the device also indicated whether or not the flow rate was appropriate?

Question 2: ~~Are current~~ Are current EMR systems able to be integrated with your device? Or will you make special considerations for that?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Joey 101

Question 1: What is the physiologic basis for KMC? *maybe out of scope BUT would be interesting*

Question 2: How can you standardize KMC? *tightness of wrapping, skin to skin contact*

Team Name: Project Clot Atriumph *I like the transitions, beautiful* ^{transitions}

~~Sopretty~~ Question 1: What does the progression of the disease look like? *constant atrial fibrillation or episodes* *answered ✓*

Question 2: Would a patient know if they are experiencing atrial fibrillation? *in conjunction with devices used at other steps*

Team Name: Tube Much *really like the background anatomy*

Question 1: What situations require intubation? *usually how much time do doctors have*

Question 2: How long is this usually in for? *emergencies between vs. planned market*

Team Name: Flawmasters

Question 1: What is high enough frequency to detect changes in urine output? *how soon does an episode occur → how urgent?*

Question 2: ~~what~~ What are some major hurdles to adoption? *episodic in nature*

Team Name: _____

Question 1:

Question 2:

I like the conclusion
if we measure IN then we should measure OUT!
good for elevator pitch

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Joey 101

Question 1: If sleeping with baby is there danger of suffocation of baby

Question 2: What is the System Usability Scale?
What about power source?

Team Name: Team Atriumph

Question 1: How would you charge the device?

Question 2: Why do you think you'll get 100% of the actual patients?
to buy your product.

Team Name: Tube Much

Question 1: Are most of the issues happening with people who are under life support for many days?
15% of all strokes, wouldn't get a lot of this market

Question 2: What is the difference between the main market and niche market? How are the niche markets not included?

Team Name: Flowmatters

Question 1: Are there any safety concerns that need to be considered?

Question 2: Why does data need to be transmitted wirelessly, is that a key constraint?

Team Name: _____

Question 1:

Question 2:

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Joey 101

Question 1: What is the system useability scale and what does it mean to have a score greater than 70?

Question 2:

Team Name: Atriumph

Question 1: What are regulator needs for a device such as the one you propose?

Question 2:

Team Name: Tube Much

Question 1: Is disposability an ~~altern~~ acceptable alternative to autoclavability? What's the advantage of being able to autoclave?

Question 2: ~~Does~~ ^{Does} expanding diameter from 8mm to 10mm carry a risk of damaging the tracheal wall?

Team Name: Flowmasters

Question 1: What other applications, if any, could your flow-rate measurement device be applied to besides urine output?

Question 2:

Team Name: _____

Question 1:

Question 2:

Proposal Presentation -- Assessment

Team Name: Atriumph

Technical Content

1. Explained motivation for design
2. Summarized scope of design problem
3. Presented market analysis
4. Presented customer needs analysis
5. Presented target specifications
6. Presented mission statement

	Not			
	Acceptable	Average	Excellent	
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Visuals or Slide Design

1. Visual appeal of slides
2. Quality of graphs, figures and tables
3. Clear, concise supporting text

	Not			
	Acceptable	Average	Excellent	
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Organization of Presentation

1. Summarized scope of talk at the beginning
2. Communicated purpose of presentation
3. Appropriate tone for audience
4. Organization of content
5. Finished with a convincing conclusion

	Not			
	Acceptable	Average	Excellent	
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Oral Presentation Quality

1. Team's confidence and enthusis
2. Team's control of Q&A and quality of responses
3. Presentation length

	Not			
	Acceptable	Average	Excellent	
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Individual Assessment

Mark X in areas that are AVG. or BELOW AVG.

- Name:
1. Erica
 2. Eric
 3. Angela
 4. Michael
 - 5.
 - 6.

Individual
Presentation
Score:
(1-5 as
above)

<u>3.5</u>
<u>4</u>
<u>3.5</u>
<u>4</u>

Well Pr	Eye Co	Voice Q	Body L	Questions
	X			
			X	

Comments: _____

One thing the group did particularly well: Visuals of ppt

One thing that could be improved: _____

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Wumbox

Question 1: any applicable tech. for your solution?

Question 2: what is the tech. hurdle that gets in the way of developing a soln.?

Team Name: Joey 101.

Question 1: Market analysis: cost of device vs. education of health professional

Question 2: how to achieve separation of physiological signals from mother and baby.

Team Name: Atviumph.

Question 1: competing tech that allows for constant monitoring?

Question 2:

Team Name: Tube Much

Question 1: market share, willingness to pay → justifications?

Question 2: improvement of existing design vs. novel design?

Team Name: Flowmassers

Question 1: Justification of market analysis?

Question 2:

Proposal Presentation -- Assessment

Team Name: *At Triumph*

Technical Content

	Not Acceptable	Average	Excellent
1. Explained motivation for design	1	2	3 ④ 5
2. Summarized scope of design problem	1	2	3 ④ 5
3. Presented market analysis	1	2	3 ④ 5
4. Presented customer needs analysis	1	2	3 ④ 5
5. Presented target specifications	1	2	3 ④ 5
6. Presented mission statement	1	2	3 ④ 5

Visuals or Slide Design

	Not Acceptable	Average	Excellent
1. Visual appeal of slides	1	2	3 4 ⑤
2. Quality of graphs, figures and tables	1	2	3 4 ⑤
3. Clear, concise supporting text	1	2	3 ④ 5

Organization of Presentation

	Not Acceptable	Average	Excellent
1. Summarized scope of talk at the beginning	1	2	3 ④ 5
2. Communicated purpose of presentation	1	2	3 ④ 5
3. Appropriate tone for audience	1	2	3 ④ 5
4. Organization of content	1	2	3 ④ 5
5. Finished with a convincing conclusion	1	②	3 4 5

Oral Presentation Quality

	Not Acceptable	Average	Excellent
1. Team's confidence and enthusiasm	1	2	3 ④ 5
2. Team's control of Q&A and quality of responses	1	2	3 ④ 5
3. Presentation length	1	2	③ 4 5

Individual Assessment

Mark X in areas that are AVG. or BELOW AVG.

- Name:
- Michael*
 - Erich*
 - Angela*
 - Sam*
 -
 -

Individual Presentation Score: (1-5 as above)

_____	4
_____	4
_____	4
_____	4

Well Pr	Eye Co	Voice Q	Body L	Questions
		X		
	X			

Comments: *excellent slide layout and visuals*

One thing the group did particularly well: *great visuals!*

One thing that could be improved: *audience communication - looked at slides a lot*

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Wombox

Question 1: If your device will be the first in this area, why state 10% market share?

Question 2: You want to optimize a previous design, but this will be the first of its kind. So what sort of changes do you anticipate making to adapt it to this new area?

Team Name: Joey 101

Question 1: Who takes these sus tests?

Question 2: How do you plan to measure skin-to-skin contact?

Team Name: Atriumph

Question 1: How will it charge and what will this mean for the patient?

Question 2: What regulations hurdles lie in the way of this device?

Team Name: Tube Much

Question 1: What are your ideas for radial expansion/contraction?

Question 2: ~~Does~~ Will your device address too deep of insertion?

Team Name: _____

Question 1:

Question 2:

Proposal Presentation -- Assessment

Team Name: *Attriump*

Technical Content

	Not				
	Acceptable	Average			Excellent
1. Explained motivation for design	1	2	3	4	5
2. Summarized scope of design problem	1	2	3	4	5
3. Presented market analysis	1	2	3	4	5
4. Presented customer needs analysis	1	2	3	4	5
5. Presented target specifications	1	2	3	4	5
6. Presented mission statement	1	2	3	4	5

Visuals or Slide Design

	Not				
	Acceptable	Average			Excellent
1. Visual appeal of slides	1	2	3	4	5
2. Quality of graphs, figures and tables	1	2	3	4	5
3. Clear, concise supporting text	1	2	3	4	5

Organization of Presentation

	Not				
	Acceptable	Average			Excellent
1. Summarized scope of talk at the beginning	1	2	3	4	5
2. Communicated purpose of presentation	1	2	3	4	5
3. Appropriate tone for audience	1	2	3	4	5
4. Organization of content	1	2	3	4	5
5. Finished with a convincing conclusion	1	2	3	4	5

Oral Presentation Quality

	Not				
	Acceptable	Average			Excellent
1. Team's confidence and enthusiasm	1	2	3	4	5
2. Team's control of Q&A and quality of responses	1	2	3	4	5
3. Presentation length	1	2	3	4	5

Individual Assessment

Mark X in areas that are AVG. or BELOW AVG.

- Name:
- Sam Vallagomesa*
 - Erica Kim*
 - Michael Hart*
 - Angela Li*
 -
 -

Individual
Presentation
Score:
(1-5 as
above)

<u>4</u>
<u>5</u>
<u>5</u>
<u>4</u>

Well Pr	Eye Co	Voice Q	Body L	Questions
		X		
		X		

Comments:

Nice Job!

One thing the group did particularly well: *Good job at analyzing existing tech*

One thing that could be improved: _____

DURING the presentation, each student is to write down ATLEAST 2 questions that they would like to ask each presenting group. These will be distributed to teams

Team Name: Joey 101

Question 1: How large is the market for this device both in and outside of Malawi?

Question 2: If KMC is as effective as an incubator and significantly less expensive why is an incubator the standard of care?

Team Name: Atcunph

Question 1: A permanent implant seems invasive and expensive, how does this compare to the current standard of care?

Question 2: Why did you choose an implant over developing or modifying a current imaging modality external

Team Name: Tube Much

Question 1: How do you know when your device has reached the optimal radius when expanding?

Question 2: How are you addressing the problem of esophageal intubation? It seems like if it's easier to insert into the trachea it will also be easier to insert into the esophagus

Team Name: Flow Masters

Question 1: It seems like the gravity driven component of the current standard of care is a large source of potential error introduction would your device also be gravity driven?

Question 2: Why did you choose to transmit data wirelessly?

Team Name: _____

Question 1:

Question 2: