VMMC

Pain-O-Meter Redesign Project

Abigail Tan
Kelsie Thomas
Belinda Zhang

Advisor: Melissa Habel
Jonas Hines, Larry Hinkle, Wezi Msungama, Carlos Toledo
To design a tool that addresses fear of pain as a key barrier to voluntary medical male circumcision (VMMC) uptake among adult men.
Process Overview

Research  Ideation  Testing  Refinements  Final Concept  Moving Forward
Research
The first step in the team’s research was understanding VMMC and how mobilizers are currently explaining pain.
Current Model

The current Pain-O-Meter (used in Zimbabwe and Zambia) uses pain analogies at each phase of the process. However, there is a disconnect between the anticipated pain and the actual experienced pain. By creating a more comprehensive yet still simple pain model we can eliminate lack of knowledge and fear of the unknown.
Understanding Pain

Pain is subjective

Pain is multidimensional

Chronic pain patients are more sensitive

No uniform pain threshold

Assessment covers sensory / emotional experience

Pain tolerance depends on multiple factors

Pain Considerations

Pain Assessment Tools
Mobiliser Discussions

Motivation
Motivated by the benefits

Common Jobs
Farmers, Businessmen, Bike & Taxi Drivers

Explaining Pain
Men want to know procedure pain & effects of pain

Pain Expectations
Pain was expected or less compared to previous pain

Most Painful Stage
Bandage removal repeatedly mentioned over erection pain

Current Guide
Information is sufficient
Mobiliser Feedback

Injection
(1-5)
Median: 2
Mean: 2.25

Procedure
(1-2)
Median: 1
Mean: 1.38

First Hour
(1-2)
Median: 1
Mean: 1.25

First Night
(2-4)
Median: 2.5
Mean: 2.75

Day 1-2
(2-4)
Median: 2.5
Mean: 2.75

Erection
(2-6)
Median: 6
Mean: 4.71

Bandage Removal
(4-6)
Median: 6
Mean: 5.5

After First Week
(1-3)
Median: 2
Mean: 2

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1-No Pain   2-Minimal/Little Pain   3-Bearable Pain   4-Moderate Pain   5-Painful   6-Terrible Pain
Ideation
Design Criteria

Based on the research and mobiliser discussions, the team crafted design criteria that the designs should consider to ensure success.
Must
   Explain procedure pain + effects on recovery/daily activities
   Simple to Use + Easy to Understand
Should
   Encourage men to continue with VMMC
   Manage expectations/anticipation of pain
   Be applicable to most countries
Nice to Have
   Visuals, words, numbers
   Segmentation by age/occupation
Attributes
   Encouraging, comprehensive, user-friendly, simple
Design Question:

“During mobiliser discussions, how can we motivate + reassure men in order to overcome the fear of VMMC pain?”
Phase 1

The design team presented 7 initial models. The purpose of this phase is to identify elements of each model that could move forward and even combine with each other.
PRO

- Combats false/amplified perceptions
- Comparative to reduce fear
- Shows pain journey

CON

- Potential to create anxiety if man never had false/amplified perception

Team Feedback:

- Worries about creating unnecessary fear
- Graph difficult to understand
Pain Duration Meter

**PRO**
- Shows duration of time and associated pain
- “Little pain outweighs momentary pain”

**CON**
- Color choice is a subjective choice based on average pain described

**Team Feedback:**
- Length of time needs to be defined
- Bar format is hard to understand

*icons are placeholders*
**PRO**

- Personal experience humanizes the tool
- Gives men ability to better comprehend pain
- Ability to segment by age/occupation

**CON**

- Problem of varying pain thresholds
- Color choice is a subjective

**Team Feedback:**

- Helps to hear other peoples stories
- Model 1-3 friendly appearance
- Need text with icons
- Colors easy to understand

*icons are placeholders*
**PRO**
- Personal experience feedback humanizes the tool
- Able to see how in the grand scheme of things, the process is not painful

**CON**
- Graph could set unrealistic or misleading expectations
- High pain level of erections and bandage removal can be intimidating

**Team Feedback:**
- Medical looking
- Remove percentages and graphs
**PRO**

- Personal voices humanize the tool
- Able to address concerns

**CON**

- Perception of pain is different for everyone
- Could be viewed as overly simplified

**Team Feedback:**

- Tips help show pain is not as bad as expected
**PRO**
- Pain scale using relative words is more understandable
- Emphasis on life events like returning to work

**CON**
- Text-heavy; POIs could be replaced with icons

**Team Feedback:**
- Graph is intimidating and medical looking
- Likes milestone markers

**Graph Details:**
- A LOT OF PAIN
- BEARABLE PAIN
- MODERATE PAIN
- LITTLE PAIN
- NO PAIN

- DAY 1
- DAY 2
- DAY 3
- DAY 4
- DAY 5
- DAY 6
- DAY 7

- FIRST NIGHT
- SECOND DAY
- BANDAGE REMOVAL
- INJECTION
- PROCEDURE

- Drink lots of water so you can urinate to relieve painful erections.

- Return to light tasks!
- Back to heavy work!
**PRO**
- Shows positive emotional state after recovery
- Less text heavy by focusing on key points

**CON**
- Very generalized
- Less info about pain, the main concern according to interviews

**Team Feedback:**
- Graph is intimidating and medical looking
Other Considerations

- Tool should be immediately intuitive, if they see a graph they won’t relate well. The majority have lower education levels so they need to easily understand.
- Erections are ongoing but get better over time - this should be shown.
- A milestone to add is soccer, since it is a common activity for these men.
Phase 2

The design team generated another round of models to present to the team based on the feedback from the first phase.
Team Feedback:
- Add tip section
- Change biking and soccer milestone to day 7

Mobiliser Script
“Hello my name is Vincent and I will share with you my personal experience with the procedure and post recovery of VMMC. I started my journey when I was 32 years old and got circumcised. The first step is getting the...”

Vincent’s Script

INJECTION
“...When the doctor gave me the injection, I felt a little bit of pain.”

PROCEDURE
“I did not feel any pain during the procedure because the injection numbed you.”

FIRST HOUR
“I felt no pain after the first hour.”

FIRST NIGHT
“I started feeling a little pain the first night but it was bearable.”

END OF DAY 2
“I still felt little pain but it was bearable.”

INFECTION
“The morning infection pain lessens and becomes bearable as the wound heals through the week.”

ELECTIONS
“...At the end of the first week I felt no pain and was able to go back to hard labor work.”

CLEANING WOUND
“I felt little pain when cleaning the wound.”

DAY 3-7
“By the end of the week, you are able to go back to hard labor work.”

Tips: As long as you follow the doctor’s instructions on caring for the wound, the recovery is not difficult.

Milestone: By the end of the week, you are able to go back to hard labor work.
Team Feedback:
- The model incorrectly represents VMMC as a cyclical process.
Team Feedback:
- Tips portion is helpful
- Change wording of tip section
- Use inset graphs to help with scaling
- Replace toilet icon

“My name is Vincent, and this is my journey with VMMC.”

Drink water to urinate and prevent painful erections
Refrain from sexual intercourse for 6 weeks
Use condoms for more protection against STDs.
**Team Feedback:**

- Shows erections getting better over time
- Calendar format easy to understand
- Replace “DAY #” with calendar icon
Phase 3

The design team made minor adjustments to the models from Phase 2 in preparation for user testing.
My VMMC Experience

DAY 1
- INJECTION
- PROCEDURE
- FIRST HOUR
- FIRST NIGHT
- ERECTIONS

DAY 2
- BANDAGE REMOVAL
- END OF DAY 2
- ERECTIONS

DAY 3-7
- CLEANSING WOUND
- DAY 3-7

VINCENT

“Refrain from sexual intercourse for the next 6 weeks.”

“If you follow the doctor’s instructions, the recovery is not difficult.”

“Painkillers are given to decrease the pain.”

“Drinking water helps prevent painful erections.”

“The pain was less than what I expected.”

*Shown to man*
“Hello my name is Vincent and I will share with you my personal experience with the procedure and post recovery of VMMC. I started my journey when I was 32 years old and got circumcised. The first step is getting the…”

1. INJECTION
   “When the provider gave me the injection, I felt a little bit of pain.”

2. PROCEDURE
   “I did not feel any pain because the injection numbs you.”

3. FIRST HOUR
   “I felt no pain after the first hour.”

4. FIRST NIGHT
   “I started feeling a little pain but it was bearable.”

5. ERECTION
   “I felt pain during the first morning erection.”

   Tip: Take painkillers to decrease the pain.

6. BANDAGE REMOVAL
   “The bandage removal was the most painful part.”

   Tip: The removal only took a couple of minutes so the pain was short lasting.

7. END OF DAY 2
   “I still felt little pain but it was bearable.”

8. ERECTIONS
   “The morning erection pain lessens and becomes bearable as the wound heals throughout the week.”

   Milestone: By the start of third day, you are able to do light activities and bath.

9. DAY 3-7
   “At the end of the first week I felt no pain and was able to go back to hard labor work.”

   Milestone: By day 7, you are able to go back to hard labor work, bike taxi driving and playing soccer.

10. CLEANING WOUND
    “I felt little pain when cleaning the wound.”

   *Only viewed by mobilizer
“My name is Vincent, and this is my journey with VMMC.”

Drink water to urinate and prevent painful erections

Refrain from sexual intercourse for 6 weeks

Use condoms to protect yourself against HIV & STDs

Injection 1st Hour Erection Bandage Removal First Week
Procedure First Night Days 1 & 2 Cleaning Wound Erection
MEET MARSHALL

MARSHALL GOT CIRCUMCISED TO PROTECT HIS FAMILY. Here’s what it was like for him.

TIP: Erections can be painful. Drink lots of water so you can pee to help them go away.

INJECTION
I only felt a little pain.

PROCEDURE
I didn’t feel any pain. The injection numbs you.

1st HOUR
I felt very little pain the first hour.

1st NIGHT
I felt a little pain but it was bearable.

ERECTION
The morning erection was painful.

BANDAGE REMOVAL
This was the most painful, but they gave painkillers.

ERECTION
Pausing helps the erection go away faster.

SHOWER!

ERECTION
I drink lots of water so I can relieve any erections.

BACK TO LIGHT WORK!

ERECTION

ERECTION

FIRST WEEK
I felt no pain at the end of the first week.

SOCCER & HEAVY LIFTING!
Testing
The team sent the three models to Malawi and asked local mobilizers for their thoughts and feedback.
- “Very easy to follow”
- “Intuitive… clear and easy to use”
- “Honest and clear” which is calming for potential clients
- “Insight into whole procedure and recovery”
  Shows that “the process is not as painful as they may think”
- “The chat can be difficult to interpret”
- “Vivid picture of how the pain decreases with each passing day”
- “Clearly proves that the healing process is less painful”
- “Long and… may confuse the mobilizer to interpret”
“For sure [this model] will encourage men to undergo VMMC and also help mobilizers to explain the pain to the potential client.”
Refinement
After receiving user testing feedback, the team decided to move forward with Model 1. We made a few minor adjustments to try to incorporate elements that mobilizers liked from the other models.
Added
- Simple erection icons to show it gets better over time
VINCENT:
MY VMMC EXPERIENCE

Added
- Larger picture of Vincent
- Color change to make more cohesive
- Bar gradient to show overall pain experience
- Erection gradient arrow to show better over time

Erections get better with time. By the end of the first week you will be fully healed.

“Refrain from sexual intercourse for the next 6 weeks.”
“If you follow doctor’s instructions, recovery is easy.”
“Painkillers are given to decrease pain.”
“Drinking water helps prevent painful erections.”
“The pain was less than expected.”
Added

- Color change
- Bar gradient to show overall pain experience

“Refrain from sexual intercourse for the next 6 weeks.”

“If you follow the doctor’s instructions, the recovery is not difficult.”

“Painkillers are given to decrease the pain.”

“Drinking water helps prevent painful erections.”

“The pain was less than what I expected.”
The team decided to adopt the color and layout changes of the second fine-tuned edit since they were the most cohesive. We also decided to merge the gradient arrow and use the erection graphic from the first fine-tuned edit since it fit better with our visual language.
Final Concept
The model frames the pain of VMMC through the personal experience of a man named Vincent. Vincent represents an average 27 year old Malawi man who has already been circumcised. The pain described by Vincent came from a compilation of responses given by 8 VMMC mobilisers. The goal of this model is to humanize the tool instead of simply using numbers and relative words, but instead give perspective of the pain through another person’s eyes. When the mobilisers use this device, they can say that either they had similar experiences to Vincent or that Vincent represents a handful of mobilisers who were interviewed about the pain/process.
VINCENT: MY VMMC EXPERIENCE

DAY 1
- Injection
- Procedure
- 1st hour
- 1st night

DAY 2
- Erections
- Bandage removal
- End of day 2

DAY 3-7
- Cleaning wound
- Day 7

The erections get better with time and fully heal by the end of the week.

“Refrain from sexual intercourse for the next 6 weeks.”
“If you follow doctor’s instructions, recovery is easy.”
“Painkillers are given to decrease pain.”
“Drinking water helps prevent painful erections.”
“The pain was less than expected.”
"Hello my name is Vincent and I will share with you my personal experience with the procedure and post recovery of VMMC. I started my journey when I was 27 years old and got circumcised. The first step is getting the..."

1. INJECTION
   "When the provider gave me the injection, I felt a little bit of pain."

2. PROCEDURE
   "I did not feel any pain because the injection numbs you."

3. FIRST HOUR
   "I felt no pain after the first hour."

4. FIRST NIGHT
   "I started feeling a little pain but it was bearable."

5. ERECTIONS
   "I felt pain during the first morning erection."

   "The next morning erection pain is bearable and lessens as the wound heals throughout the week."

   Tip: Take painkillers to decrease the pain.

6. BANDAGE REMOVAL
   "The bandage removal was the most painful part."

   Tip: The removal only took a couple of minutes so the pain was short lasting.

7. END OF DAY 2
   "I still felt little pain but it was bearable."

8. CLEANING WOUND
   "I felt little pain when cleaning the wound."

9. DAY 3-7
   "At the end of the first week I felt no pain and was able to go back to hard labor work."

**MILESTONES**

By the start of DAY 3, you are able to bathe and do light activities.

By DAY 7, you are able to go back to hard labor work, hike, taxi driving and playing soccer.

After 6 weeks, you are able to have sexual intercourse.

*Only viewed by mobilizer*
In comparison to the original Pain-O-Meter used in Zimbabwe and Zambia, the new Pain-O-Meter addresses perception versus reality by using a personal storytelling layout to explain the pain.
Moving Forward

- Implementation in Malawi and by other interested programs
- Potential for segmentation
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Questions?

Design Contacts:
belinda.zhang@gatech.edu
kelsiethomas@mac.com
stan45@gatech.edu

CDC-HQ Contact:
Melissa Habel
mhabel@cdc.gov
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