

Mothers First submission to the Sight and life Elevator Pitch contest October 2020



THE MUAC A METER



Integrating ready to use technology we can transform how we measure, store and interpret data that comes to us from the field. From bluetooth to the cloud the MUAC a Meter is ready to bring 21 century technology to the field. Contact Pat McMahon nutritionforall.net@gmail.com

MOTHERSFIRST.NET

Elevator pitch

Q1 Describe your idea that offers a creative approach to reduce micronutrient malnutrition among the population. (Maximum 400 words)

The problem

The collection of accurate nutrition data in the field is the cornerstone of any nutrition programming. Despite this in the field weighing scales and the measurement of MUAC as an assessment tool are wrought with problems. The accuracy of the scales themselves for example, reading of the scales.

Similarly the measurement of MUAC as an easy to use tool has intrinsic problems such as the availability of MUAC bands, the accuracy of the reading themselves.

Our solution.

Using technology that is ready and available can transform this aspect of nutrition programs. We have conceptualized the MUAC a Meter. (See concept drawing)

Using technology that is available in a hardware store we can measure MUAC digitally. Using the hardware of a mobile phone this data can be collected on the device and integrated in a mobile app that will program and manage the project.

Please see The 1000 Day App video [here](#).

The device that will be able to receive data from bluetooth enabled digital weighing scales.

How would this contribute to scaling up MMN.

The better and more accurate the nutrition data we have the better we are able to program manage and develop cost intervention tools to scale up interventions. It builds accurate and reliable real time data to demonstrate the effectiveness of interventions. Such as MMN, Protein energy supplementation.

How is it different from current or conventional approaches? (do not exceed 300 words)

Despite the technology revolution that has taken place around us in the past 20 years we are still using pen and paper to recode data in the field. Data annailasion if it does take place may take months to correlate. Using basic software programs the MUAC A Meter will digitize field based delivery of essential nutrition actions. All the components are there.

Please find the MUAC a Meter development document <https://bit.ly/2ImsS5w>

Please find here the 1000 day app development document (software) <https://bit.ly/3iS3wcn>

Next steps.

While you could look puerly at the cost of developing the MUAC a Meter and associated hardware. In fact because this technology is owned by mobile tech firms. We believe that the MUAC a Meter can be built and supplied as part of corporate social responsibility. These Machines are built to last a lifetime. Winning this innovation award would be to say that this solution has merit. It will in theory say that this is possible and the nutrition community is will to explore this exciting opportunity.

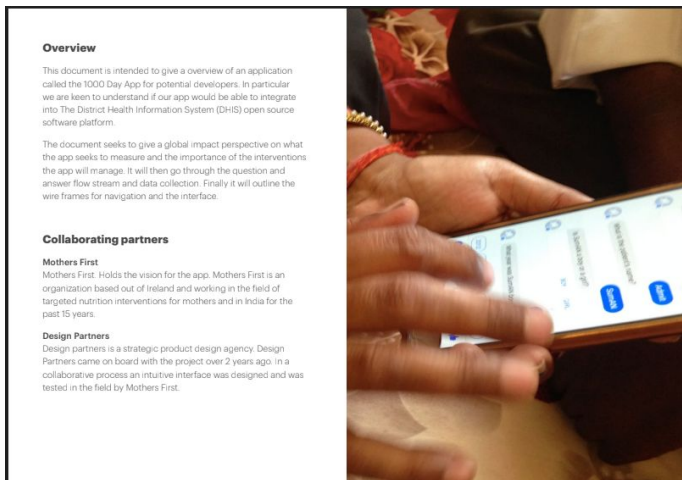
Additional questions asked by sight and life elevator pitch team

Please explain how is your innovation “pandemic proof” in about 150 words.

Social distancing.

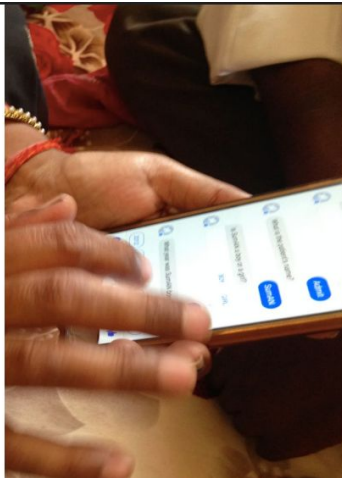
- A key feature of the MUAC a Meter (MaM) is that it will virtually eliminate the need for paperwork and so issues such as pen sharing and close proximity to patients and so on are cut down.
- The Bluetooth feature from the weighing scale to the MaM helps with social distancing at a key moment in nutrition assessments.
- In the future disposable MUAC tapes such as are becoming available could be inserted into the inner rim of the measuring component of MaM.
- The device will be capable of real-time monitoring therefore act as an early warning to acute shocks such as the pandemic.

The two components to the MUAC a Meter are software and hardware. Please find below the work we have done so far on these.



1 Software development document can be found here

<https://bit.ly/3iS3wcn>



education?

Product Development: The MUAC A Meter

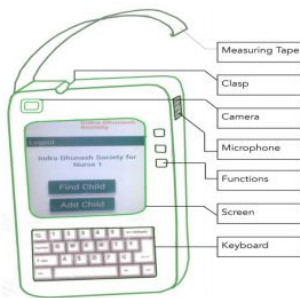
The MUAC a meter is a design concept which uses every day technologies to create a device that is nutrition data collection simplified (NDCS). It will go a long way to empower field workers that their work is being seen and is making a difference.

Size:
Hand held and robust big screen with easy to use key pad

Technical specifications:
Similar to a simple smart phone.

Special functions: Tape measurement
Mid Upper arm circumference (MUAC) International research is clearly showing that there is a clear correlation between MUAC measurements and weight increase and decrease. To have a key measurement that is digital cannot be underestimated.

Currently MUAC is measured with a simple band. The MUAC-A-Meter will measure this digitally and feed it directly into the system if an individual is enrolled. Simple area surveys will be possible using the survey mode on the device just using MUAC as an Indicator. Voice recognition technologies can make other data uploads seamless and simple.



2 Hardware development document can be found here

<https://bit.ly/2ImsS5w>

Sight and Lives comment on our application

“We are in the final stages of selecting our finalists and loved the idea of the MUAC Meter. We think it is a fabulous innovation!”

Unfortunately it transpired that we were above the age category to be included in the finals. In other words we were too old, yet the idea is new.

Our email reply

The elevator pitch is a platform for great ideas to emerge. I think that I embody the spirit of youth and innovation. Of thinking outside the box. I believe in this idea. However, while disappointed I understand if the MUAC a Meter cannot proceed to the finals.

If Sight and Life believe in this idea we can make this happen, of that I am certain. Imagine every clinic with a MUAC a Meter and weighing scales both of which are built to last 20 years.

The MUAC a Meter will be our storyteller. Quality accurate data in real-time. Every piece of this already exists, we just need to believe.

To you the reader!.

As a famous man once said 'When we look upon a better future we must bring it into now'

If you have got this far, perhaps you feel a tingle of excitement, a glimpse into what the future can look like. Hold onto that feeling, make contact and together we will be more than two.

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