**Bangalore**

**June 3rd**

Visit to local PMC clinic that serves a ward 2kms away f Ejipuru

*Site and staff activity*

Clinic is bright and cool and virtually empty at the time of the visit. The area surrounding clinic appears impoverished: goats, rubbish, dogs on the street

The fact that the clinic is not situated within the catchment area of the population it serves is a problem for local women, in terms of access and transportation, and is one of the key issues the BBN wants to address.

The team were introduced to one of the health care staff in the clinic, and to [name of staff member] who is a lactation consultant, and a staff nurse/midwife at local private hospital, loaned to the clinic through a private/public partnership

She set up ad hoc counselling sessions in the clinic as women waited for their appointments. The sessions included infant feeding and general public health. [Name of the staff member] and her colleague and [name of another staff member] reported that they have been very successful. They also involved families (fathers and mothers and mothers in law) who were waiting with pregnant women. [Name of the staff member] noted that all local staff are aware of the need to educate the community the women live in. [Name of the staff member] gave an example of how dietary advice could potentially help women with low iron levels: dark leafy green vegetables are available locally but traditionally cooked with dairy products. Women can be advised to cook these separately to improve iron uptake.

[Name of the staff member] estimated she saw around 70 women a month

The head of the service also arrived towards the end of the visit

***Response to monitoring system***

[Member of UK research team] showed the three staff present what the system can do. This generated positive reactions and engagement. Indeed, a male patient waiting in an adjacent area was very curious about what we were doing and came to find out what was going on.

The staff felt that the kit could be valuable for recording data in outreach clinics, and sending the information back to the central clinic in the ward. However, they felt that staff would not want to be responsible for transporting expensive equipment. Under these circumstances, they felt that the kit could be based centrally, and used in that location.

[Name of the staff member] reported that the BBN is keen to work with the clinic to develop community engagement. They are currently creating a kind of staff/community stakeholder group, as a way of catalyzing communication between the facility andlocal community members.

*Evening meeting*

The team were joined by other members of the BBN for an evening meeting, including [Name of the staff member] husband, who is an [xxx] engineer. He noted that electronics tend not to function for a long time in India, due to the heat and environmental conditions. He recommended working with a trusted Indian manufacturer if kit is to be rolled out widely around India. He also noted that licensing and marketing is difficult, and that the best route to success for this is to go through trusted colleagues. Key points he made:

-dust heat humidity require sealed units to protect delicate electronics

-calibration - ? guaranteeing accuracy is an issue

-consider what can be serviced locally/replacement of parts

-value of linking with an Indian partner if possible and make in India

A significant opportunity is that the Indian government are currently investing massively in local clinics. The downside of this is that big companies are already gearing up to capitalize on this opportunity, so it is vital to act quickly on this opportunity.

He noted that some of the key questions from potential users/investors might be:

-? can you do more than one person at once? eg BP monitor and oximeter all at once

-Why do you need the hub - why cant the bp monitor send info direct to the phone? - the hub acts as a central collection unit - could this not be direct to the phone? (response from [member of the UK research team]: the hub makes the connectivity easier and allows for more sensors to be added. - a phone app would need to be amended each time a new sensor).

**June 4th 2019**

***First women’s group***

Total around 12 women, plus the local ASHA, and an interpreter [name of interpreter], [name of staff member] from BBN, [3 members of the UK research team].

Group held in a small room in the house of a local woman. House in very impoverished district of scheduled class residents. Women came in and out, sometimes with children. Very vibrant, lots of energy, healthy looking women and children.

Good engagement mixture of pregnant and non-pregnant women and children and ages and first to third baby. Lots of engagement (though some dominance by one of the Ashas at times. All seemed very comfortable

Between them, the ASHA/interpreter/[name of staff member] reported that womens groups gave identity and power to marginalized communities. They could question the system and in fact in this case had done - eg in terms of the use of the community of the local maternity facility, they had lobbied to ensure a doctor was available, that the care environment was hygienic and clean, and so on.

When the group started they couldn't even sign their own name. The group was set up in 2011 by an external NGO, and actively supported by them until 2014, after which they became self-sustaining. They started to take on human rights and health rights, how to talk to the dominant local officials, sorting out water collection and improved drainage in their area, and control of mosquito breeding, sorting out and collecting local waste. They wrote to the govt and the government changed these issues. They also put in successful applications to get concrete structures built, rather than temporary slums. They suffered caste based discrimination when higher caste residents built a wall at the end of their roads to stop them travelling though adjacent higher class areas to get to the local temple. The womans group challenged this with local government, and won, meaning that the wall was pulled down. In terms of direct maternity care, they lobbied successfully to have an abusive nurse moved, and to have under the counter fees removed, and they regularly respond to any incidence of inadequate care. A community score card has been offered to the community and the health officials to see how the care the women say they are receiving and the care that staff think they are giving compares.

At the moment, BBN are working with the group to enable the set up of a hospital/community maternal health monitoring committee. They find women’s groups to be a very powerful tool for peoples action for development.

*Response to the PRIME kit*

Observationally, the women were curious and excited about using the kit, and happy there is something portable that brings these assessments to their doorstep. There was no evident anxiety or fear. There were questions about the pathway once a reading is taken, as some reported that they already have some anxiety about their state of health, but others felt the kit can reassure them about their health. The BBN staff and the ASHA felt that it might be best if the ASHA was the holder of the kit, and the catalyst for referral if required.

***Second women’s group***

This meeting took place in a relatively less impoverished area of Bangalore, with wider streets, and much less rubbish in the streets/ fewer roaming animals. The meeting was in a very small room used for community education. All attendees were Muslim women. There were around 10 attendees, plus the local ASHA as well as the project team and BBN staff. There was far less spontaneous conversation, and a few individuals did most of the talking. Some of the women looked very young, and/or somewhat undernourished. The conversation was focused on the monitoring system rather than the role and benefits of women’s groups.

Having practiced with the kit, the women seemed to be receptive to it. [Member of staff] reported that, based on the conversation, the woman saw some benefits, mainly that they could control their own health information. However, she also reported that it was felt best to do this with a health worker, who is trained and incentivized, and this needs to be linked with the local groups and communities. The ASHA worker is key, but needs training and incentives to add this to her workload

**General Note**

It was noted over the course of the whole visit (to Bangalore and Hyderabad) that the connection for the ECG is loose and might get easily broken – it sometimes needs fiddling with to make sure it was connected, leading to the possibility of breakage if people force the connection roughly. The unit small, which can be an advantage, but it could be easy to lose in a busy clinic/in the community (and this is also true for the other small elements of the kit). It was suggested that a round pin connector might be better.

Towards the end of the data collection in Hyderabad the hub not charging and not running well on batteries.