This two week trip is planned in two halves. The first week will be spent in Freetown, facilitating a 2 day workshop in the city. Follow on visits from the previous trip will be incorporated as well as visits to some new units. The second week will be based in the Waterloo area, 2 hours drive from Freetown, where we will facilitate a 2 day workshop and follow up visits to some more remote out of town areas. We are expecting 40-50 participants at the workshops, whom will all receive follow up visits in their own clinical areas within the next 3-6 months.

**Travelling personnel**
- Oli Jeacock
- Ellie Corlett
- Sharon Hastings

**Aims of the trip**
- 2 day workshop in Freetown
- 2 day workshop in Waterloo (Lumpa)
- Visit new units within both areas
- To follow up units attending the previous workshop
- To follow up maternity staff who have been identified as key link workers/mentors.
- Deliver neonatal resuscitation training as in house training in clinical areas
- Observe units availability of emergency equipment and designated neonatal resuscitation areas.
- Attain feedback from previous workshops and ascertain whether training has been cascaded.
- Discuss the use of the partogram and whether using it is making a difference to whether small units refer in to PCMH sooner.
- Visit units affected by the flooding (i.e. Regent health centre) and assess equipment damages and loss

**Day one**
Today is Sunday so rest day for most. However as we all know, in midwifery the baby's don't stop coming just because it's the weekend. It does mean that clinics are staffed but it is a lot quieter. No clinics are run during Sunday, no under 5's or antenatal clinic. No health campaigns or immunisations. Usually, depending on size of the clinic, there are one or two members of staff present to look after any labouring women who may come in during this day. Some extremely small
clinics may only use an on call system whereby the midwife, who lives close by, gets called in if somebody turns up in labour.

Today we went to Kroo Bay. A densely, overcrowded, slum population of 18,000. Kroo bay ignites the hearts of everyone who goes there. It is a very poor area, deemed the rubbish pit of Freetown, full of pigs, rubbish, sewage, flooding but still so full of life and wonderful people. The African Maternity Link has a close relationship with Kroo Bay health centre and the staff there. We have been working with them and the midwife, Martha, for a few years now and have always been extremely impressed with Martha’s dedication, honesty, willingness to improve her knowledge and skills and indeed the knowledge she has. Her documentation is good and the colleagues she works with clearly learn from her teachings well. The MCMH’s here have learnt from her cascading of training and not only deliver babies but Martha has been teaching them how to suture. So many improvements have been made in Kroo Bay recently, the implementation of a tap and sink is fantastic news as now they have clean running water, albeit intermittently. They still have minimal equipment but that is a countrywide problem here. The staff when needed if stock is low buys sutures, lidocaine and sometimes drugs and blades are used for episiotomies if needed due to lack of equipment. However, necessary drugs and essential equipment like gloves and PPE are supplied from the Ministry of Heath.

Day two

Today we spend the day planning the workshops and organising the next few weeks. Facilitating workshops and organising the planning of visits is a whole days worth of work as not only do we have to ensure our presentations are up to date and tailored to the skill mix of people attending, we have to plan the follow up visits we are doing with the best time to arrive at the health centres, so our arrival does not clash with busy clinics or low staffing numbers.

We have also managed to obtain a new delivery bed for Kroo Bay thanks to World Medical Relief in America. We have also obtained boxes of gloves, catheters, thermometers, syringes, blood giving sets and other really
useful equipment that will be donated across the units we visit and work with.

Day three
Day one of workshops in Freetown. 18 attendees compromising of midwives, MCHN’s and SCHN’s attend from a variety of unit’s big, small, lone workers, hospital staff and small privately funded health facilities. We are expecting two more midwives who inform us they are held up clinically and unable to attend until tomorrow. This is frustrating but cannot be helped.

Today we cover a variety of topics including:
- Antenatal care
- Normal labour
- Obstructed labour
- The use of the partograph
- Management of the stages of labour
- Malpresentation
- Breech birth
- Cord prolapse
- Neonatal resuscitation

All topics covered are interactive with questions, answers, sharing of previous workplace scenarios, quizzes, group work and role play.

A successful day had. A good group of people who have a good standard knowledge base.

Interestingly we talk to a man who's wife died last night in childbirth. She was having twins and labouring at full term. The first twin had died a few days previously but the second twin was still alive on admission to the hospital. She suffered from anaemia but was taking vitamins in pregnancy to aid with it. It appeared that they have put up a syntocinon drip to augment labour in the night. Here they have no syringe drivers or pumps to enable correct dosage of drip rates, but instead use a ‘drops per minute’ approach, which is very dangerous as syntocinon is such a strong drug. It appears that at some point during the night the second twin also died (perhaps from the syntocinon use) and the mother then suffered a cardiac arrest, perhaps from
uterine rupture or other causes in childbirth that we are not aware of in this case, as we have not spoken with the clinical staff, only the father of the children. The post-mortem indicated death was due to cardiac arrest and anaemia. The twins were not expedited at the hospital, only once at the mortuary did the mortuary staff perform a Caesarean section and remove the twins from the abdomen.

This case is not the only we hear of this day. We also learn of an eclamptic fit in one of our known health centres the day before, whereby, although referred to PCMH hospital, she also died from complications of untreated severe eclampsia. This case is one in which we know can be possibly prevented by good regular antenatal care. We discuss these scenarios with our workshop attendees and reflect on what could have been done to prevent such tragedy, focusing on early referral and skill of clinical staff to take action before referral if possible.

Day four
The second day of workshops. 19 attendees from 11 units. On today's itinerary are;

- Pre eclampsia and eclampsia
- Shoulder dystocia
- Uterine rupture
- 3rd stage of labour and retained placenta
- PPH
- Sepsis
- Neonatal resuscitation

We concluded our workshop by issuing the same quiz we gave the attendees at the beginning of the workshop yesterday so that we can compare answers and discuss what new knowledge they have learnt. The workshop evaluation form is also quite extensive and contains vital information from the attendees, which we use to further ensure we tailor our workshop training to what the midwives and healthcare professionals feel they need training on. It is also good to gain feedback on what they have learnt during our workshops to ensure they are retaining the key important points that will ensure safe practice and smart use of their skills.

Speaking to Elizabeth from Hamilton PHU, I look for feedback on the BP machine we provided her with in February. These BP machines have been made and intended for use in third world countries and use a traffic light system to indicate abnormal blood pressures. They are chargeable
by phone port and are designed to last in a harsh environment. Elizabeth speaks highly of the machine and has praised its use in some antenatal referrals she has made to PCMH. As she is the only SECHN working there it also helps ensure correct readings are being taken by less skilled or inexperienced staff. Elizabeth particularly likes the use of the traffic light system and has been using it to take a BP series when blood pressures are found to be out of the normal range.

Day five
The first day of follow up visits commenced today.

Rockupa government hospital
Firstly we visit Rockupa government hospital to the east of Freetown. Rockupa last had a visit from TAML last year, however, there is a big refurbishment of the hospital, and therefore they are currently based in a small unit at the moment while the work is being carried out. This new unit is spread into different buildings with c/s and under 5’s clinic taking place in another building. The maternity unit is clearly too small for them presently, with their 60 births per month, but they set up the space well. A clinic and waiting area, separate postnatal rooms for c/s and normal birth mothers, with 4 beds in each room. These rooms were also used for labouring women and to treat women coming in with ailments during pregnancy or postnatally too. The labour room had two delivery beds side on to each other, plus another hard bed where they set up for their neonatal resuscitation. It was good to see on the wall was our simplified neonatal resuscitation algorithm, displayed for them to use easily next to their resuscitation area. All their equipment was packed away in buckets to be kept clean, with their delivery instruments and birthing essentials ready sterilised under a cover. Here they currently have 7 midwives and 4 SCEHN’s, whom appear to work well together with some good documentation seen. We discuss recent cases of referrals to PCMH for prolonged labour and a delivery where the second twin was a transverse lie. We also discuss other types of deliveries they have had recently, including breech, vacuum and c/s. Today we spent some time teaching the staff neonatal resuscitation. 9 members of staff joined in our training using the resuscitation doll and were engaged in our topic. It appeared that some did not have much knowledge of NNR, however it was clear that those who have met TAML before and
attended training sessions previously were retaining some basic skill knowledge, which they were happy to share with the group.

**Calaba Town PHU**

A really welcoming place amongst the hustle of the streets. Here one midwife works with 6 SCEHN’s and 8 MCHA’s, attending to 20-25 deliveries per month. We meet with the two members of staff who attended our workshops this week and learn that one of them had been a nurse in the military for ten years before becoming an SCEHN here. It's quite a basic unit with only 3 rooms and very minimal space, furniture and equipment. Later that week we send them a new delivery bed for their labour ward, thanks to the generous donations from World Medical Relief as their one delivery bed is not satisfactory. However, even basic equipment such as instruments, pinnards and sutures were sparse. Good documentation and partograph use was noted although some cases I'm extremely dubious of. All partographs followed the alert line and never differed, the FH was a consistent 120bpm on all partographs including a macerated stillbirth-, which is impossible! Perhaps some further training or observational work would be on benefit here.

On our way out we meet with two men from the DPM who are partaking in unannounced visits to check that units are suitably ready for the next polio campaign. All maternity clinics are also accountable to the DPM with filled in partographs essential practice and monthly figures up to date to enable them to get extra funding and pay. This perhaps is the reason for falsifying partograph documentation, if that is the case, when FH’s haven't been plotted or care hasn't been given when it should. There has been some issues over time with stories of cases not matching up to the documentation seen. In some instances we here of referrals for prolonged labours where the partograph plots nicely along the alert line or where VE’s have been done far too regularly to enable the plotting to be accurately along the alert line. This could also be a gap in knowledge rather than falsification. During workshops and training we always find that it's the partographs that, PST healthcare professionals struggle with documenting, however if it was part of every day practice we could assume it would become second nature. I have noticed during these recent workshops, that a few believe the FH should be plotted on the alert line, whatever the time, rather than plotting on the time where it falls on the graph. This would explain some of the documentation I have seen in some units where the partograph really does not make any sense. Closer observation and time spent at each of these units is the only way to understand and see what is really happening in practice and to help them correctly document and care.
Aberdeen women's centre

A trip to Aberdeen women's was really to show Ellie and Sharon what can be accomplished here with good management, regular funding and quality policies and guidelines. Aberdeen women's has had new management again this last year, being now run by a European doctor. This centre is well staffed, clean, and spacious with a very clear European approach to care. You can see that its running is very similar in ways to British hospitals, and can see that it has always been run by Europeans. Hear there is an emphasis on confidentiality, documentation and dignity for the women and people residing in the clinic presently. Curtains are closed when a woman is in labour, drug stock is stored correctly and signed out, babies are labeled (which I have never ever seen happen in Africa), they have HDU beds, policies for IPC, drugs and care, and a very well stocked labour ward with two resusitaires, all the equipment needed for emergency situations and even paediatric support. Furthermore, there is a consistent amount of funding being put into Aberdeen women's centre that aids in its smooth running hugely. Good management with strict policies and regular on the job training is always evident when speaking to the staff, as well as updating them at TAML workshops.

Day 6

Regent

Today was a very special visit for us, as we visit Regent CHC and the area where they were most affected by the devastating mudslides that happened in August. Regent itself is a mountainous area, about half an hours drive outside of Freetown. It's a beautiful area with houses upon houses built into the mountains. Clearly, over construction and lack of basic planning, building structure and surveying combined with heavy rainfall has been at the heart of natural disaster. This community suffered a loss of 1000 people; many were children and mothers asleep in their homes. Most of the people who have lost homes have been temporarily rehoused in camps, with a government initiative to re home everyone in process. We visit the site of the mudslide and see the wrath of nature, as it leaves nothing living in its path, leading down all the way into Freetown.
Regent CHC luckily has not been subject to the disasters of the community surrounding it. Although they suffered some flooding surrounding the building, the unit itself was untouched. They new extension houses a new labour ward with 3 good delivery beds, which is very clean, tiled and spacious and a postnatal room which has 4 beds where women can stay for 24 hours. We visit during postnatal clinic and under 5’s. The midwife there, Fatmata was holding a postnatal class to about 40 mothers, discussing a variety of important issues including, exclusive breastfeeding, weaning, no water, how to wrap babies in the warmth, including he type of blankets needed to ensure they don’t get too hot and can regulate their own temperature. They discussed the importance of nutrition and healthy mothers, how to prevent newborn disease as well as very good and interactive information on the importance of immunisation, using pictures and song to aid in the teachings. It was fantastic to see such knowledge being utilised in a class environment with all mothers breastfeeding their babies as they waited for immunisations. As there is no such health visitors or community postnatal visits, this clinic is highly important.

This unit is quite a busy place with around 20 births per month. 2 MW’s, MCHA’s and 10 SCEHN’s work in this bustling unit. 5 people from this unit have attended our workshops over the last 2 years (since the Ebola outbreak) with monthly teaching sessions being held so that any healthcare professionals who attend workshops of any kind can cascade the new training and updates to the rest of the staff. Here we notice a need for some basic equipment as we do in most units we visit, including pinnards, a Doppler and instruments. We leave a new bag and mask and discuss neonatal resuscitation with 2 members of staff. As there is a busy clinic on and Jayne had stayed on post nightshift to meet us, we didn’t complete any further neonatal resuscitation training. It was quite interesting to note of a recent case where a new mother died at home. She was an inpatient being treated for a symptomatic STI 3 days previously who self discharged and went into labour at home, using a TBA. We were then told she retained her placenta and died of PPH and combined infection at home, rather than being referred into the unit to give birth. The baby was brought to Regent CHC as the father was in prison, the family residing in the provinces and no one to care for the baby. The staff here referred the baby to PCMH for prophylactic infection (Amoxicillin) treatment and because she had slight facial jaundice, then was brought back to the unit where the staff here are caring for her throughout the shift rotations. Princess Agnes (they have named her) is now one month old and is still waiting for the correct family members to come and collect her. However, she is thriving and the staff are paying for her milk and cares. This sort of community spirit is not uncommon here, during my times in Sierra Leone I have heard many stories where staff are looking after babies, ill women and young rape victims, really resonating how fantastic these people are for
caring for their own people. In a country where there are no health visitors, social workers, benefits or extended help, it is natural instinct to be caring and compassion to those who need help.

King Harman road hospital

Situated in the middle of town is King Harman road hospital, a large busy unit, currently situated in a temporary building whilst the old hospital goes under renovation. Being a hospital, they normally facilitate C/S here but currently are referring cases due to lack of space. 2 matrons, 10 midwives, 7 SCEHN’s, and 3 MCHA’s facilitate family planning, antenatal, postnatal and intrapartum care here, as well as minor injury. We have trained 3 members of staff here so far and were met by one of the matrons who showed us around the temporary unit. It's quite small here in comparison to the size of the normal hospital, so we can clearly see why they do not have the capacity to carry out C/S. labour ward has 2 delivery beds in it and the room next door holds one bed for postnatal or if unoccupied a labouring woman. The space is small and a designated neonatal resuscitation area has not been set up, due to lack of space. However, we meet Amy, one of the midwives on duty, who tells us that once a woman transfers to the labour ward, the cot comes in and they set up the resuscitation area inside of it. We advise to use the other firm delivery bed if it is available, as the space is wider and easier to carry out correct neonatal resuscitation if needed. 25-30 deliveries here per month seems a hard task in such a small space. On each shift, delivery handover is given from the midwives to the matron as well as the midwifery team. The matrons here are very busy facilitating and it seems to work well as the documentation is clear, concise and consistent. MDT working is clear from a case of puerperal psychosis they have had this month. Completely unheard of in the community, the woman's family referred her into the unit, 2 weeks after giving birth there for becoming violent, irrational talk and in a confused state. Here she stayed for 6 days, where she was given supportive treatment, antipsychotic drugs, regular observations, blood tests, broad spectrum antibiotics, IV fluids and medical care from doctors. They liaised with staff from Kissi mental hospital and have also referred follow up there for her. This is fantastic care, with brilliant documentation seen in the form of an admission and handover story, prescription charts, and doctor’s review. Unfortunately due to Friday prayers, we did not see any of the midwives here today who had attended our training, however we learn that all training gets cascaded. Written reports are done by the staff attending and given to the matrons to discuss at the next general meeting. This then is reported on and ways to incorporate training and new knowledge into practice areas is established.

Day 7

Hamilton PHU

Hamilton is a very small clinic of 2 rooms where we have a very good rapor. We have been working with Elizabeth the SCEHN (acting midwife) and her colleagues for a few years now and support them via what's app whilst in the U.K. too. As we aim to do this in all of our units, this is the one
place that we have been rolling our continuous support for the longest. The staff here know us well. We have seen improvements in care, knowledge, IPC and willingness to learn and continue to do so. Elizabeth has attended our training a few times and each time reports on learning new things. She cascades the training to other healthcare professionals here, despite us having now trained 3-4 staff members. Our handouts and information is always laminated, and new knowledge displayed and well looked after to aid in their care. Today we see them cleaning the whole unit. People from the community come to help, including women with babies strapped to their backs. All of the equipment gets moved out or onto tables and the floor scrubbed by hand. They decline neonatal resuscitation training here today as they are busy with the cleaning and have nowhere to do it presently. However, we know that Hamilton gets regular visits so it's not an immediate need currently.

Mambo CHC

Mambo is a new unit for us. As we are keen to expand where we can, it is important to begin to invite new units to our workshops and incorporate follow up visits in other areas. We currently work with approximately 47 units, so increasing our scope is important to do so when we can. Mambo is extremely close to Hamilton so not a far distance to work with. It has only been open since May 2016. Interestingly, this unit is quite large, and poorly equipped for the size. There is a huge open space for antenatal care and under 5’s clinic including minor injuries. 2 empty rooms, that are supposed to be consultation rooms, a few other rooms used for family planning etc and then the labour ward was two rooms, one for delivery and one for postnatal and labouring women. Mambo doesn't have any midwives, but 2 SCEHN’s and 2 MCHA’s with approximately 12 deliveries per month. They have solar lighting that is fantastic to see, with chargeable lighting. There is no freezer or fridge for 3rd stage management drugs or vaccinations; so all vaccinations are collected from Hamilton PHU. Here we teach neonatal resuscitation and find a clear candidate for train the trainer. Aminatu is quite skilled in resuscitation and can remember what she needs to and when according to the situation. It will be encouraging to follow up this unit in the coming months to see the progress of the clinic and how well the workshop training has been cascaded. Hopefully with some input Mambo can utilise the space
more effectively too.

Lakka

We visit Lakka a large health centre close to Mambo and Hamilton. It is the largest facility in this area. Here we meet the CHO in charge, Emmanuel and his staff. There is another CHO working here alongside him, with 2 student CHO’s who have just finished their exams and will now begin gaining clinical experience before they are posted out to other health centres. CHO’s are similar to medical officers, so do minor injuries, consultations and depending on their scope of practice and health centre may do instrumental deliveries and C/S. Alongside the SCEHN’s and MCHA’s we meet the two midwives posted here. Susan is in charge of the maternity sector. They have approximately 67 deliveries per month, which is pretty consistent according to their delivery book. There is a lot of space here with many rooms utilised well. They have an IPAS abortion clinic where they see people suffering from the aftermath of a criminal abortion. Here in Sierra Leone it is illegal for women to have a medical abortion, however it is not illegal for healthcare professionals to complete the procedure, so many women will illegally seek out illegal abortion, through herbs and illegal medication, or in some cases illegal procedure. Unfortunately, many women suffer haemorrhage, severe infection or sepsis from this so it is very dangerous. IPAS then will look after these women to good health, treat their needs or complete the abortion process legally. Following on from this they ensure family planning is put into place before these women leave. Here at Lakka certain SCEHN’s are trained to put in IUD’s, IUCD’s, implants and prescribe oral contraceptive pills as well as giving out condoms. They have a room for family planning clinic, a huge space for antenatal and postnatal clinic, of which they do two of each per week excluding the under 5’s clinic and vaccination day.

We go into the labour ward, where they have two rooms set back down from the centre of the main clinical area down some steps. They have four delivery beds (two that look appropriate) and an overflow bed. Susan discusses neonatal resuscitation with us and we do some resuscitation training. She happily leads us through the process and we correct her where necessary. Following the protocol seems to be quite a useful tool to aid staff.

We meet the DMO for western rural here. He is the district medical officer for the entire western peninsula, so is the main contact for us with training and workshops. He is in charge of all the health centres in this area so makes regular visits to the units that he is accountable for. It is very important that the DMO knows what NGO’s, charities and organisations are working and training in these units as he essentially needs to ensure all training is appropriate, consistent and in line with The Ministry of Health EMONC guidelines. A very important meeting for us, we were met with good approach, interest and encouragement. He invited us to lease with him further when
Day 8
Day off.
We are travelling slightly out of Freetown today to stay in Waterloo with a larger catchment of units outside of the city. Staying here for a few days enables us to visit clinics that are on the other side of the Waterloo western rural catchment area without being completely caught up in lots of traffic trying to get out of Freetown.

Day 9
Catch up day.
Lumpa CHC is the site of our next workshops. We have facilitated training here before, as it is quite a large outside space suitable for training. Today we set up ready for tomorrow and prepare Lumpa’s facility.

Day 10
Day one of Lumpa workshops.
We are once again expecting 20 participants but 22 turn up. 3 new units bring two new participants each from M.J MCH post, New London and Bureh beach CHC. We cover day one of the itinerary with a fantastic group of midwives, SCEHN’s, MCHA’s and two volunteers. Volunteers do not get paid for their work but aim to train as MCHAs so they work to gain experience from the staff and assist at clinics and delivery.

We have a great day, with very interested healthcare professionals who are very engaged and interact well with our teachings. Many questions are asked, scenarios are discussed and roleplay watched. Many take photos, videos and make notes so that they can remember key points of training.

Partograph use is complex for some, many don’t understand the correct use of the alert and action line, which perhaps is the reason why many of the
partographs we see in units follow alert lines perfectly. It seemed odd to them to plot the second VE not on the alert line, however after some further training and scenarios those who were struggling seemed to understand how it works and why. It was quite interesting to talk about augmentation via ARM as many said they would just refer, whether appropriate or not. However, once the day had finished many useful skills and critical thinking aspects had been discussed, therefore, future practice issues understood more thoroughly.

Whilst at Lumpa they were quite busy. Postnatal clinic and under 5’s was happening. The babies and children were being weighed and their length measured. There were 2 women in labour and one postnatal from the early morning. The one grand multip woman delivered a girl around lunchtime and the second was in active labour once we left. We discussed management of their labours when we could and possible plans of care. It was fantastic to see their care as we were there and the MCHA seemed to spend most of her time in the labour ward looking after these women. However, as we were training at the workshop we were unable to discuss further plans and observe care at this point.

Day 11
Day 2 of workshops was a success.
We follow the standard pattern of workshops, using the quiz and evaluation forms as a guide on how to improve our workshops in the future.
Unfortunately as we were there, we were called in for critical emergency neonatal resuscitation. This, although a very difficult situation to be in, was watched by most of the workshop attendees, of which none were registered midwives. Therefore it was useful for them all to see real life neonatal resuscitation first hand from us. This hopefully was good teaching if anything. We discussed the event afterwards and debriefed the attendees. Most were amazed at how quick our skills were and desired to be able to act as quickly as we had.

Day 12
A very busy day today, out of Freetown and in the areas surrounding Waterloo.
Rogbangba CHP

A fairly large community situated near Hastings is Rogbangba. Community health posts were built to bridge the space between large units in communities that are far away from their nearest clinic or hospital. They are typically very small like PHU’s and run by minimal staff. They have 3 SCEHN’s, 3 MCHA’s and two volunteers with 10-15 deliveries a month. This unit is quite sufficient in size for its purpose with two consultation rooms used for family planning, HIV consultations, ANC and consultations for sick children i.e. testing and treating malaria etc. They were doing under 5’s clinic combined with health education as we visited. Because the unit is so small, postnatal care is combined with vaccination times and under 5’s clinic. Women stay for 24 hours postnatal as they do at most units now, which is fantastic to see, as they don't have postnatal care as such otherwise. The delivery room hosts two delivery beds and a solid surface where they do neonatal resuscitation. The posters from the workshop are up on the wall and we are met by one of the MCHA’s from the workshop who has come in to see us outside of her rostered hours. We meet an early labourer and are pleased to see documentation has already commenced. We are told that they listen to the FH every 2 hours in early labour, which seems sufficient enough. We also observe one of the staff members encouraging the woman to go and eat, drink and go for a walk. We discuss cases of PPH they have had, all with good outcomes and referral to PCMH. We do some neonatal resuscitation training with two other staff members there, led by the MCMA who attended our workshop.

Campbell town

Campbell town was quite a deflating visit today. This unit is in need of repair quite significantly with rain water leaking through the roofing in various places. The ceilings are caving in with huge holes and damp seating through. Cracks are visible on the walls and the whole place looks quite dirty and unkempt. However, the staff here tells us that the government are aware of the situation and have declined repairs or renovations of this unit currently. As we look around I notice that the labour room is filthy, the store room is full to the brim with rubbish that quite frankly does not need to be in there at all. There are two consultation rooms that aren't being utilised well and piles of documentation everywhere seemingly in no order at all. I was quite appalled to be honest as with the huge IPC campaign that was carried out after the Ebola outbreak I couldn't believe the centre was such a mess despite it being run down. After some words of advise we spoke of how the whole centre must be looked after well, especially if the government is to refurbish, as they won't invest any money into somewhere that is
not well looked after, despite its current state. They argue they don't have sufficient rooms here, with no postnatal room, however a large enough room is being used to store rubbish in. Old furniture, cots, beds, bikes and scrap that actually houses a space large enough for a postnatal room of at least one bed. One bed in which they probability have stored in that pile in the room. The labour ward was another battle in its self. The delivery workbench was filthy dirty and piled high with unnecessary things. Not only does it make essential items not easily accessed but also dirty items that need to be clean and sterile. We completely stripped of the work bench and cleaned all of the equipment. Put drugs into the stock cupboard and unnecessary duplicated items away into a box underneath, so that they can be reached if needed but not necessary in day to day. This meant that the resuscitation equipment was easy to hand, the sterile instruments and essential items were obvious and clean and tidy. We discussed the importance of keeping this area exactly as we left it and left them with promises of sorting out the rubbish in the store cupboard to really utilise the space for something more purposeful. Hopefully when we visit this unit next time improvements will have been made. Therefore, we can not help people who won't help themselves and that includes looking after the work environment no matter where it is or in what state the building is in. However, we had successful participation from the workshops and are encouraged by their eagerness to improve practice so hopefully a little direction is all that is needed.

M.J-Small county CHP

M.J is a fantastic new unit built in January by the MCHA in charge and her husband with funding from the government. Margaret understood that there was a need to have a health clinic in her community to enable the surrounding women to attend accessible maternity care as well as healthcare for the children and family planning consultations. She states that Mabureh is the closest clinic to her, which is where she gets her vaccinations from, as they have no freezer presently. As we learn later on, Mabureh really isn't that close and it's a very bumpy car journey, on terrible roads hence why the CHP was built. There is no running water here yet, consistent lighting and minimal equipment but what they do have is well looked after, including the delivery instruments and neonatal bag and mask. A fridge for 3rd stage management drugs, freezer for vaccinations and delivery and postnatal beds are needed especially as they have approximately 20 births a month here and it's a two hour ambulance drive to PCMH. We were all amazed at this place and the welcome we received. Margaret was very honest about discussing cases she has had here so far, luckily most deliveries have been ok, with early
referral a necessity if necessary. She speaks of the high prevalence of STI and malaria in the antenatal women within this community. She says STI although this meaning covers a range of infections, some UTI, thrush and normal bacterial infections. As in Sierra Leone they don't typically have any ways of swabbing or identifying infections they tend too use symptoms as a means of diagnosing and therefore treat with broad spectrum antibiotics and include STI treatment. The women here would also take home treatment for her partner due to the possibility is a sexually transmitted infection and therefore harmful to the baby. This is quite a good idea as it is well known that many of the men will not come to the centres as they would not want people to see them going in to be treated. We finished off the visit by discussing neonatal resuscitation, partographs and answering questions about midwifery care. We notice that the FH on her partographs are only every done 4 hourly, which Margaret thought was sufficient. We see she grabs a pen to write down the correct timings and I'm pleasantly reassured she will change her practice as she seems very passionate and keen to learn more. The volunteer and MCHA who came to the workshop were also they only two attendees to be on time both days, despite them living one of the furthest away. I would be quite keen to do some more work with this unit and educate further where knowledge and skill is lacking.

Mabureh

Mabureh is quite a large unit far from Freetown. The many staff here are largely volunteers who are not paid to work. Some of these volunteers have been working here for 3-4 years with the 4 MCHA’s, who deliver approximately 35 births per month, which is quite a large number considering there is no midwife presently working here. We have visited here before, although it is a fairly new unit to us. One MCHA and one volunteer came to this week’s workshop, which means we have trained four members of staff so far. Today we meet with one volunteer who came to our workshop and the other members of staff working today. No MCHA’s are on duty only 8 volunteers, however there are no clinics today so the unit is fairly quiet with no labourers currently. We look around the CHP, which is quite a big space with big bright rooms, completely unutilised. Labour ward still only has one delivery bed in it and one cot. There are no posters on the wall, including the ones we have given over the workshops and time we have been visiting here. There is nowhere set up for neonatal resuscitation despite us advising this is done many times. We are told if they need to resuscitate then they do it in the cot,
which is completely inappropriate and insufficient. We once again advise that an area is set up specifically for this reason and hope to see this on the next visit. We put up posters on the wall including the neonatal resuscitation protocol.

We do some training here and leave a new bag and mask. Despite not receiving much interest to begin with, once we began neonatal resuscitation and split them into two groups, everyone seemed much more interested to learn and keen to practice their new skills on the mannequin doll.

Overall, Mabureh could benefit from some observational visits and further on the job training. I'm concerned here about the use of TBA's and lack of trained staff with such high birth numbers in such a rural location. Partograph use needs further looking at also as recent documentation was visualised and didn't seem up to standard with some partographs not making particular sense, minimal FH documentation, plus all of the partographs I observed had VE plots that were consistently along the alert line, which is quite suspicious. I think with further advise and training this unit could practice a lot better.

Day 13

Benguema

Visit cut short due to an emergency situation that had to be attended too.

A nice clean and tidy CHP with running water managed by SCEHN’s, MCHA’s and volunteers. We left a new bag and mask including a paed mask. They need a new resuscitation poster putting up on the wall and have very minimal equipment here to deal with emergency situations.

Kuntorloh CHC

Kuntorloh is our last visit of the trip. We meet the one midwife working here, Elizabeth, who attended our training last year alongside two other attendees who have now left and been posted to Kissy. One MCHA who came to our workshop last week is here today, however is currently busy caring for a woman in labour. The other MCHA is not working today. We have only been working here for the last year so it's fairly new to us, however we are greeted and remembered by Elizabeth. Kuntoloh is a small unit but fairly busy. It has 3 CHO’s, 1 midwife, 11 MCHA’s (three are volunteers) and 12 SCEHN’s (three are volunteers). Typically they have 27-35 deliveries a month here, which considering the staffing levels is not as many as you perhaps think. It appears through my experience of visiting many of these places that some of the busier places have the less staff and small units than some others. Not all units have a midwife or a CHO, however they would probably benefit from more experienced and qualified staff when looking at their patient records. Here they
have a couple of offices, a large open space for clinics, 2 observation/minor injuries rooms- one male and one female, each housing 2 beds, a postnatal room with 3 beds and the labour room which was incredibly small. It has two flat delivery beds in it, however one is used as a table to document labour care, place out the delivery kit and also for neonatal resuscitation. The space was far too small to cater much else but the water buckets, although they did have a joining toilet and shower room. This was the only toilet facility in the building so used for everyone, meaning everyone had to walk through the labour room.

Documentation here seemed quite good with accurate documentation of deliveries, referrals, and clinics readily available and up to date. Elizabeth writes up an overview at the end of each month with what obstetric emergencies they have had etc. We discuss a case of maternal death that happened at the end of last month. A 2 hour G4 postnatal woman was reportedly bleeding quite heavily although final EBL on transfer was 400ml, so I'm unsure of whether that is a difficulty in estimating blood loss. This woman had a second dose of IM oxytocin, followed by 600mcg of misoprostol and an IV infusion of oxytocin 40 units in 500ml of ringers lactate. It was difficult to know whether there was any conservative management or whether the source of the PPH was actively identified as we didn't seem to get much response when we asked and prompted. However, Elizabeth reports a fast referral and quick drug administration. Bi manual compression was not done and she wasn't chaperoned to the hospital by a member of staff from Kuntoloh. Referral to PCMH isn't too far from here as it is in Freetown but the woman died when she got there whilst she awaited a blood transfusion. We discuss prophylactic treatment of PPH in high risk woman and management of PPH, including identifying the cause. A few other cases are discussed and then we go to the labour room where there is a primip in labour at 8cm. We observe care, of which not much is done but they advises her to eat and drink, which was fantastic to see. Her membranes rupture and as she didn't bring a piece of plastic to put under her they leave her in her wet lappa soaking the bed until we advised to change it. However, her friend then comes with some plastic and another lappa. They have started documenting on the partograph and with a little encouragement document time of membrane rupture and auscultate the fetal heart whilst we are there.

Follow up visits remaining
- Kissy
- Newton
- Bureh beach
- New London
- Waterloo

Train the trainers identified plus units
- Aminata Lumpa. MCHA. Very keen to be a TOT.
- Jamie Asia Konyima. SCEHN. Newton CHC
- Osanata S Bangura. SCEHN. Kiss Town CHC
- Jane M Nyamalou. MCHA. Regent

Units identified as benefitting from observational visits
- Calaba town
- Lumpa
- Kuntoloh
- Mabureh

Recommendations
- Clinical observation days at larger units that have at least 30 births per month. Observe clinical care and facilitate on the job training through mentorship. Particularly useful for units that have students or no midwives too.
- Train the trainer in depth workshops to encourage them to facilitate training. Give them TAML t shirts and keep better contact with them through whattsapp. They can evidence their training for us to encourage progress further.
- Train the trainer log books for cascading training in each unit.
- Further communication with DMO's
- Obstetric emergency posters for the units.
- Reduction of transport fees for workshop attendees.
- Separate student, SCEHN, MCHA workshops or training? Although didn't particularly seem an issue at this trips workshops.
- Cleaning checks? Cleaning rota? Daily tick box checklist? Everyone's responsibility to be tidy, clean and proud of work areas
- Most units desperate for delivery/suture instruments and sutures.
Closer contact with the midwifery schools and their students and preceptors.

Future

It is highly recommended to secure financial supplementation through grants or more consistent regular funding. This would enable more frequent trips to SL to support staff, students and the community. Although TAML aims to plan trips 3 monthly, each visit is not consistently visiting all of the units that we support. Currently most units are having staff attend training twice a year and are receiving follow up visits once or twice per year. This is not often enough to make consistent progress in training and include observational days. Being able to stay a day or two in some units and facilitate on the job training, mentoring the identified train the trainers and really promoting change in practice within clinical settings is what is needed. This can only be done effectively with adequate regular visits and further support.

Currently, The African Maternity Link and Life For African Mothers are facilitating trips as much as possible but without the funds to have longer trips put in place (I.e. 3-6 months) or a staff member based in SL, or more regular trips (I.e. every 1-2 months) progress is slow. However, although slow, we see progress in care, documentation and skill and this is also shown in the statistics for maternal and neonatal mortality and morbidity. With the maternal mortality rate now 1:21 from 1:8 4 years ago we are sure that this approach to training and education if consistent enough has a great impact on the lives of women and babies in Sierra Leone. We aim to continue our work, liaising with the Ministry of Health, Midwifery schools and the DMO’s in SL to provide excellent evidence based, up to date education and training to continue improving birth outcomes within the Western area and Bo.

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Written by
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On behalf of The African Maternity Link, October 2017.

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