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Insights from West Africa

I was lucky enough to have the opportunity to volunteer for 3 months in the West African country of Sierra Leone. Sierra Leone is (and has been for the past 10 years) the very last country in the UN development index. This means that by all indicators (and most of them are health and education) it has consistently placed last. This is due in large part to a brutal and long civil war that essentially decimated most of the infrastructure in the country, and caused all of their health indicators to plummet. It had been a life long ambition of mine to work or volunteer in a developing country. When I discovered the Volunteer Services Overseas (VSO) was accepting short term experienced volunteers I jumped at the chance. After going through their screening and training program, I was offered the opportunity to work with the Sierra Leone Ministry of Health and Sanitation. I was asked to help with their national health plan and to help with their information systems work. Coming from almost a decade of health informatics work in North America, Sierra Leone is almost as far a departure as you can get. Electricity – even in Freetown, the largest and capital city, was inconsistent at best. Even in the government building, we were regularly without power and even more regularly without water. The staff, although very keen to learn, had little to no computer training, internet access was sporadic at best and very slow.

There were efforts underway from a number of agencies Organizations to help strengthen Sierra Leone's health system. One of the most notable organizations working in Health Information Systems is the Health Metric's Network (HMN). HMN is the first global partnership focused on health information system strengthening. Their head office is in the World Health Organization in Geneva, but they have a large number of field-support projects as well. Health Metrics network had a number of individuals supporting the health information efforts in Sierra Leone. The objective is simple- better health information should lead to better decisions and ultimately better health outcomes. For the most part, health data efforts were concentrated

on improving the accuracy and completeness of the data collected on paper. This is a very sensible and appropriate approach, given the challenges with electricity and computers. One of the largest barriers to overcome with respect to data quality, is to get the data collectors to understand how important the data actually is. In fact this was a systemic problem, they did not have an "information culture" that saw value in having accurate information to inform decisions. Even in my short time there- and definitely in the past year, the tide has begun to turn and this culture has been nurtured. The information is being shared with the local communities, and it is beginning to make a difference. Just last week, I heard an example that illustrates the power of this information in the right hands to make changes. One of the indicators that is closely monitored is the number of births that are attended by a trained professional. In a country with the worst maternal mortality rate in the world (with 1 in 8 women dying in childbirth or pregnancy related causes, compared to 1 in 76 in the rest of the developing world) one can see how this is important. Just in the past few months, the chief's have been given, on a monthly basis, the information on some of the key health indicators. After examining the data one chief realized that the maternal mortality in his area was higher than in other areas and the number of attended births was low. After discussing the situation with the district health officers, he has instituted a "fine" for any woman that chooses to give birth without the assistance of a trained professional. And from what I hear, this approach is working!

Despite the challenges, or perhaps because of them, I believe I returned a much wiser health informatician. With so much to do and so limited the resources, you really need to focus on what is important. It was not just about setting appropriate priorities, although that of course is essential, it is also about the unwavering, laser-like focus on what we are doing, and why. In the multiple implementations I have done over the years and the growing complexity, I believe I (and others) have

had the “luxury” of being able to drift from that focus and become distracted with all the functionality that we “could” do, and sometimes being distracted from what we “need” to do. Here are my “back to basics” questions I now force myself to consider as a result of my West Africa experience:

- 1) Why are we doing this? If you can’t, in one sentence, articulate why you are doing the project, than you need to take a step back and figure that out. Every single member of your team should be able to answer that question, and the answers should be the same. This seems obvious- but I would challenge many of you to ask your team – the answers may surprise you.
- 2) Who are we doing this for? Who is going to use the data we produce, and for what purpose? Strongly resist the urge to collect everything just because you can. This is an issue that African developing countries really struggle with as well- every donor agency and organization thinks they should collect a few extra pieces of information. You also need to make sure you understand all the different stakeholders as it will help you think through how to collect the data. A typical issue in Sierra Leone was that information was often collected by disease or condition- so if a clinic saw a pregnant woman who had hypertension AND an antepartum hemorrhage, she would be “tallied” (as it is literally usually a tick mark in a column) as both- so you have no real idea of actual patients seen, or the number of patients with multiple issues. I can’t tell you the number of times I have seen excessively long admission histories or assessment notes in clinical documentation projects in North America.

This brings me to the last point.

- 3) Who is collecting this information? Do they know how to answer the questions? How much additional work is it for them? The quality of your data will depend a lot on their buy in. This was very true in Sierra Leone- too often the person responsible for collecting the data had little to do with actually using the data. As those who run clinics also became “consumers” of that data – even if it is only their vaccination rates, the quality began to improve. It was not just because they saw the data quality was bad (and it really was in many cases) but that they began to see the value in the data.

The single greatest barrier faced by Sierra Leone (and I would say almost all sub-Sahara African countries is lack of capacity in health informatics. Through my work with COACH on the Health Informatics as a Profession (HIP) steering committee and other similar work, I

believe we are facing similar capacity issues (although clearly not as severe). They have challenges being able to train and retain staff, particularly in the public sector. They suffer enormous “brain drain” both out of their countries as well as to other organizations (usually NGOs who can, and do, pay much better). The bulk of development work is capacity building, and although I did roll up my sleeves and do a lot of the work, it was always done within a mentorship context. I also took any opportunity to help them improve their computer and information management skills in general. Every day for about a month, I worked with a core group of about 10 people working on health planning for a district. At least 1 hour of each day I spent teaching one-on-one something that would help improve each person’s capability. That could be things such as making pivot tables for those who understood excel, or how to do effective internet searches. I also lent them my laptop to take home at night and practice (while the battery lasted). We also documented these “how to” guides with the intent that they would each start to teach each other what they learned. So much of this is simple and yet effective. In fact, I think those sessions were among the most rewarding experiences of my time there.

I went to Sierra Leone hopeful that I could help them to benefit from some of my health informatics experience, pretty sure that some of what I knew would be applicable there and this was certainly the case. I was less prepared for how transferable some of that experience would be for my work back in Canada. It allowed me to see our responsibilities here with a fresh perspective, a “getting back to basics” perspective that we could all learn from. Our system is advanced compared to theirs for sure, but that complexity causes us to seek ever more elaborate solutions when all we need to do is ask ourselves the three questions above. My experience rewarded me as I expected, contributing to the lives of the local HI team and helping them improve. Little did I realize I would gain a practical benefit for my work back home. ●

