In Ghana as in other developing countries, there are many problems with the process of referring women and newborns for hospital care. As a result, many do not get the care they need in a timely way. Project Five Alive!, in collaboration with the Ghana Health Service (GHS), launched a new initiative designed to address these problems. The initiative works in six districts in Central and Northern Regions: Gomoa West, Asikuma Odoben Brakwa, Assin North, Gushegu, Nanumba South, and North District. Four districts out of the six – AOB, Assin North, NN and NS – are running community-facility networks while two form a network of only health facilities.

One of the participating districts, Gomoa West, has its fair share of problems with maternal and newborn health care. During the Referral Launch and first Learning Session on August 7-8, 2012, organized by the District Health Directorate under the auspices...
of Project Fives Alive!, some of the frontline health workers from the sub-districts shared their experiences.

Madam Juliana Duker (a.k.a. Auntie Julie), a midwife at Gomoa Oguaa Health Center, described an incident that took place in her facility and how she was able to save the situation.

Esi Brago, a 17-year-old girl who was pregnant, visited Gomoa Oguaa Health Center for antenatal care. Auntie Julie advised her to go to a higher-level facility when she reached full term because her laboratory investigations showed a low hemoglobin and her sickling was positive. Because the midwife could not determine her genotype, she referred her to St. Luke’s Hospital, the district hospital. In addition, her young age, as well as, her small stature and pelvis, made it obvious that she should be referred to a higher facility.

One evening, Auntie Julie was at the Health Center when Esi Brago was rushed in by her mother. Unfortunately, Esi had not heeded to her advice; she had stayed at home until she was due for delivery. On her arrival, she was bleeding; her condition was critical that Auntie Julie decided to refer her to the St. Luke’s Hospital. "While I was completing her referral form, I was also preparing to deliver in case she started pushing," Auntie Julie explains. "In no time, the baby started coming just after, she started bleeding copiously. Oh God, obviously the girl was dying! I needed to act fast to save her life.”

Gomoa West District previously did not have ambulance service. Considering Esi’s acute condition, Auntie Julie realized she might die on the way to the distant hospital if she were transported in a taxi. Auntie Julie set up three drips on Esi’s two arms and leg for quick transfusion with 10 ampule oxytocin and IV fluids. She also pressed her abdomen to aid uterine contraction. "I stood for about one and a half hours administering the drips with both hands," Auntie Julie recalls. "I asked the security man at the facility to help squeeze the drip
to enable effective administration, I had to do this because the girl was dying. In fact, she was almost gone. The mother who was observing us also collapsed. I had to run home barefooted to bring the mother and daughter some beverage because there was nobody at home."

When Esi Brago’s condition stabilized, Auntie Julie turned her attention to the baby, who had begun bleeding from the umbilical cord. She put pressure on the cord with a bandage until the bleeding ceased. Through Madam Julie’s quick intervention, Esi Brago survived and her son’s life was saved.

In addition, at the Launch meeting, many frontline health complained about the “abuse” and “maltreatment” they suffer at the hands of their colleagues whenever they accompany patients to higher facilities. For example, Lydia Edzii, a community health nurse at Osedze Health Center at Osedze, another sub-district in Gomoa West District, spoke about a woman who came to her health center complaining that she had fibroid, allegedly a result of practicing family planning. The nurse referred her to St. Luke Catholic Hospital, Apam. Again, the patient did not comply, but came back at a later date complaining about abdominal pains. The nurse gave her paracetamol and advised her to go to a higher-level facility if the pain worsened. As it turned out, the woman was pregnant. She was finally sent to the district hospital and there she gave birth to a baby girl.

These stories highlight some of the challenges with the referral process in Ghana. Although the health centers did refer the women to the hospital, there were no proper structures in place to ensure that the patients reported to the required destination/hospital.

Lack of transportation, lack of money, fear of surgery and death, poor road and telephone networks, and lack of access to ambulance are some of the contributing factors to delays in the referral process. Project Fives Alive! and the GHS are working assiduously to improve the referral process in the country through the application of quality improvement methods and tools. The goal of the new initiative is to save mothers’ and newborns’ lives by identifying problems in the current referral process, and then developing, testing, and spreading changes to improve it.

by Dolores F. M. Hervie

Health Care Improves with Data Use at Tamale Teaching Hospital

Even though most health professionals recognize the importance of local data for proper planning, only a handful are aware that the first user of data is the one who generated it. Consequently, only a small proportion of health staff appreciate the fact that they can take life-saving actions if they analyze their local data before forwarding it to the regional or national level.

Tamale Teaching Hospital (TTH), the third largest teaching hospital in Ghana, serves as a tertiary-level healthcare provider for the three northern regions. It also serves as the main teaching facility for the School of Medicine and Health Sciences of the University for Development Studies (UDS). Although TTH once had superb infrastructure, its infrastructure and equipment deteriorated in the recent past. Today, however, one can easily notice a strikingly different environment at the facility due to new construction.

Impressed by the grandeur around me, enhanced by several renovations and ongoing refurbishment work, I walked with pride with a few colleagues down the corridor leading to the CEO’s office. We introduced ourselves as a team from Project Five Alive! (PFA), whose aim is to contribute to the effort to reduce mortality in children under five through the use of Quality Improvement (QI)
methodology. It was obvious that both infant and maternal issues were of grave concern to the CEO as he probed further to learn about the strategy that PFA uses to achieve its objective. We explained that PFA works through data to drive change that leads to successful interventions. Unsure whether he was convinced by this method alone, a colleague added almost uncontrollably that, “We encourage health professionals to form QI teams, analyze their data, identify gaps, develop and test change ideas to improve processes, and transform systems based on the data to achieve a desired outcome!”

Nodding his head in agreement and occasionally jotting a few points in his diary, the CEO responded very enthusiastically, “I think I like your methodology for reducing infant and maternal mortality since it is not too different from what I have in mind,” pointing to the flat file on his desk. We were thereby granted permission to work with the heads of the various departments in the hospital to begin this journey.

After the initial engagement in September 2011, the PFA team continued to provide support through mentoring and coaching for selected health professionals at TTH who quickly formed QI teams in selected departments, including Obstetrics & Gynecology (O&G), Outpatient department (OPD), Pediatrics, and the Neonatal Intensive Care Unit (NICU). The QI teams were inspired by a desire to provide excellent service, in keeping with the hospital’s motto – “excellence.” Recognizing the need to formulate interventions based on data, the QI teams (together with PFA) reviewed their intermediary/process measures and related them to outcome data to identify the major causes of infant and maternal deaths. Members of the QI team were surprised at what their own data revealed; various indicators showed performance that was lower than expected.

Perturbed by the current state of affairs but confident of a bright future and willing to take action, the teams developed change ideas that they would test with the aim to accelerate the achievement of Millennium Development Goals 4 & 5. Some of the interventions they pursued included the formation of a triaging team at the OPD, improved supply of oxygen, improved correct partograph use, reduction in lead time for performing emergency caesarian section (C/S), and early detection of risk factors for elective C/S at O&G department. Other change ideas were even more specific, for example, improving adherence to therapeutic feeding during the night shift, protocol adherence for managing malnourished children under-5 (U5s) on admission, and procurement of scrubs and new suction machines in the NICU.

On one fine morning, the QI team met with management to share the data and solicit their buy-in to support their subsequent intervention plans. The hospital managers were equally astonished and skeptical about the statistics.
presented. In fact, one pediatrician retorted in bewilderment, “This cannot be our data!” However, despite their initial apprehension, hospital managers eventually agreed that the data was indeed accurate. Accepting the discouraging data (both process and outcome) as a true reflection of the state of affairs in their departments did not come easy to the hospital managers. Heads of department later met with their departmental staff to further analyze the data; where they still had doubts, they conducted an independent study to either affirm or dispute the initial data findings. Interestingly, the subsequent study buttressed the initial data presented by the QI team. Finally, they were able to convince those health staff who vehemently challenged the data, proving just how important it is to analyze data for one’s own use.

As a result of overwhelming evidence created by increased data use, the hospital managers have pledged their commitment and support to the new interventions.

Currently, with the introduction of quality improvement methods, the health staff are testing a number of change ideas and constantly watching their data for the desired outcomes. Please be assured that, the next time you find yourself in TTH, you will not just be walking around a magnificent edifice, but your care will also be of higher quality – thanks to the power of data.

by Mr. Eric Adjei Boadu
Going the Extra Mile: The Story of a Team Leader

Realizing that a problem exists, and having the WILL to do something about it, are essential in developing a long-lasting solution. The efforts of the National Catholic Health Service (NCHS) and her development partners to reduce Under-5 mortality within NCHS hospitals and clinics have helped to improve health care in Ghana.

In 2008, the NCHS made a decision to inform all of its hospitals of their morbidity and mortality data. These health institutions were confronted with their own morbidity and mortality data. Hitherto, most health workers did not pay particular attention to or did not attach much importance to the data they generate to make informed decisions.

Our Lady of Grace Hospital (OLGH), Breman Asikuma, located in the Central Region of Ghana, found itself among the worst-performing hospitals with respect to Under-5 mortality. According to Dr. Benedict Owusu Boateng, the Quality Improvement (QI) team leader of OLGH, prior to the onset of the QI work under the Project Fives Alive! (PFA) initiative, the institution itself had noticed some major challenges that it was trying to address. “As a clinician who was in charge of the children’s ward, I knew a lot of changes had to be made to make the provision of care more effective and efficient,” says Dr. Boateng. “The major question was, how were these changes going to be made?”

What was done differently to achieve reduction in U5MR here? OLGH came together with eight other low-performing hospitals in an innovative initiative to reduce Under-5 mortality over an 18-month period. In 2008, OLGH was ranked second on the Institutional U5MR, with a median of 22.7 deaths per 1000 admissions. OLGH addressed this problem by using the QI Model for Improvement, instead of an ad hoc
introduction of measures, the team at OLGH used QI tools to do a root-cause analysis of the problem, and then planned, introduced, and fine-tuned changes before scaling up.

As part of the Hospitals Collaborative, the management of the hospital formed a quality improvement (QI) team, including committed and dedicated staff. The support of the entire leadership of the hospital was key, ensuring that the QI team had the time and a venue for regular meetings. Management also resourced the paediatric unit with Oxygen Concentrators and key medications, and ensured that there were adequate blood stock levels. The team was successful in reducing U-5 mortality – from 22.7 deaths per 1000 admissions to 9.3 deaths per 1000 admissions.

Dr. Boateng and some of his team members

The QI team at OLGH has made a significant impact as a result of the support it enjoys from management. “One of the major advantages that made it easier for me as a team leader to sell our ideas to management is that they see me as a person who seeks the good of the institution,” Dr. Boateng explains. “I studied the personalities that I had to deal with and therefore knew the opportune times that are fertile for the selling of new ideas.”

Dr. Boateng uses good communication skills and a touch of diplomacy when dealing with management. To him, well-thought-out ideas presented in clear and concise manner, along with regular updates on the team’s activities, yielded sustained management interest in the activities of the QI team.

Getting the requisite numbers of qualified staff in an institution like OLGH was a major challenge. The approach was to train and mentor staff (especially on the children’s ward) to be able to identify life-threatening conditions like convulsion and airway management and to institute the appropriate measures to prevent deaths. “During the initial stages, I had to motivate the team members to meet regularly in spite of our different schedules, even if I had to personally put something small (item 13/refreshment) on the table until management support arrived,” Dr. Boateng explained. “I usually took key interest in data collection, analysis, and the interpretation, and here again I was at the forefront because I got to know that data is very important in QI work,” Dr. Boateng makes sure that everybody he works with is abreast with the management of U5s. Even when he is not on duty, Dr. Boateng still passes by the ward to ensure that things are going well. He also trained new members and students to the children’s ward on QI.

Role of Team Members

One of the major factors contributing to the success of the QI team at OLGH has been the cohesion among the team members, which offers the necessary platform for the free expression of ideas and opinions. The level of commitment and enthusiasm also made it easier for the leader to assign duties to team members.

The most exciting experience during the period

The QI team was excited to see the significant results. The current Under-5 mortality rate is 9.3 deaths per 1000 admissions – a dramatic reduction from 22.7 deaths per 1000 admissions in just 18 months. Dr. Boateng could not hide his feelings when he said, “It feels great to see one’s effort yielding some
results, but it even feels better when you know you have the support of a dedicated team who would continue to keep the flame burning even when those who started it are no more.”

**Dynamic Team Leadership and Challenges**
According to Dr. Boateng, one of the major challenges he encountered as a leader was how to sustain the interest of his team members. “I encourage my team members to play their designated roles, and I acknowledge their sacrifices and contributions to the QI work,” he explains. “I have maintained a good rapport between the QI team and management in order to ensure tacit support from them.” The team is taking the necessary steps to sustain their achievements.

*by Ms. Roberta Asiedu*

**About Project Fives Alive!**
*Fives Alive!* is a project that unleashes the innovative potential of frontline health workers to develop practical strategies and tactics to overcome systems failures in the care of pregnant women and children in Ghana that could lead to preventable deaths. The Institute for Healthcare Improvement and the National Catholic Health Service are collaborating with the Ghana Health Service to spread successful changes across the country for maximal impact. The project is funded by the Bill and Melinda Gates Foundation.

---

![Some of the QI team members in a discussion](image)

---

**Nurturing children for a healthier nation**

---

**Project Fives Alive!**
Directorate of Health
National Catholic Secretariat
P. O. Box KA 9712
Airport, Accra
Ghana

Tel: + 233 289 116 856
Fax: + 233 302 500 463
Email:info@fivesalice.org
Website:www.fivesalive.org