

Understanding acute illness from a community perspective

A summary of two workshops in Kisoro District, Uganda



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Summary

The overall aim of this work was to understand acute illness from a community perspective in a remote and rural part of Uganda. Kisoro district is located in south-west Uganda, at Uganda's border with Rwanda and the Democratic Republic of Congo. Kisoro district is divided into 37 parishes, each served by two Community Health Extension Workers (CHEWs), and 513 villages, where Village Health Teams (VHTs) operate at the community level, typically with two to three members.

Supported by the Cambridge-Africa ALBORADA research fund, the NIHR Global Health Research Group on Acquired Brain and Spine Injury, and a Cambridge Gates Studentship, we conducted community engagement workshops in Kisoro district on 19 and 20 September 2025. The workshop included members of the VHT, healthcare workers at the district hospital and lower-level health facilities, and one patient survivor who shared her experience of acute illness and admission to the district hospital Intensive Care Unit (ICU) in 2024.

This report covers:

- Village health workers' perspectives on recognising and responding to acute illness at community level
- Lower-level facility perspectives on assessment, referral pathways, and care delivery
- Lived experience of acute illness from a patient survivor in Kisoro district
- Key lessons and challenges identified across community and facility settings



Introduction

Sub-Saharan Africa faces a high burden of preventable and infectious diseases, contributing to high levels of mortality. These challenges are compounded by limited resources, including a significant shortage of health workers.

In Uganda, one strategy used by the Ministry of Health to address this gap has been to increase community participation in health care. Village Health Teams (VHTs) have been established to support local health service delivery within their own communities. Members of the VHT are known to their community and are within easy reach compared to formal health facilities.

VHTs are often made up of lay people with no formal medical background. They are selected and given basic training in identifying common ailments, managing them at home, and referring sicker people to health facilities. VHTs also play a vital role in preventative healthcare through health education and promotion of government health programmes to communities. These teams provide a link between unserved households and the formal healthcare system. The health care system in Uganda is organised according to the administrative divisions of the local government as illustrated in Figure 1 (page 4).

Members of the community can approach VHT members for assessment, and VHTs often conduct home visits for people who are acutely unwell or living with chronic illnesses. Through these

relatively informal interactions, community health teams help bring health care to the doorsteps of some of the most vulnerable people in their communities.

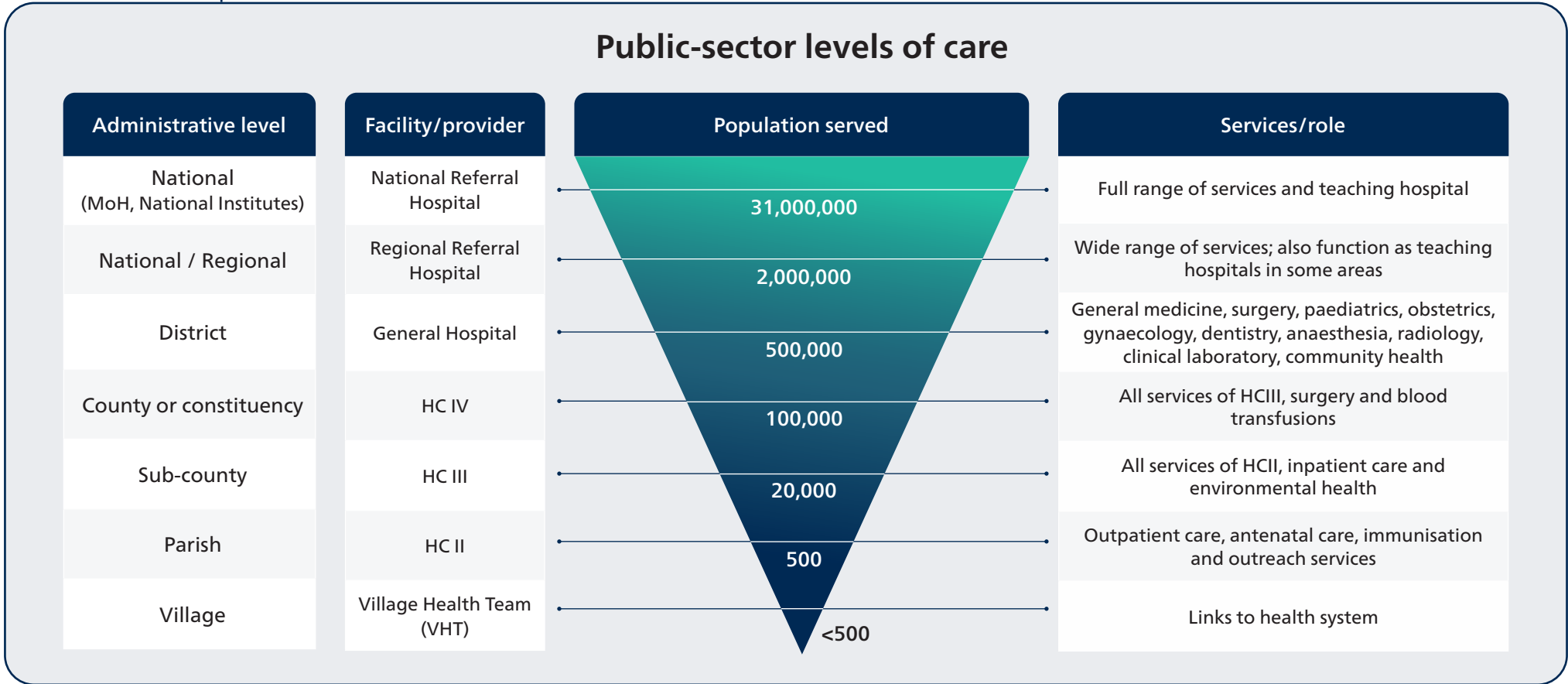
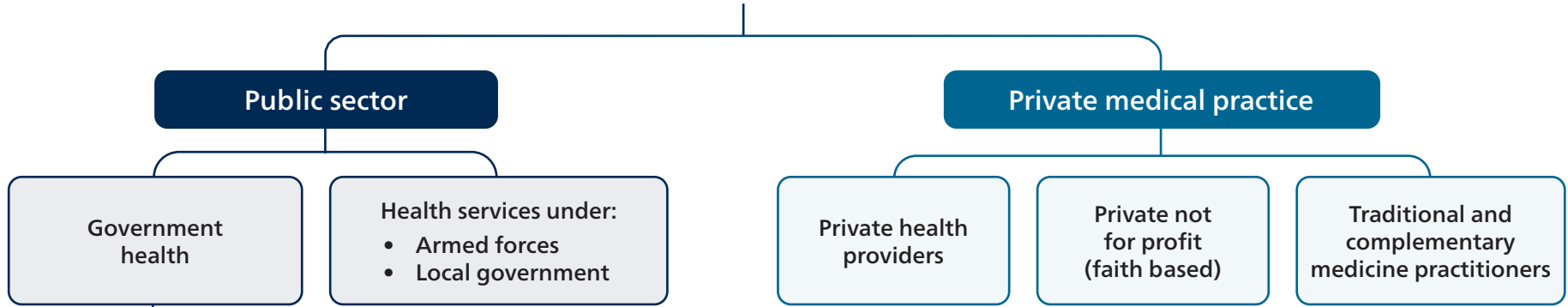
VHT members are selected by their communities during village sensitisation meetings. Villagers nominate and vote for three to five people who are good communicators, have an interest in the village's health and general development, are trusted by the community, and are willing to take on the role. Selected VHT members are then trained by designated Ministry of Health trainers. Although the intended caseload is 25–35 homesteads, VHTs vary in their motivation and ability to carry out this voluntary role.

We conducted this community engagement activity to better understand how village health workers understand and approach acute illness, and how patients are cared for at lower-level health facilities in Kisoro district.

Discussions were held in both Kifumbira, the local dialect, and English on both days. An interpreter who lives and works within the district helped clarify context and facilitate discussions, enabling participants to express their views in the local dialect where needed.

All content was checked for accuracy with the participants during the discussions. Discussions were audio recorded, transcribed, and, where needed, translated into English.

Figure 1: Healthcare system components



Day 1: Village health workers' perspectives of acute illness

The first workshop was held on 20 September 2025 at Kisoro district hospital. It was attended by 11 VHT members and the VHT coordinator at the district hospital.

During this discussion, we explored five key areas:

1. What VHTs understand acute illness to be
2. Recognition and initial response to acute illness
3. The health system and referral process from a VHT's perspective
4. The role of VHTs in the recovery and post-discharge care of patients
5. Challenges faced and areas for support

Understanding of acute illness

The keywords used by the participants to describe acute illness included "illness with fast onset", "progression of symptoms", "may result in death if untreated", and "illness makes the patient too sick to work".

Recognition and initial response to acute illness

VHTs recognise acute illness based on symptoms and signs that members within their communities present with. The following were mentioned as commonly seen among the acutely ill: fever (often a subjective feeling of a raised body temperature or as detected by the caregiver), fast or laboured breathing, diarrhoea, vomiting, bleeding, convulsions, severe pain, and altered level of consciousness ranging from confusion and aggressive behaviour to coma.



The health system and referral process from a VHT's perspective

Most villages reported having two active VHTs, introduced to the community during routine village meetings organised by the local council leadership. At these meetings, VHTs' telephone contacts and residences are often shared with the public, and their residences are known within the community. Village members contact VHTs by phone or visit them at home to request a health assessment for an unwell family member. VHTs may also be aware of people with chronic illnesses through previous interactions and may schedule home visits when someone becomes unwell.

Once a patient has been assessed, the VHT decides whether the illness can be managed at home or the patient needs to be referred to the nearest health centre. VHTs are required to complete a referral form to accompany the patient to the hospital. When these are in short supply, they document their findings in ordinary books or paper.

Pre-hospital transportation of the acutely ill takes various forms depending on availability and the patient's location at the time of referral. The VHT may request an ambulance from the district hospital. This request is usually made to the hospital's Medical Superintendent or the District Health Officer. Priority is usually given to women with pregnancy-related conditions.

Alternatively, the family may hire a vehicle (taxi or a public transport minivan) to take the patient to the hospital or a boda boda (a commercial motorcycle). Kisoro's mountainous terrain makes it difficult for some means of transport to reach homesteads,

particularly those on mountain slopes. In these cases, a community stretcher is often used to carry the patient from their home to more suitable terrain, where vehicles or motorcycles can be used.

Some patients or families may decline referral for hospitalisation and instead seek care from faith healers at places of worship (usually a church) or from traditional healers or witch doctors at a shrine.

Notably, some communities reported maintaining an informal village insurance fund, in which communal contributions are set aside to help cover the costs of acute illness.

Involvement in the recovery and post-discharge care of patients

VHTs reported participating in the following ways:

1. Conducting home visits to follow up on those discharged from hospital. Patients are asked to show the VHT their discharge letters. VHTs then discuss the discharge instructions with the patient and remind them of review dates.
2. Patients receiving treatment for tuberculosis may have VHTs as their treatment partner for Directly Observed Therapy (DOT). VHTs also act as surveillance partners for health centres, monitoring for symptoms among family members of those on treatment, and tracing contacts who have moved away from home.
3. Regular home visits for patients with chronic illnesses and poor health.

Challenges and areas for support

- **Lack of equipment to make meaningful assessments.** It was noted that only three (of 11) VHTs at the workshop had homepacks. A homepack is a tool kit containing a pulse oximeter and a thermometer used during community visits to take vital sign measurements.
- **Limited knowledge of the management of medical conditions.**
- **Safe transport of critically ill patients,** a frequent example being the unconscious patient.
- **The use of herbal remedies alongside medication from hospitals.** These are generally known within the community, with some VHTs reporting that they have recommended them to patients. Examples include drinking 'mubirizi' to treat malaria, bathing with 'kizimya muliro' (loosely translated as 'the fire quencher') to manage fevers.
- **Poverty.** Many families are unable to raise funds to take their loved ones to hospital for treatment.
- **Mountainous terrain,** which makes transporting sick patients difficult.
- **Shortage of supplies, including first aid medications and referral forms.** Some health facilities will not recognise unofficial documents, and the patient may be taken through the usual admission process, including sitting in long queues when referred without the official referral letter.

Day 2: Perspectives of lower-level facility healthcare workers

The second day was attended by 17 people, comprising five medical officers, seven nurses, one anaesthetist and one patient survivor, who also agreed to a one-on-one interview. Three VHTs who were unable to attend the previous workshop also joined this team.

Understanding of acute illness

Participants described acute illness as a quick-onset ailment that may progress to a life-threatening state and demands urgent attention. However, they noted that some of these cases go unnoticed until it is too late. Participants also highlighted the growing use of media, such as radio, to sensitise communities and increase awareness of how to identify acute illness.

Recognition and initial response to acute illness

Acute illness is recognised through symptoms and signs of disease, often characterised by quicker progression in severity. Participants noted that, sometimes, it is the complications of acute illness that trigger referral for hospital admission. The onset of acute illness can usually be traced to within six weeks of presentation, although some participants reported a 3-week timeline.

Trauma was commonly seen as acute in presentation, although participants also noted that patients sometimes developed chronic problems following an acute injury. Other common presentations seen included fever, shortness of breath, and seizures.

Initial management in the community depends on where care is sought. Traditional treatment methods involve visiting herbalists who offer herbal remedies but may also refer patients to hospital. These referrals are verbal and not supported by any documentation.

VHWs may offer symptom relief in the form of an oral antipyretic, followed by referral. Health facility-based workers reported taking vital signs, such as temperature and blood pressure; however, the majority reported that their facilities lacked functional pulse oximeters. Pulse rates are determined by a timed count of the radial pulse through palpation.

At the health facility level, patients are assessed through physical examination and vital sign measurements. Pulse oximeters and thermometers were reported to be frequently unavailable or not functioning. All facilities represented at the workshop reported being able to measure blood pressure, with equipment ranging from mercury sphygmomanometers to digital devices.

Referral pathways

Referral was reported to be complicated when VHTs lacked referral forms to complete for patients. Other challenges cited include a lack of money to transport acutely ill patients. Most patients are transported to health facilities by boda boda following referral. These motorcycles are preferred because they can manoeuvre

through mountainous terrain more easily than most vehicles. Level IV health centres and hospitals have access to the district ambulance.

One member described a local tonsillectomy procedure performed by herbalists in the community, in which inflamed tonsils are poked until they bleed. It is believed that bleeding causes the tonsils to shrink. Patients are then given herbal remedies following the procedure. However, some traditional healers have reportedly started sending clients to hospital after the procedure to get medication. Healthcare workers suggested that these healers may have seen cases of deterioration following this type of tonsillectomy and may believe medication can help prevent this.

Common reasons for referral included:

- **Altered level of consciousness** with a Glasgow Coma Score of 12 or less.
- **The need for further investigations that are not available at the health facility**, such as renal and liver function tests, electrolytes, and CT scans.
- **Respiratory distress.** Oxygen therapy beyond low-flow oxygen is often not available. The supply of oxygen is also not in bulk. Healthcare workers reported not being confident in setting up oxygen therapy, especially where they were required to set up the oxygen cylinder and oxygen delivery devices. There was a desire for frequent training and refresher courses on such aspects of care. Centres with pulse oximetry also reported a need to refer when oxygen saturation is less than 90% on oxygen therapy.
- **Clinical evidence of end-organ failure**, such as liver failure.

Facilities

At the district hospital, acutely ill patients are managed in the emergency department and the ICU. When there are no beds in the ICU, patients are kept in the emergency department, where access to oxygen and close monitoring are easier to obtain.

Health centres have a triage point where new patients are assessed. Acutely ill patients are allowed to skip the queue, and the most senior healthcare worker is notified.

Health centres have landlines which they use to contact the district hospital. The most common referral cases are obstetrics. The first point of call is the maternity ward. If an emergency call is not answered, the health centres contact the head of nursing or escalate to the Medical Director.

Level IV health centres can offer blood transfusions when blood is available. They have no ultrasound scans. They can perform general surgery, with herniorrhaphy and caesarean section being the most complex cases performed.

Recovery and aftercare

Some VHTs help patients get their prescriptions dispensed at the hospital pharmacy. This is more common with VHTs located close to the hospital.

For patients who have had an acute illness, health facilities offer a date for early review following discharge. No rehabilitative services, such as physiotherapy, exist.

Challenges

- **Access to blood and blood products is limited.** Feedback from hospitals is often slow, so many level IV health centres prefer to refer patients for transfusion, even when they could have managed the illness if blood products were available.
- **An unstable electricity supply was reported.** Facilities reported unreliable hydro-powered electricity, and participants requested solar-powered options to provide a more consistent power supply.
- **Limited monitoring equipment.** Some level IV health centres and operating theatres lack essential monitors, particularly pulse oximeters. This limits the care they can provide and has led to some operating theatres shutting down, increasing referrals to hospitals. One anaesthesia provider, who had been transferred from a district hospital to a level IV health centre, reported that even when he knew what to do, he lacked the necessary supplies.
- **User training is needed for procured equipment.**
- **Need for clinical training.** Training in the management of common acute illnesses is required, especially for people presenting with respiratory distress, stroke, trauma, and shock.
- **Staff burnout.** Staff burnout is an issue, largely due to staff being unable to take leave. This is particularly the case for health centres where some cadres have only one person. For example, one anaesthetist reported not being able to fully take leave for the previous two years because he is the only anaesthetist at his centre.
- **Inconsistent supply of drugs and medical supplies.** Quarterly supplies are not sufficient to meet facilities' needs. In addition, the drugs that health facilities can request are predetermined by the formulary, and requests may not be transferable between drug categories, even when a facility cannot use a particular drug. For example, quotas for anaesthetics cannot be transferred to antibiotics even when the theatre is not operational, despite high numbers of patients with infections requiring antibiotics.
- **Limited transport.** There is limited availability of transport for ill patients requiring inter-facility transfer.

Lived experience of acute illness: a patient survivor's account

NA, a 38-year-old single mother of four children who left secondary school at S.2 (year 9)

Experience of diagnosis

"Two years ago, I experienced progressively worsening generalised body weakness. I was always thirsty, especially at night, and was frequently waking up to urinate. I went to the hospital, but all the tests came back normal.

After visiting both the public hospital several times and a private facility with no clear diagnosis and no response to medication to manage my symptoms, I began to think this was a case of witchcraft. It was increasingly difficult to care for my husband and four children.

One morning, I was feeling very weak to the extent that even holding a cup in my hands was difficult. I called a nurse I knew at Kisoro hospital, which was not very far from my home, and informed her of my ill health and that I did not think I could make it to the hospital by myself. The next thing I remember was waking up in the emergency department, with many things connected to my body. She told me that she found me unconscious at home and had brought me to hospital in an ambulance. I was diagnosed with diabetes. After a week of treatment, I was discharged on medication."

Discharge into the community

"I went home on medication, but I was not well enough to care for my family. Neither my husband nor I had regular work, so we did not have money for basic needs, including food for the family. When I had nothing to eat, I did not take the medication, and soon I was back in the hospital. I had also been taught the symptoms of low blood sugar, which can happen after taking medication, but I often did not have anything sweet in the house to use for first aid.

I used to think diabetes was a disease of obese people; it was hard to understand why a small woman like me had developed the sickness. Review visits at the hospital have helped me learn more about this illness. I now know it cannot be cured but can be controlled.

In 2024, I lost a lot of weight and experienced the same body weakness as before. However, this time, I had excessive vomiting. I was diagnosed with tuberculosis and started on treatment. I had to be fed through a feeding tube passed through my nose, but I would vomit after being fed. I was on oxygen to help me breathe. I remember that the hospital



staff contributed money for me to be transported by ambulance to Mbarara regional referral hospital. They told me my problems could not be handled at the district hospital.

I do not recall everything properly, but I was admitted to Mbarara hospital for at least two weeks. When I got better, they sent me back to Kisoro hospital, and I was admitted to the hospital ICU. I was glad that, unlike my first admission, this time the medication was being given continuously in my vein through a pumping machine, instead of the frequent injections I had received before. I was also happy that they were monitoring me all the time, with machines.”

Impact on family life

“My husband left our home one day and has never come back. He said he cannot manage to stay with a woman who is in hospital all the time. It is expensive. At the time he left, we had constructed a small house but had not put a roof on it yet. I had to move my children to a small rental, which I cannot even afford. Although they attend a public school, parents are required to make a monetary contribution every school term (20,000 Uganda shillings).

Under the grant that set up the district ICU, I was temporarily employed to provide basic cleaning services in the unit under the guidance of the nursing team. This grant and employment opportunity have since ended. I struggle to look after myself and my children. It is hard to get employment with my level of education, but also because people know that I have often been unwell. I have a small garden where I grow food for the family, but that is also difficult to do when I feel unwell.”

Lessons learned and appeal to health workers and researchers

“I am grateful for the education I have received on diabetes as a disease. I have become an advocate in my own village, looking out for others who I know have the same illness and encouraging them to come for our planned hospital visits for check-ups.

I know that many people do not know the symptoms and signs of diabetes and other illnesses common in this district. I request health workers and all VHTs to spend more time on community sensitisation. Be approachable so that people with inquiries can discuss their health concerns freely. I encourage all people to seek help from the health worker or village health teams before seeking alternatives from faith healers, whether in churches or shrines.

I think home-based health education is not sustainable for VHTs. The homes are many, and VHTs are few. I encourage them to take advantage of all village gatherings, especially the monthly village meetings, to conduct health sensitisation talks, so that the message can reach more people regularly. Radio shows are good, but not everybody can afford a radio. If more patients can be involved in some health projects, it makes it easier for other patients to understand the goal of the project and may provide some income for people like me.”



Lessons learned from this work

Our engagement with the Kisoro community highlights the essential role that village health teams, embedded in their community, can play in the recognition and management of acute illness in a rural, resource-poor community. Referral is a complex process within the community and varies with both the underlying illness and the care first sought by the patient. Deficits in community awareness, health worker training, and health system resources, along with challenging geography, are key issues in delivering community care after acute illness.

However, we identified a strong desire to improve this, with target areas identified as community awareness, technology development, and healthcare resourcing. The community showed great resilience in the face of the challenges, with village insurance schemes, informal referral pathways, and community advocates all working to strengthen the health system from the ground up.

These findings will directly influence our research efforts, and we will continue to engage with this community to validate and communicate research findings as they emerge.



Read more about the International Health Systems Group's wider community and stakeholder engagement activities and workshop reports: <https://www-edc.eng.cam.ac.uk/research/international-health-systems>