

A brief history of the UBH-ABS Partnership's Breast Cancer Project in Zimbabwe

The seeds of our longstanding Partnership in Zimbabwe were sown more than 8 years ago when the United Bulawayo Hospitals (UBH) agreed to work with the ABS to investigate the terrible breast cancer outcomes in Zimbabwe, focusing particularly on Matabeleland South (MS) and Bulawayo Metropolitan (BM). We were awarded a small 'Start-up' grant from Johnson & Johnson (Tropical Health and Education Trust, THET) in 2019, and the project was launched with a 2-day brainstorming session involving a wide range of healthcare stakeholders which provided vital background information for a questionnaire-based Needs Analysis (NA).

The NA involved interviewing nearly 1,500 people- women, their families and frontline staff living and working in MS and BM- during the first year of the pandemic. Shocking delays were disclosed at every stage of a patient's pathway. This was due to the widespread lack of understanding about the nature, investigation and treatment of breast cancer- which in turn reflected the absence of any formal education or training at all levels, combined with little if any public awareness of the disease.

Our shocking findings were published^{1,2}. An urgent plan of action was agreed, focusing first and foremost on teaching core clinical skills to the frontline health workers (FWs) who provide the first point of contact in peripheral clinics for women with breast problems. We set about developing a range of educational materials and approaches including an interactive online 'Introduction to Breast Care' course for nurses, integrating self-assessment, face-to-face workshops, an inaugural Bulawayo Breast Cancer Symposium in 2019, and two-year UK Breast Surgical Fellowships for two Zimbabwean surgeons, including the Partnership's Co-lead, Dr Munyaradzi Magara.

In 2021 and 2022, two Steel Charitable Trust grants amounting to £45K enabled the Partnership to:

- Fund and appoint three new six-week UK fellowships in large breast units to give senior frontline nurses/midwives an opportunity to learn about clinical examination, breast US (BUS) and modern multidisciplinary care. Three more fellows were subsequently appointed in 2025, and all six are now supporting their peers in Zimbabwe as Master Trainers
- Purchase three portable, hand-held wireless Clarius™ BUS probes for use in three new diagnostic breast clinics (DBC's) established in UBH, Gwanda and Beitbridge. The DBC's are colocated with the cervical cancer screening services (in the Visual Inspection with Acetic acid and Cervicography [VIAC] clinics). These support one-stop triage of new patients- enabling discharge of the majority with benign conditions such as cysts, and rapid onward referral for those with suspicious findings

- Support the vital ongoing development of a bespoke DBC database in collaboration with the Department of Computer Sciences at the National University of Science and Technology in Bulawayo, and a new workshop for those frontline DBC staff who will be responsible for data entry, retrieval and transmission to a central database

By 2024, the framework for a transformed breast service was in place, and plans for a new Diagnostic Breast Centre (DBC) at UBH were drawn up. Two large NGOs expressed an interest in part-funding this £1million+ project. The second Bulawayo Breast Symposium attracted >150 multidisciplinary delegates and was opened by the First Lady, Dr Auxillia Mnangagwa, who also laid the foundation stone for the proposed new DBC. Later that year, several Partnerships working in Zimbabwe were encouraged to apply for a Foreign and Commonwealth Development Office grant to support a new UK/Zimbabwe Health Partnership Pilot Project (UKZHPPP).

The UBH/ABS Partnership was awarded £66K, to build on the educational foundations we had built since 2018. A group of UK, Zimbabwean and South African faculty finalised the content and delivery of key clinical, computer, BUS, surgical and 'Training The Trainer' skills courses. A subgroup drafted a breast curriculum for a new post-basic Breast Disease Diploma aimed at qualified nurses, which has the potential to transform breast cancer knowledge and skills across the country. All skills courses were completed and delivered successfully during a 'Surgical Masterclass' week at UBH in 2025. This event included the first live surgery workshop in the country demonstrating new oncoplastic techniques. A short extension to the grant in 2026 enabled the partnership to overcome Zimbabwe's unpredictable internet links by installing Starlink™ into each DBC. The Partnership were also able to purchase high-definition videoconferencing equipment to support an expanding programme of surgical workshops- with the next workshop scheduled in September 2026.

Summary of the Partnership's major achievements

- Investigated, identified and published the key reasons for the shocking breast cancer outcomes in MS and BM
- Implemented a comprehensive programme of training and education for all levels of clinical staff, from frontline healthcare workers to specialist surgeons
- Transformed the patient pathway by opening three DBCs with the potential to offer rapid patient triage before onward referral or discharge
- Developed a bespoke DBC database supporting standardised data collection, audit and research, backed up by staff training
- Funded six UK learning fellowships for senior nurses/midwives who have returned as Master Trainers, now supporting their peers during programme extension
- Designed a new National Diploma in Breast Disease for newly qualified nurses

- Purchased and installed new equipment to enable reliable data transfer between DBC staffs and high-quality image transfer for remote image reporting
- Installing videoconferencing equipment to support new surgical workshops
- Secured MOHCC's commitment to supporting an MOU, and to the implementation of breast cancer surveillance alongside cervical screening programmes in other Provinces

Future directions

- Handover of skills courses to those Master Trainers and Surgeons who are ready to take ownership and delivery of core training materials in MS/BM and elsewhere
- Finalising the details of the Diploma with the UBH School of Nursing, the Nurses Council of Zimbabwe and the MOHCC in time for the first intake of nurses planned for 2027
- Developing a working relationship with the Breast Interest Group of South Africa (BIGOSA) to agree QIs, guidelines, protocols and pathways to support the nascent Breast Service in Zimbabwe
- Securing an agreement with Professor Jenny Edge, Head of the Witwatersrand University's Breast Service, to host a clinical breast fellowship to support senior VIAC clinic nurses as the programme extends into other Provinces
- Introducing a robust public awareness/education programme with the help of community leaders, churches, schools, patient advocacy groups, the media and others
- Working out a programme with the MOHCC to enable formal integration of 'breast screening' into the cervical screening services provided in >100 VIAC clinics across the country
- Launching a major fundraising campaign for the new DBC at UBH, by establishing an experienced/influential fundraising committee, with the support of major NGOs and the endorsement of the First Lady
- Following a detailed impact study to assess the Partnership's achievements to date, we are collaborating with our expert radiology colleagues to investigate the feasibility of remote BUS image reporting *versus* using AI tools at the point of care

Reference

1. Magara MS, Mungazi SG, Gonde P, Nare H, Mwembe D, Madzikova A, et al. (2023) Factors leading to the late diagnosis and poor outcomes of breast cancer in Matabeleland South and the Bulawayo Metropolitan Provinces in Zimbabwe. PLoS ONE18(11) e0292169.
<https://doi.org/10.1371/journal.pone.0292169>

2. Rainsbury RM, Magara MS. Advancing breast cancer in the developing world: Challenges in Zimbabwe. *Belg J Med Oncol* (2023);17(7):259-63