# LUISA GUIDOTTI HOSPITAL

July – September (Q3)

and

January – September 2024

Highlights of Activities

Presented by: Dr Massimo Migani (Medical Superintendent)

27th of October 2024

## Luisa Guidotti Hospital historical background.

All Souls Mission, Mutoko was founded by the Jesuits in 1930. The mission is in a rural environment 25 Km from Mutoko Town (Chabvuta Village – Chiwore Ward).

The Dominican Sisters came to the Mission in 1932 and later opened a hospital.

In 1968 the hospital was entrusted to the AFMM (International Medical Association), Dr Maria Elena Pesaresi and Sr Caterina Savini were on the staff establishment. In 1969 Dr Luisa Guidotti came to replace Dr Pesaresi who went to serve another mission hospital in Zambia.

In 1976 the hospital was upgraded to the status of a "Mission Hospital" (Dr Luisa Guidotti – Medical Superintendent and Sr Caterina Savini – Matron)

In 1979 Dr Luisa Guidotti was killed by the security forces during the Independence war.

In 1982 Dr Maria Elena Pesaresi returned to All Souls and took charge of the Hospital.

In 1983 the Hospital was renamed **"Luisa Guidotti Hospital".**

Since 2014 Dr M. Migani has been appointed as the Medical Superintendent, with currently the Hospital Executive composed by him as the Medical Superintendent, Mrs I. Chipuriro as the Tutor in Charge of the School of Nursing and Midwifery, Mrs T. Dzagonga as the Hospital Matron and Mr P. L. Machipisa as the Hospital Administrator. At present the Hospital is a 101 registered beds Mission Hospital (the number of in-patients beds has been revised during COVID19 pandemic in 83 in-patient beds and 18 beds for waiting mothers - WMH), and comprises of the following departments:

Outpatient department, Pharmacy, Male Ward, Female Ward, Paediatric Ward, Maternity Ward (including Labour ward), TB Ward, COVID19 Isolation ward, Theatre block, Laboratory, O.I. Clinic (for patients living with HIV, treatment and follow up), Family and Child Health department, Rehabilitation Department, Dental Department, Eye Clinic, Waiting Mothers' Home.

There is also a School of Nursing and Midwifery accredited under Ministry of Health and Child Welfare.

## Catchment population area.

Luisa Guidotti Hospital is acting as the first Health Facility for a direct catchment population area comprising 6.451 citizens. It is a referral centre for the surrounding rural clinics of Mutoko East and North and due to its geographical location (close to the boundary with Mudzi District) is a referral centre also for some clinics belonging to this District, for a total population (including direct catchment area) of 139.649 citizens (data from National Census 2022 and District profile 2024 with adaptation according to annual growth rate).

However especially for some services, the Hospital receives patients from further areas (including the capital city Harare and other Provinces).

### CATCHMENT POPULATION 2024

| REFERRAL POPULATION ESTIMATED | Wards from Mutoko (East and part of North) – Mudzi (part of West and South) | 139.649 |
|---|---|---|

| CATCHMENT POPULATION (Direct catchment) | Ward 16 (LGH) | 6.451 |
|---|---|---|
| MALE | 48.2% | 3.108 |
| FEMALE | 51.8% | 3.343 |
| UNDER 1 YEAR | 3.0% | 193 |
| CHILDREN 1 – 4 YEARS | 11.7% | 754 |
| CHILDREN < 5YEARS | 14.7% | 947 |
| CHILDREN 5-14 YEARS | 28.3% | 1.824 |
| CHILDREN 0-10 YEARS | 32.3% | 2.081 |
| CHILDREN < 15 YEARS | 43.0% | 2.771 |
| 15 YEARS + | 57.0% | 3.680 |
| WOMEN OF CHILD BEARING AGE (15 – 49) | 22.5% | 1.453 |
| EXPECTED PREGNANCIES | 5% | 323 |
| EXPECTED BIRTHS | 4% | 258 |

Sources:

- MOHCC Catchment Population by Health Centre – Mutoko District Document 2024
- Census 2022 with adaptation of growth rate (national average 1.5% as per Census 2022).

## VISION/MISSION/CORE VALUES.

Centred on the example of the life of Jesus Christ, the hospital vision and mission are inspired by principles of Love and promotion of "development, wellbeing and common good".

In this view and in line with the Ministry of Health and Child Care vision and mission, the hospital aims to promote an integrated approach to public health interventions where "one-health" and "circular economy" concepts are pillars of the hospital strategic interventions.

### VISION.

Luisa Guidotti hospital envisages *a healthy and self-reliant community* so that "they *may have life and have it to the full" (John 10, 10)*

### MISSION.

Luisa Guidotti hospital *is committed to promote high quality of health services, maximizing resources and working in a close bond with the community served, towards the promotion of preventive and sustainable community health programmes. This with an approach focused on principles of «one-health» and «circular economy».*

### CORE VALUES.

*Faith, Love, Ethics, Integrity, Justice, Creativity, Perseverance towards development.*

## STRATEGIC OBJECTIVES AND PRIORITY AREAS OF ACTIVITY/PROGRAMMES.

In line with the MOHCC National Health Strategy and the Hospital strategy, we summarize 3 main Key results areas of intervention (1. Health Services delivery, 2. Infrastructure/Working environment, 3. Community development/Environment)which include specific priority activities/programmes whose outcomes aim to improve: a) Quality of services, Health outcomes, Expanded access to Health; b) Community development, wellbeing of populations and prevention of diseases.

In a review of the strategic plan done according to National, Provincial and institutional priorities, the following areas have been identified as priority areas (which can be summarized under the above-mentioned 3 key results areas):

*1. Improved Leadership and Governance at all levels of the Institution (KRA1-KRA2)*

*2. Improved Quality monitoring towards TQM (KRA1-KRA2)*

*3. Sustained High quality service delivery, expanded access to health for specialist's services (KRA1)*

*4. Optimized resource utilization and introduction of innovative approach to promote sustainability (KRA1-KRA2)*

*5. Improved community health programmes through enhanced Community participation and Stakeholders engagement (KRA3)*

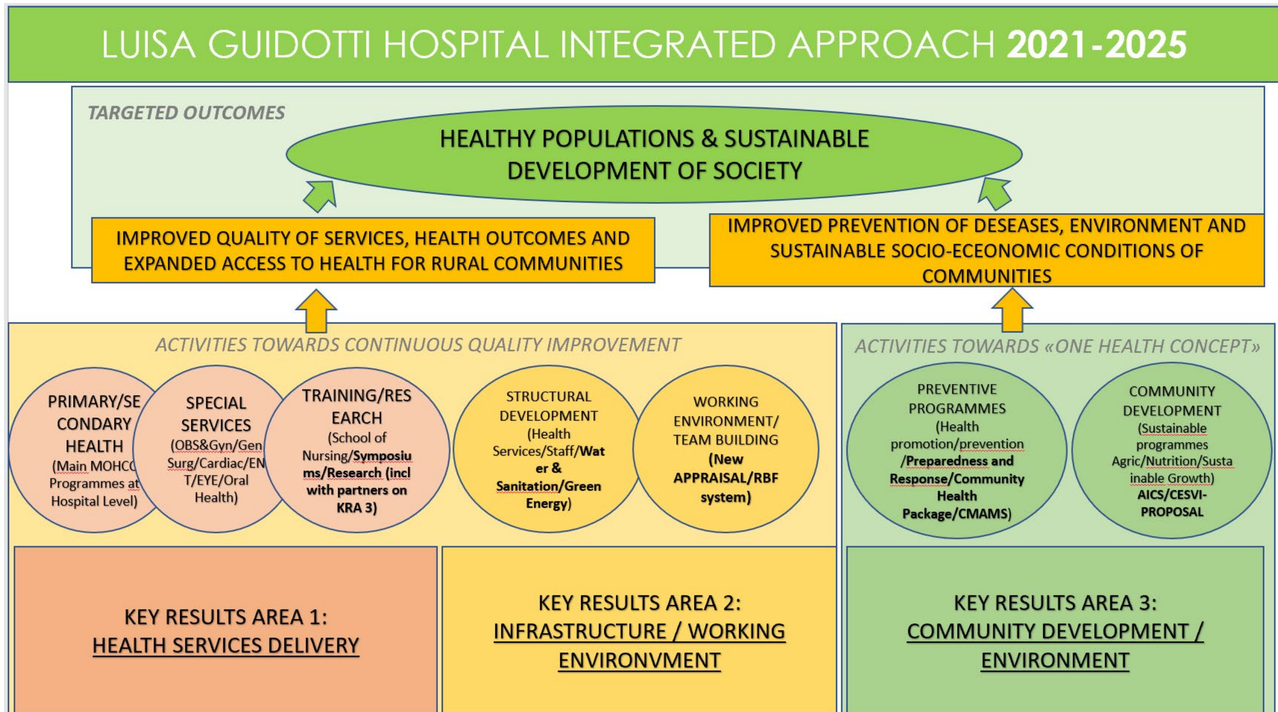
*6. Enhanced emergency preparedness and response to epidemic prone diseases, outbreaks and disasters (KRA1-KRA3)*

*7. Enhanced evidence-based education and research to improve skills of human capital for health (KRA1)*

Priority Working improving teams grouped according to activity/programmes comprise of:

1. RMNCH (Reproductive Maternal Neonatal & Child health) – KRA1
2. Clinical Management &Critical Care– KRA1
3. Surgical services – KRA1
4. Infection Prevention and Control – KRA1
5. O.I./EMTCT – TB services – KRA1
6. IMNCI/EPI – KRA1
7. Pharmaceuticals - KRA1
8. Laboratory Services – KRA1
9. Training/Continuous education – KRA1
10. Procurement/Store management/Logistics – KRA1
11. Maintenance/Water supply/Structural development – KRA2
12. Working Environment (Inc. Implementation of Leadership & Management development plan/Monitoring & Evaluation data collection towards Total quality management) – KRA2
13. Waste Management/Environment – KRA3
14. Community Programmes/Community development – KRA3

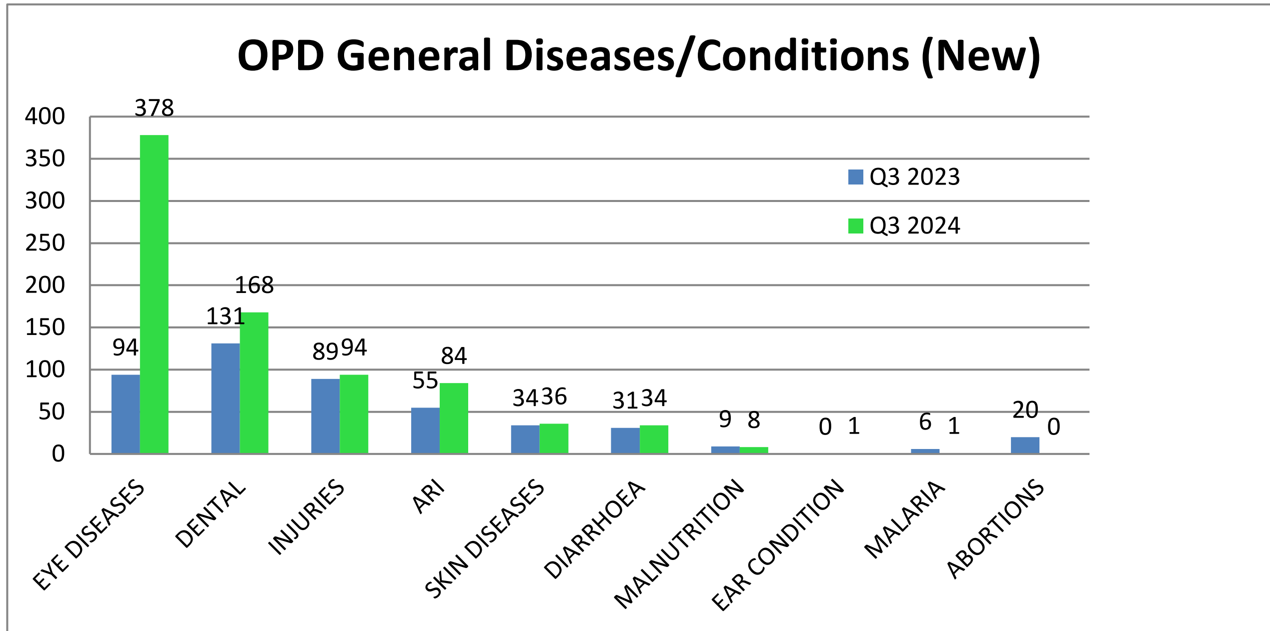
To promote quality improvement and an approach towards Total Quality Management, in line with the MOHCC quality improvement framework, the hospital has set a Quality Improvement Committee with the aim to coordinate quality improvement and quality control and has established Working Improvement Teams for each of the above Priority areas of intervention. Activities have since been promoted through the QIC to assist and motivate WITs.

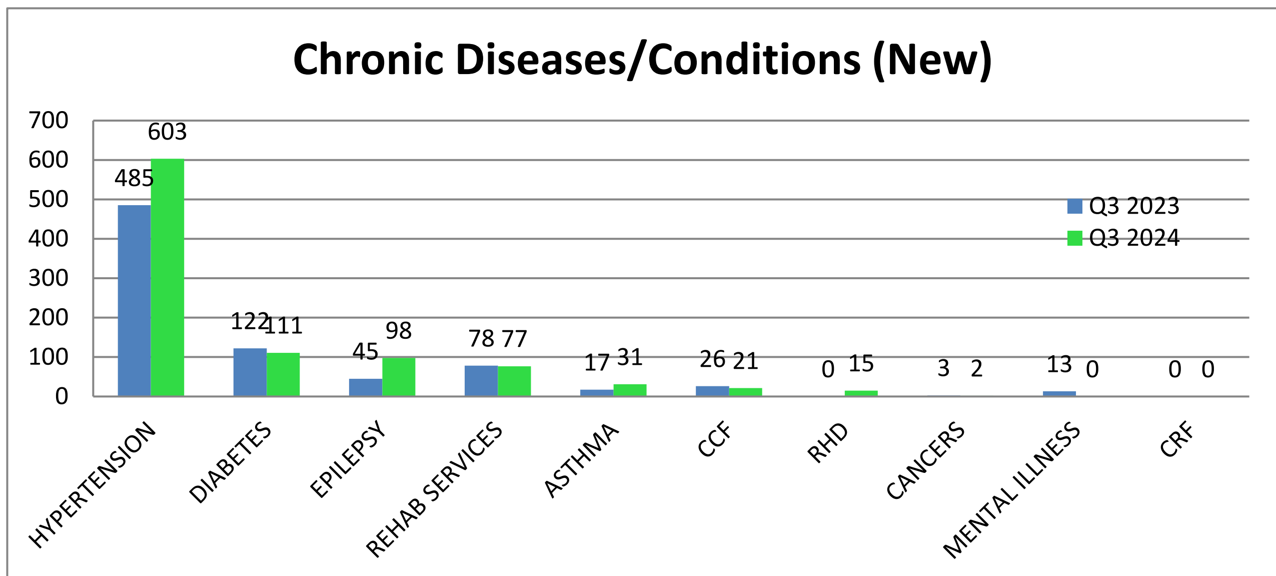


| Service Delivery | Achieved Q3 2023 | Target Q3 2024 | Achieved Q3 2024 | Jan-Sept 2023 | Jan-Sept 2024 |
|---|---|---|---|---|---|
| Total population | 10676 | 6451 | 6451 | 10676 | 6451 |
| Total number of inpatient beds | 83 | 83 | 83 | 83 | 83 |
| Total number of admissions inclusive maternity | 522 | 400 | 445 | 1639 | 1432 |
| Total bed occupancy rate (%) | 40.68% | 35% | 37.8% | 41.44% | 40.5% |
| Total institutional deliveries | 205 | >188 | 174 | 619 | 549 |
| Total deaths rate | 2.87% | < 4.5% | 5.6% | 2.5% | 3.7% |
| Maternal deaths | 0 | 0 | 0 | 1 | 0 |
| Total number of new outpatient department (OPD) visits | 2017 | 3750 | 3522 | 7143 | 7875 |
| Total number of new and repeat outpatient department (OPD) visits | 4867 | 6000 | 6360 | 16869 | 17626 |
| Outreach OPD services (Oral, Eye, Rehab, general OPD services) | - | - | 771 | - | 1656 |
| TOTAL institutional and community OPD services | 4867 | 6000 | 7131 | 16869 | 19282 |
| Operating theatre | | | | | |
| Number of caesarian sections | 11 | N/A | 12 | 48 | 28 |
| Caesarean section rate | 5.36% | 10-12% | 6.9% | 7.75% | 5.1% |
| Number of major operations done excluding caesarian sections | 0 | N/A | 0 | 0 | 50 |
| Number of minor operations/procedures done | 48 | N/A | 31 | 171 | 182 |
| Number of table deaths | 0 | 0 | 0 | 0 | 0 |
| Dental services | | | | | |
| Number of procedures performed | 272 | 300 | 303 | 790 | 1170 |
| Rehabilitation services | | | | | |
| Number of procedures performed | 194 | 200 | 298 | 575 | 831 |
| Ophthalmology services | | | | | |
| Number of conditions attended | 157 | 150 | 640 | 370 | 1009 |
| Radiology services | | | | | |
| Number of clients who had X Ray done in the dept | 421 | 450 | 427 | 1045 | 1418 |
| Number of clients who had Ultrasound Scan done in the dept | 460 | 425 | 388 | 1389 | 1183 |
| Laboratory services | | | | | |
| Number of Laboratory tests done | 4151 | 4500 | 5886 | 15864 | 15286 |

## HIGHLIGHTS OF ACTIVITIES / PROGRAMMES

### 1. Inpatients and Outpatients services.




#### Comments

In Q3 There has been 46.5% increase in outpatients' services attendances (new and repeated visits, including outreach services) as compared to the same period last year (+14.3% if comparing the period Jan-Sept 2024 vs 2023).

The increase is attributed mainly to the outreach programme initiated in March 2024 as part of the strategic interventions aimed to increase access to health to communities, whereby at least 3 times every month, a team composed by staff conducts Oral Health, Eye Health, Rehabilitative services combined with community awareness and screening. From April the programme integrates a pharmaceutical component to increase access to medication for the rural community. Target

of the programme are the clinics and schools in the direct catchment area including surrounding, particularly: Bondamakara, Kawere, Kowo, Madimutsa, Kapondoro, Makosa, Mushimbo.

Admissions trends have been characterized by a reduction of (13.8%) in admissions (including maternity cases) and an increase in death rate from the general wards (overall, still below target), to confirm that there is a trend in late presentations and some increase in terminal/palliative chronic conditions. The increased number of deaths may also be related to a reduction in transfers of critically ill patients as considering the period January - September 2024 vs 2023 there has been a decrease by 18.3% in transfers (main reductions noted from OPD, Paediatric, Maternity and Neonatal as it can be appreciated in the table at page 9).

## RMNCH – Maternal & neonatal services/EMTCT/EPI/Child health.

| Indicator | Q2 2024 | Q3 2024 | Jan-Sep 2023 | Jan-Sept 2024 |
|---|---|---|---|---|
| Number of pregnant women who book for first ANC visit before 16 weeks | 31(27%) | 34(19.5%) | 94(15.19%) | 99(18.09%) |
| Number of pregnant women who book for first ANC visit before 12 weeks – target(40%) | 8 (6.9%) | 13 (7.47%) | 60(9.69%) | 35(6.4%) |
| Proportion of births attended by a skilled birth attended - monthly target | 100%(187) | 100%(174) | 100%(619) | 100%(547) |
| Pregnant women receiving two or more Tetanus Toxoid (TT2+) vaccinations | 85 | 107 | 322 | 323 |
| Caesarean sections as a percentage of all live births (Caesarean section rate) - target (10%) | 6.5% | 6.9% | 7.75% | 5.1% |
| Total number of pregnant mothers who received iron and folic during current pregnancy | 188 | 172 | 619 | 576 |
| Number of maternal deaths | 0 | 0 | 1 | 0 |
| High Risk Maternal cases referral out (Pregnant women at risk referred to from clinics) | 12 | 14 | 49 | 44 |
| Post Natal Care - Women with their new-born child receiving three post-natal care service after delivery (Day 1; Day 3 ; Day 7) | 36 | 39 | 145 | 125 |
| Proportion of pregnant women who have their BP, urine and blood samples (Hb, Syphilis, HIV) taken when they attend ANC – target | 100% | 100% | 100% | 100% |
| Maternal case fatality rate in health institutions | 0:100000 | 0:100000 | 1.62:100000 | 0:100000 |
| Number of perinatal deaths – epidemiological indicator (total MSBs, FSBs, ENNDs) | 2<br>10.5:1000 | 2<br>11.2:1000 | 8<br>12.9:1000 | 8<br>14.6:1000 |
| Number of perinatal deaths - institutional management quality indicator (FSBs, ENNDs) | 0<br>0:1000 | 0<br>0:1000 | 6<br>9.69:1000 | 3<br>3.64:1000 |
| Proportion of women having four or more ANC visits (ANC coverage at least four visits) | 92%<br>172/187 | 94.7%<br>163/172 | 92.4%<br>(572/619) | 87.3%<br>503/576 |
| Number of maternal death audit meetings conducted – target (100%) | -<br>100% | -<br>100% | 1<br>(100%) | -<br>100% |

**Comments**

There is stable consistency in the reduction of perinatal mortality rates (both overall and institutional perinatal mortality rate – note the disaggregated data focusing on the perinatal deaths linked to the labour and delivery). Looking at the disaggregated data, of note is that the institutional rate is progressively reducing expressing the good trends obtained with the internal quality improvement programmes promoted. There is still need to work intensifying the community surveillance on pregnancy at risk of complication as most of the perinatal deaths occurred are represented by intrauterine deaths secondary to hypertension in pregnancy. For this reason the institution will focus on piloting an electronic mapping and tracking system of pregnancies at risks and ANC bookings, to enhance prevention, surveillance and early detection/management of complications.

Strengthening of regular and periodic simulations and sharing experiences with midwives and doctors from Italy under the CMAMS programme and activities to strengthen monitoring of mothers in labour to increase alertness and response to

complications have become part of the routine activities. Priorities for the next months will be also in collaboration with the Districts of Mutoko and Mudzi to improve community awareness as it is of concern the important drop of mothers coming for a first booking within the first trimester.

### CMAMS PROGRAMME (Comprehensive Management Approach to Maternal Services to save maternal and neonatal lives in Zimbabwe).

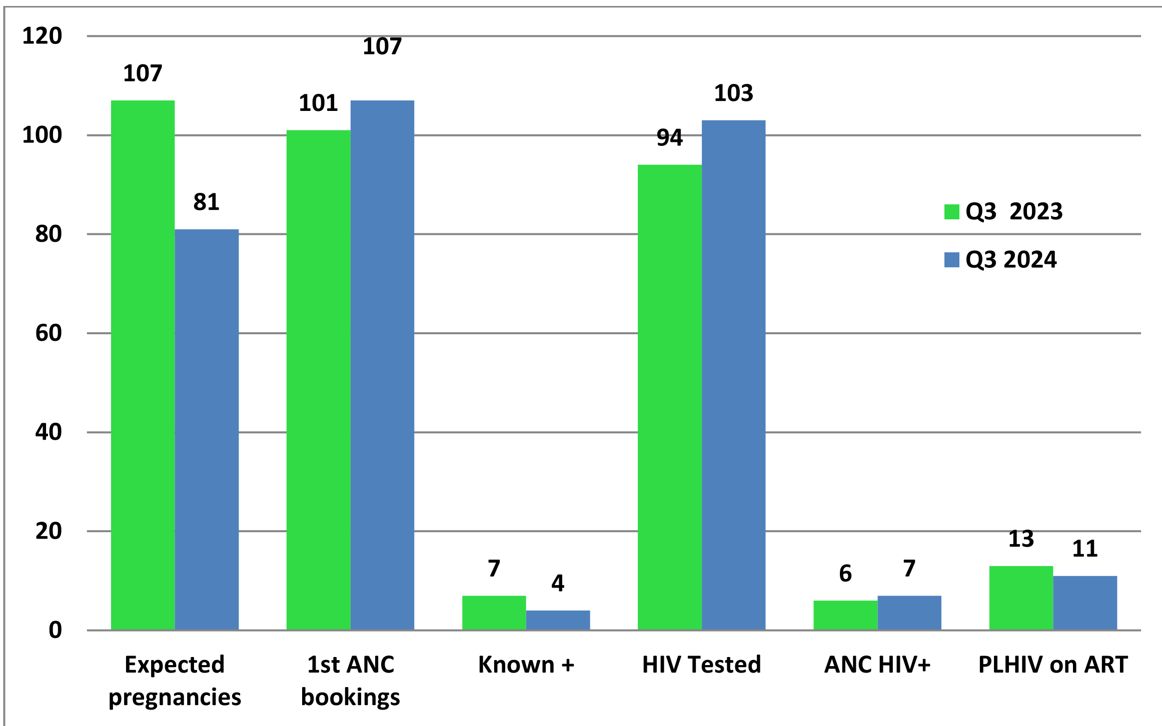
In collaboration with the Provincial Medical Director of Mashonaland East and the GEO Group (GruppoGestioneEmergenzeOstetriche – Italy; a group of specialists Obstetricians and Gynaecologists), Luisa Guidotti Hospital participated to draft of a pilot programme to reduce maternal and perinatal morbidity and mortality with a multilevel approach (from community health at village and primary level of health care to secondary – district level of care). The programme aims to tackle the three delays responsible for maternal and perinatal mortality through: promotion of knowledge and community direct participation to reproductive, maternal, neonatal and child health issues (including direct involvement of Community health workers for active screening and early detection at community level of pregnancy and neonatal disorders); improving referral system network in the rural set-up to reduce delays of transfers to next level of care; improving knowledge and competence of health care workers in the management of antenatal, labour and post-natal complications through a hands-on approach based on simulations with the use of advanced simulators.

The positive achievements obtained with the programme in 2022 brought to the drafting of a programme for 2023-2024 aimed to exchange practices with experienced Obstetricians and Midwives coming from centre of excellence and training institutions from Italy in a spirit of peer-to-peer review, on-job mentoring and mutual collaboration in coordination with the Provincial Medical Director.

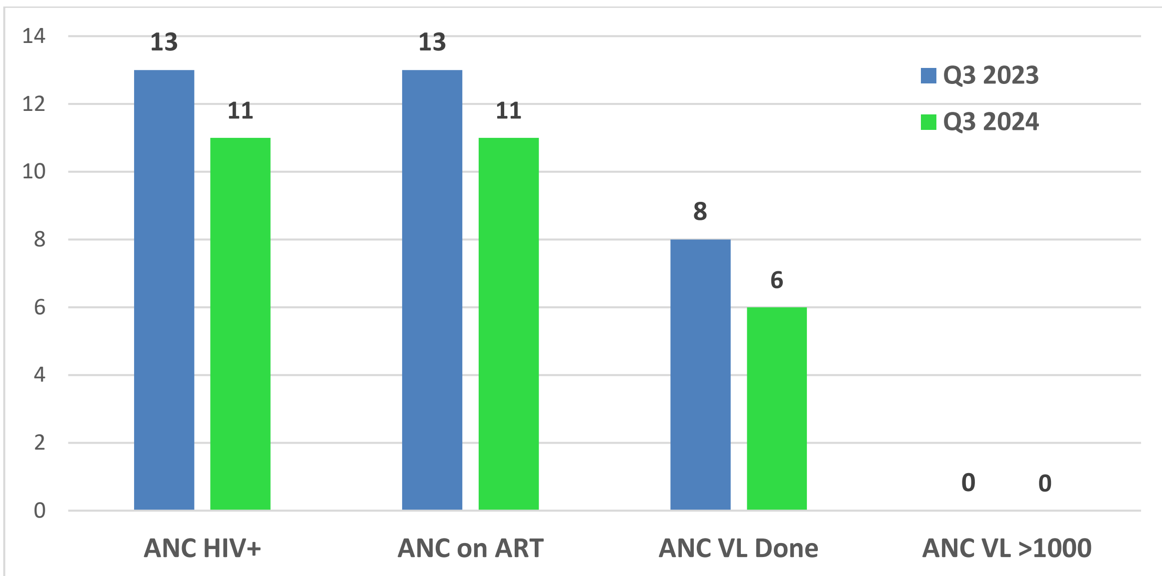
There has been a decrease of transfers from maternity, compared to the previous year, however, figures are still high mainly caused by the presence of only 2 medical doctors (instead of 4) for most of the second quarter secondary to staff rotation which reduced the possibility to manage emergencies particularly during weekends when the nurse anaesthetist would have off-call. The total amount of transfers has a relevant decline compared to the previous year considering the periods January - Sept 2023 vs 2024 (-18.3%).

| TRANSFERS | Q2 2024 | Q3 2024 | Jan-Sept 2023 | Jan-Sept 2024 |
|---|---|---|---|---|
| MATERNITY | 12 | 10 | 49 | 42 |
| ADULT WARD | 10 | 11 | 24 | 24 |
| PEADIATRIC | 3 | 4 | 11 | 8 |
| OPD | 7 | 6 | 24 | 19 |
| NEONATAL | 0 | 0 | 7 | 1 |
| **TOTALS** | **32** | **31** | **115** | **94** |

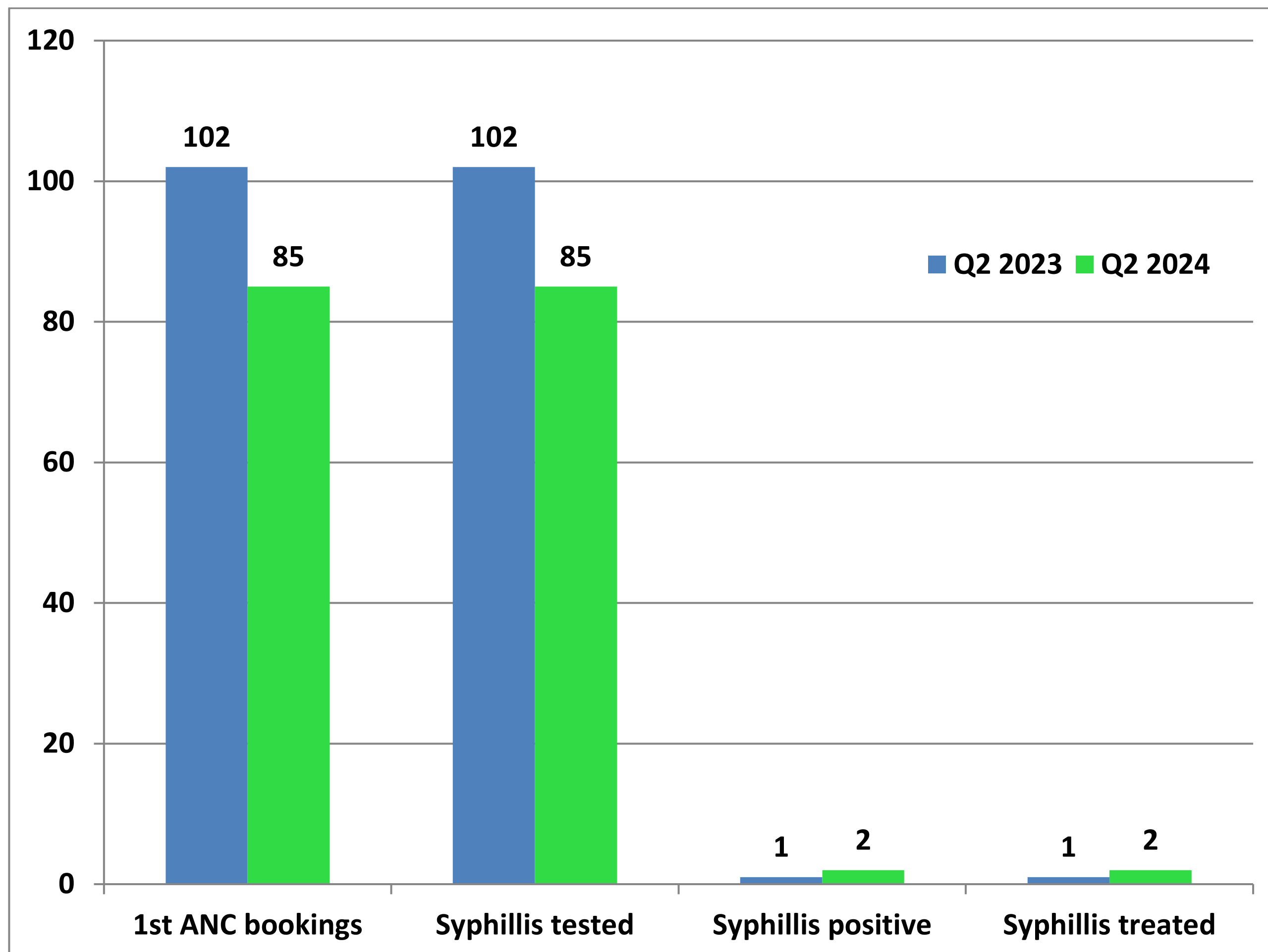
**ANC Cascade Q3 2024 vsQ3 2023**




**ANC ART Coverage and Viral Load Testing**



**ANC Syphilis testing Q3 2024 vs Q3 2023**




**Comments**

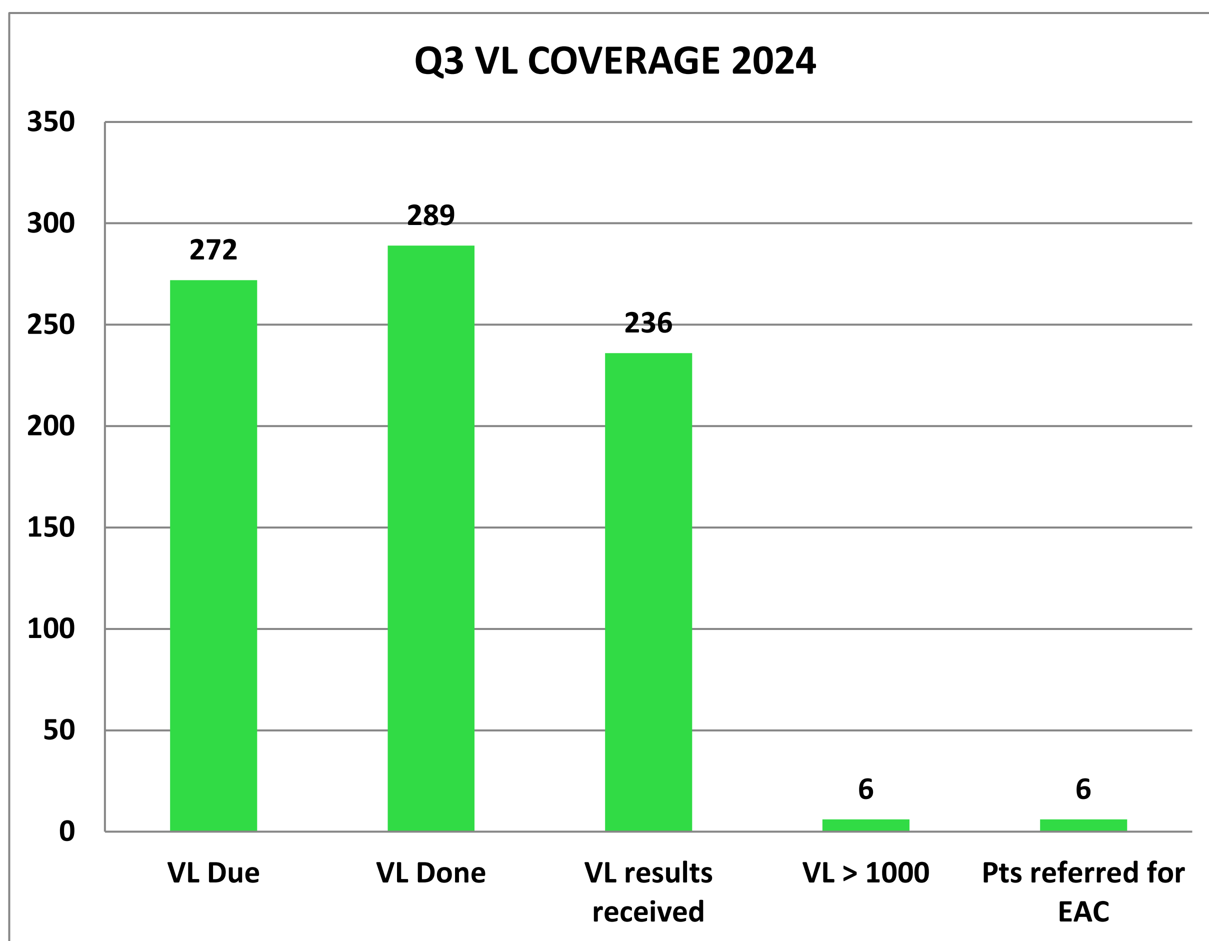
It has been possible to achieve 100% ART coverage during pregnancy. Viral load testing is done regularly for pregnant mothers leaving with HIV as the facility can perform GeneXpert dedicated VL testing; all mothers leaving with HIV due for viral load testing were tested (4 not yet due for testing), therefore VL coverage in ANC has been at 100%. 19 HIV exposed infants were delivered and 100% received post exposure prophylaxis.

## 1. O.I./ART and Tuberculosis.

| Indicators measuring efforts that contribute to the reduction of HIV morbidity and mortality | | | | |
|---|---|---|---|---|
| **Indicators** | **Q2 2024** | **Q3 2024** | **Jan-Sept 2024** | **Jan-Sept 2023** |
| Number of males and females tested for HIV and received their results | 443 | 468 | 1472 | 1001 |
| Number of children and adults living with HIV continuing on ART | 1104 | 1135 | 1135 | 1141 |
| Number of adults newly initiated on ART | 14 | 26 | 66 | 51 |
| Total number of adults on ART (new and old cumulative) | 1082 | 1099 | 1099 | 1099 |
| Number of children newly initiated on ART | 0 | 0 | 2 | 2 |
| Total number of children on ART (new and old cumulative) | 36 | 36 | 36 | 42 |
| Number of new STI cases | 40 | 27 | 109 | 104 |
| Number of repeat STIs | 2 | 4 | 6 | 3 |

There is a relevant number of Sexually transmitted Infections cases (STIs); compared to the previous year there has been a strengthening in the reporting system which was noted with some gaps in the previous year when analyzed (during the previous year it was highlighted a reduction and found that was because of reduced reporting rather than behavioral change within the community).

| | Q2 2024 | Q3 2024 | Jan-Sept 2024 | Jan-Sept 2023 |
|---|---|---|---|---|
| **Viral load tests done** | 292 | 289 | 746 | 773 |
| **Results received** | 154 | 236 | 517 | 532 |
| **> 1000 copies/ml** | 5 | 6 | 20 | 17 |
| **Patients referred for EAC** | 4 | 6 | 16 | 17 |




### Comments

There is need to sustain positive achievements obtained so far (106%, number increased due to new clients who had their viral load taken) of patients due for test received collection of samples, however, there has been an improvement in receiving results with 81.67% - equal to 86.7% of overall due – receiving results). There is still need to pursue the target of at least 95% of patients reached with a VL test done and results received.

Since February 2017 the OI/ART programme is running with only one Primary Care Counsellor instead of two. There has not yet been a new deployment for the second, after one left service.

Of the 1135 patients currently on ART, there were: 26 new initiations, 9 transfers out, 6 transfers in, 4 deaths in Q3 2024.

**To reduce the mortality, morbidity and transmission of tuberculosis by 90%**

| Data element | Q2 2024 | Q3 2024 | Jan-Sep 2024 | Jan-Sep 2023 |
|---|---|---|---|---|
| Number of bacteriologically confirmed drug-resistant TB cases (RR-TB and/or MDR-TB) notified | 0 | 0 | 0 | 0 |
| Number of cases with drug resistant TB (RR-TB and/or MDR-TB) that began second-line treatment | 0 | 0 | 0 | 0 |
| Percentage of TB cases treatment success rate - all forms | 100% | 100% | 100% | 100% |
| Number of notified cases of all forms of TB - bacteriologically confirmed plus clinically diagnosed, new and relapses MT | 10<br>6 bacterial<br>4 Clinical | 16<br>5 bacterial<br>11 clinical | 38 | 48 |
| Percentage of HIV- positive registered TB patients given ant-retroviral therapy during TB treatment | 100% | 100% | 100% | 100% |
| Number of cases with drug resistant TB (RRT-TB and/or MDR-TB) that began second line treatment MT | 0 | 0 | 0 | 0 |
| Number of all TB patients who defaulted treatment MT | 0 | 0 | 0 | 0 |
| Number of bacteriologically confirmed, drug resistant TB cases (RR-TB and /or MDR-TB) notified MT | 0 | 0 | 0 | 0 |

**Comments**

No deaths occurred during the reporting period. Strengthening of contact tracing especially for contacts coming from other districts has been identified as a priority action.

## 2. Under 5 health indicators

| 3. Indicators | Q2 2024 | Q32024 | Jan-Sep 2024 | Jan-Sept 2023 |
|---|---|---|---|---|
| % of children who are fully immunized at 12 months (Primary course completed) | 36 (75%) | 37(77.08%) | 85(59%) | 85(59%) |
| Number of ARI cases treated | 72 | 53 | 213 | 187 |
| Number of facilities with at least one staff with IMNCI skills and attending to under 5-year children | 1 | 1 | 1 | 1 |
| Number of health facilities with functional cold chain requirements | 1 | 1 | 1 | 1 |
| Percentage of children aged 12 - 23 months who received BCG vaccine by their first birthday | 100% | 100% | 100% | 100% |
| Number of children received Penta 3 | 41 (85.4%) | 37 (77.08%) | 110 (76.08%) | 138 (76%) |
| Percentage of children under 5 with pneumonia treated with appropriate antibiotics | 72 (100%) | 63 (100%) | 223 (100%) | 187 (100%) |

**Comments**

Concerning the Expanded Immunization Programme, the institution participated to integrated campaigns within the community. There is a too low coverage of vaccine administration besides BCG which is administered to all newborn with a supermarket approach. In an analysis done in 2022 by head count done by CHWs at community level it has been noticed that there are relevant discrepancies between expected demographic data and existing ones. Besides this and the fact

that some children cannot be reached for religious reasons, it has been identified that the institution is working with targets based on direct catchment area but some of the villages are not reporting yet directly to Luisa Guidotti Hospital (i.e. Bwanya area reports to Kapondoro clinic instead). Engagement has been done with the District of Mutoko to rectify this and ensure that all direct catchment area (including CHWs) will report to LGH for increased coordination of EPI activities and since September 2024, 7 villages from the Bwanya area have been included under LGH direct supervision. A first meeting with community stakeholders has been promoted in September in preparation to a second meeting in October (to enhance community led interventions with special regards to EPI coverage, disease surveillance, water and sanitation and possible improvements with regards to access to medications for Non-communicable diseases). Aim is the correction of the current status of the institution in category 4 (RED/REC categorization) in the EPI coverage and increase quality and access to health services with a holistic approach.

## Malaria indicators and epidemic prone disease surveillance

| Indicators | Q2 2024 | Q3 2024 | Jan- Sept 2024 | Jan - Sept 2023 |
|---|---|---|---|---|
| Total number of suspected cases | 329(CHWs-51%) | 280(CHWs-53.6%) | 889(CHWs -51%) | 1665 (CHWs-973 (58.4%) |
| Number of suspected malaria cases tested by RDT or Slide | 329(CHWs-51%) | 280(CHWs-53.6%) | 889(CHWs -51%) | 1665 (CHWs-973 (58.4%) |
| Number of confirmed cases | 2 (CHWs-100%) | 4 (CHWs-25%) | 7 (CHWs-14.28%) | 195 (CHWs-98 50.2%) |
| Number of children under 5yrs treated for Malaria | 1(CHWs - 1) | 0 | 0 | 24 (CHWs-15) |
| Number of women attending ANC given IPT2 | 80 | 58 | 290 | 196 |
| Number of women attending ANC given IPT3 | 121 | 53 | 312 | 347 |
| Total number of malaria cases admitted | 0 | 3 | 5 | 83 |
| Number of inpatient malaria deaths | 0 | 0 | 0 | 3 |
| Total number of malaria deaths | 0 | 0 | 0 | 3 |
| Malaria case fatality rate | 0 | 0 | 0 | 1.5% |
| Proportion of suspected malaria cases tested at public sector health facilities (microscopy or RDT) excludes community testing | 161 (100%) | 130 (100%) | 435 (100%) | (692)100% |
| % of confirmed malaria cases that received recommended 1st-line ACTs at public health institutions (excludes community treatment) | 0 | 3(75%) | 7(100%) | (97)100% |
| Proportion of confirmed malaria cases investigated (Pre - Elimination districts) | N/A | N/A | N/A | N/A |
| Proportion of malaria deaths audited | N/A | N/A | N/A | 100% |
| Malaria incidence | 0.3:1000 (2/6451) | 0.12:1000 4/6451 | 1.09:1000 7/6451 | 18.27:1000 (195/10676) |

### Comments

100% for Q3 equal to 25% as the first semester of 2024, of the malaria cases identified have been diagnosed and treated with first line treatment directly in the community by the CHWs. The programme is running very well for the direct catchment area and monthly meetings have been promoted with CHWs to continuously strengthen community participation and coordination on health issues. Based on this success, the hospital is trying to expand intervention and preventive measures to

improve health also in maternity, child health and NCDs community awareness. During the current year, the drought experienced without precedents has probably contributed to a reduction in malaria cases seen this year.

## 4. Pharmaceutical services

The hospital is facing challenges to guarantee adequate levels of medicines supply therefore is forced to procure privately medicines which on several occasions are provided free of charge to patients or below cost to support health programmes or special groups.

| Medicine/pharmacy services | | | | |
|---|---|---|---|---|
| **Indicators** | **Q3 2023** | **Q3 2024** | **Jan - Sept 2024** | **Jan – Sept 2023** |
| Average vital drug stock status(%) | 76% | 74% | 72.6% | 73% |
| Average essential drug stock status(%) | 73% | 73% | 70% | 62% |
| Average necessary drug stock status(%) | 55% | 54% | 47% | 39% |
| Number of blood units used | 29 | 28 | 87 | 106 |
| Oxygen availability(yes/no) | YES | YES | YES | YES |

To maximize resources, cost recovery where possible while keeping costs for patients at the minimal possible for expanded access to medicines in the rural communities and accountability, the department has been fully computerized starting from the 1st July 2022. There has been a positive impact in ensuring stronger monitoring and cost-optimized availability of vital medicines despite a decline in the supply from Natpharm experienced in the current year compared to the previous as shown in the table above.

## 5. INR monitoring Programme/ Cardiac programme

A programme to monitor locally the patients who, over the years underwent overseas to cardiothoracic surgery (for prosthetic valve replacement) and that now are in need of anticoagulant therapy, has been promoted since 2014 for coordinating specialists in Cardiology with our resident Doctors and Nurses in order to promote step by step increased Institutional capacity.

It is a programme based on the interconnection between the resident professional staff (Doctors and nurses) and the International Team of Surgeons and Cardiologists, via internet. Luisa Guidotti Hospital Laboratory and other centers in Harare are the site performing the INR tests, which are done free of any charge for the enrolled patients.

The decentralization of test for the patients from Harare, done through the distribution of point of care devices (specifically designed for patient self-testing worldwide) to clusters of patients, identified according to geographical distribution done in 2019, allowed to improve adherence to the programme despite the important challenges given by the economic crisis and strict lockdowns measures implemented for several months during the year.

At present 67 patients are enrolled under follow-up (49 Harare, 2 Bulawayo, 4 Kwekwe, 11 Luisa Guidotti Hospital) with some occasional patients who receive service with the monitoring of their INR.

Patients “out of range” receive the correction of the dose within the same day the test is performed. There are important challenges concerning transport possibilities for the Mutoko group, which, despite help given to some patients with contributions for their bus fares, has been seriously affected by this.

Anticoagulant therapy is given free of charge to all the patients enrolled in the programme, as another measure to improve on patients’ adherence to the treatment. Patients although are requested to come for tests, receive their treatment for 6 months of therapy. This on one side prevents lack of adherence to therapy

even without coming for check-ups but on the other side may contribute to reduce motivation to come for the monthly INR tests.

During the year it has been possible to implement philanthropic cardiologic activities to assist cardiac patients and continue building capacity at institutional level in the clinical management. To date 6 children have been escorted and operated in Italy under the programme.

## 6. Other clinical activities (January – September 2024). Philanthropic programmes

*Ophthalmic camps (February – May).*

In collaboration with the Mash East Ophthalmic team, 2 Eye surgical camps were promoted in February and May where patients were screened and treated for eye conditions and a total of 59 cataracts surgery were performed. We aim to promote at least another 1 more camp during the year.

*Otolaryngology (ENT) medical and surgical camp (April).*

An ENT surgical mission was implemented in April with a total of 95 patients attended to and 37 surgical interventions done to expand access to specialist services for the rural communities and to build local capacity at institutional level in the various clinical areas for diagnosis and treatment.

*General Surgery camp (May).*

General surgical mission was implemented in May with a total of 73 patients attended to and 32 surgical interventions done to expand access to specialist services for the rural communities and to build local capacity at institutional level in the various clinical areas for diagnosis and treatment.

*Cardiology camp (May).*

A medical camp was promoted in May with the assistance of one Cardiologist, to continue the follow-up of patients already operated under the cardiac humanitarian programme promoted by the hospital since 1984 (which assisted patients with more than 500 cardiac surgeries done overseas, mainly in Italy) and to screen patients to be enrolled for surgery. The programme is also aimed at support improvement of institutional management of cardiologic conditions.

*Obstetrics and Gynaecology camps (Q1-Q2).*

Under the Obstetrics & Gynecology philanthropic programme, it has been possible to implement camps to improve institutional and team responsiveness towards management of obstetrics conditions and emergencies as well as to implement in June a surgical Gynaecologic mission to expand access to specialist services for the communities and support institutional capacity building of the hospital resident team.

## 7. School of Nursing.

Currently the school is training 15 Primary Care Nurses who started in January 2024, also new groups of students started training in September (5 midwifery students and 29 Registered General Nurses Students). 56 completed training (50 passed at the first attempt with 1 national gold medal and one national bronze medal at the state final examinations; 6 have to sit for exams for a second attempt, 1 secondary to a road traffic accident could not sit for the first attempt with the other group and is sitting in November). 4 Midwives under training completed the course and 2 passed at the first attempt (2 have to sit again in November).

The School during the year is involved in a Quality improvement programme aimed to increase linkage between the school and the clinical areas for educational development and clinical practice and supervision improvement and has a crucial role in the CMAMS programme, aimed to improve maternal and neonatal health and outcomes. The programme, developed in collaboration with the Provincial Medical Directorate of Mashonaland East Province and international specialists from GEO Group (Italy), includes a component

concerning training of community health workers and continuous educational development of staff at hospital and clinic level. We have requested approval for implementation of a series of philanthropic missions with combined teams of Obstetricians and Midwives coming from high load Centres of excellence in Italy with the scope to share experience and provide on-job mentoring to institutional staff and training staff of the School of Midwifery. Ultimate goal is to translate as more as possible current evidence-based best practices, into the local context and the available resources. A combined group-study of teaching staff and clinical staff has been established to drive implementation of activities, knowledge transfer and monitoring of educational activities promoted at the institution.

## 8. Quality improvement activities

As highlighted at page 4, the hospital is implementing a quality improvement programme in line with the QI framework for the MOHCC.

Of note for Q1-Q3 2024:

1. There has been a revision of the strategic planning of the Institution in line with the National and Provincial strategic priorities (Q1).

2. Admin/Procurement processes/Stores management/Fuel consumption has been included as part of KAIZEN exercise and monitoring tools have been finalized and rolled out to strengthen efficiency and resource optimization (Q2).

3. As part of the improvement of Working environment, sessions have been promoted to increase mentoring in leadership and management of managers and in Q2 a plan for the junior staff across departments has been set which has been started implementation in (Q3).

4. Community programs; the integrated outreach programme has started and has been rolled in full from March 2024 with high participation and good feedback from communities (Q2). A programme for drilling 14 boreholes within the community (1 per village) to complement the needs of the communities and the efforts of the Government of Zimbabwe with a multi-sectoral approach inspired by principles of One-Health has been initiated in Q3 with the support of Church stakeholders through the Hospital and in Q4 the Institution expects to complete the project.

5. Educational research activities have been promoted during Q1, for the midwifery students in line with evidence-based medicine and to foster academic and evidence-based approach during training, to promote critical thinking and analytic capacity, fundamental for quality improvement-oriented approach to clinical service. In Q2 the finalization of a scientific article proposal concerning documented quality improvement methodologies and activities was done in collaboration with the Provincial Medical Director and has been presented for the abstracts' selection to the Zimbabwe Medical Association in view of the Annual General Meeting and in Q3 has been submitted for peer-to-peer review for possible publication.

6. A Monitoring and evaluation team has been established under the Working environment WIT and a set of tools has been rolled out during Q2 as part of the activities aimed at working towards Total Quality Management.

7. Monthly Financial reports with balance sheet and annual internal auditing has been achieved and now is routine of the hospital activities to improve analysis, transparency, accountability and strengthen risk management.

8. The review of the exit interviews system with an electronic anonymous database for analysis has been rolled out in Q2 and now is utilized for regular feedback as client satisfaction survey in addition to the

already implemented Community Based Organization's feedback. The same system will be applied in Q4 to improve also monitoring of IPC protocol application and review of performance within the departments with a continuous assessment and revaluation as part of the WIT – Infection prevention and control's activities.

9. Strategies to improve skills within maintenance department (in electricity and electronic/medical engineering) and to support consolidation of a dedicated team to address the increased need of competence in maintaining medical equipment derived by the introduction of new technologies, have been put in place in collaboration with the Human Resources Office, to maximize Human Capital at all levels of the institution, in collaboration with the Provincial Medical Directorate.

## 9. Structural development.

The hospital has completed a structural renovation plan with Bill of Quantity for improvement of patients' flow from the Outpatient area and to optimize the admission blocks for adults' wards, as well as the doctors and nurses' rooms (including O.I. area) at the outpatient and emergency block and a project proposal has been submitted for potential funding. Response is expected in Q4.

After a community stakeholder meeting and consequent to the effects of the drought caused by El Niño, the hospital has engaged potential funders to see in collaboration with the District's WASH Cluster, the possibility to implement the drilling of 14 community boreholes to improve access to safe water for the prevention of epidemic prone diseases and the improvement of water, hygiene and sanitation within the hospital's direct catchment area. The project is expected to be completed by Q4 2024 with the first boreholes to be drilled by the end of October.

By November 2024 the hospital expects to complete the installation of new equipment for Surgery at the Theatre block (laparoscopic and endoscopic equipment) and set an internal network for data connectivity and internet improvements to set the foundation for future implementation of Electronic Health Recording, including digital imaging data storage predisposition.

## 10. Challenges.

1. **MEDICINES (PROCUREMENT).**

The cost of medicines continues to increase due to hyperinflation. The medicines received from Natpharm(the central distribution agency from Ministry of Health and Child care of Zimbabwe), are far from being able to cover the needs and the Hospital is forced to buy privately and to give to patients below costs. Donors (MarilenaPesaresi Foundation, Rimini 4 Mutoko,UTOPHA and PiccoliGrandiCuori Association – Italy) are supporting part of the required budget, which is always on the increase due to the high costs of medicines and sundries and the increase also of debtors. **For the period Jan-Sept a monthly average of about 5800 USD had been allocated to medicines procurement to cover the gaps making an estimated of about 70.000 USD/year)**

2. **LABORATORY REAGENTS SHORTAGE.**

An important part of Laboratory reagents are not all available at Natpharm and this causes high burden on financial resources (for the Hospital and the patients) as the Hospital is forced to buy them from the private sector in order to uphold good standards of services. At present, some of the tests offered at the Institution are available only in Harare. **For the period Jan-Aug a monthly average of about 3700 USD had been allocated for the procurement of reagents and the servicing of equipment to cover the gaps making an estimated of about 45.000 USD/year).**

3. **HOSPITAL REVENUE.**

The hyperinflation and reduced income caused by the fact that several patients have not adequate funds to cover required costs, has consequently increased the unbalance between income and expenditures and severely compromised long-term sustainability. The Hospital is looking forward to work with organizations which can assist to cover the emergencies but also to those who would like to partner for sustainable development projects at institutional and community level. **To date, the hospital has delivered free services to the community for about 31.000 USD (estimated year cost 46.500 USD). Currently about 28% of the hospital income is represented by donations towards day to day running of services by Church donors.**

5. **FUEL CONSUMPTION and ELECTRICITY.**

Secondary to the unstable national power supply, the hospital has been facing huge challenges in terms of fuel consumption for both vehicles (including free cost transfers to further level of care) and especially, to run hospital generators. Also, network coverage (telephone and internet) has been very unstable during the quarter, with sometimes affecting urgent communication during emergencies or to next level of care for peer-to-peer consultation. The hospital is trying to look for interested stakeholders to develop a project which could guarantee reduction in the use of generators by promoting long term sustainable alternative green energy with the use of new generation solar systems with batteries. **Based on current expenses the hospital is having an estimated cost of 39.000 USD/year for fuel to maintain electricity 24/7 using generators and 35.000 USD to support transfer, community outreaches and other logistics activities (total 74.000 USD for fuel costs).**
**The high increase of electricity expenses and tariffs as the hospital is on a pre-paid commercial ZESA meter brings costs estimated at 54.000 USD for electricity. It would be crucial for the hospital to possibly have a new transformer installed as the one existing at present is shared with the mission and doesn't cover all power needs, with the results of instability in the supply and risks of damaging electronic equipment.**

6. **LACK OF CRITICAL QUALIFIED STAFF / STAFF VACANCIES**

The challenges highlighted in the previous full year 2022 report, is persisting in some departments. The hospital received new staff deployed in Q2 which alleviated staff shortage in some departments. However high staff turnover remains a challenge with the consequent threat of impact on maintaining current standards, team coordination and promoting knowledge transfer. **Crucial skilled staff at present are: Accountant/accounting assistant post X2 (at present there is only 1 accounting assistant post + 1 opened in October), Pharmacy technicians/Dispensary assistants x 2, X-ray operator x 1, Ultra sonographer x 1, HR Assistant x 1, Tutors x 2, Clinical Instructor x 1.**

7. **HOSPITAL AMBULANCE.**

The hospital fleet is becoming old and a major accident occurred in June removed a utility car from the available vehicles. One of the older ambulances (Toyota land cruiser) also has major needs of repairs (new engine and new gear box) for the cost of about 13.000 USD. **At present the hospital fleet is represented by 1 Ambulance, 1 service vehicle and 1 lorry and the hospital sometimes supports the District Hospital with transfers services.**

7. **NUTRITIONAL SERVICES.**

Despite efforts which led to improve budget allocation for hospital diet, on the staff establishment there is no dedicated staff for nutrition services (Hospital Food Services Supervisor). The hospital kitchen is quite improvised in terms of equipment and furniture. There is no Nutrition Garden as the hospital is not having enough water to dedicate to irrigation scheme and not enough staff (general hands) to work in the garden. As anticipated above, the Hospital is also looking at the possibility to work in partnership with organizations, to promote community nutrition projects, aimed to: improve nutrition and health, improve self-sustainability and community

resilience, community development and empowerment with the "One Health approach" and working at different levels to improve community wellness and health.

## Conclusions – Future considerations for Q4 2024

The year has been characterized by consolidation of positive trends of outcomes despite the reduced resources set-up and a highly changing environment secondary to the local (including the extreme drought experienced during the year) and global situation (affecting the global economy with effects on the local setting).

The hospital had also managed to start the planned integrated outreach programme, the expanded implementation of surgical and other philanthropic missions and set a monitoring and evaluation team to improve monitoring of activities towards TQM.

In summary for the next quarter, we aim to:

1. Expand our preventive programmes and outreach with the implementation of some mentoring activities done together with the Districts of Mutoko and Mudzi to improve coordination and networking with the clinics referring to LGH and strengthen referral with special regards to maternal and neonatal health. At the same time, improving preparedness and responsiveness to epidemic prone disease through the same efficient collaboration with the community and clinics.

2. The hospital has identified a severe threat represented by the risk of epidemic prone diseases caused the lack of safe water in the communities secondary to the severe drought caused by El-Niño and the absence of boreholes in 12 of the 20 villages served (before expansion of coverage of coordination to 27 villages in October as previously indicated). Consequent to stakeholders meetings (in coordination with the District's WASH cluster), it has been possible to mobilize funds through the Catholic Church, for the drilling of 14 community boreholes. The borehole sites identification has been completed on the 20/09/2024 and the aim is to complete the installation of boreholes within the Q4 2024 (drilling of a first group of boreholes to start from the last week of October).

3. Support the specialist philanthropic programmes, to increase the number of specialists' missions for the improvement of access to specialist services for the rural communities. Special focus will be on the installation of laparoscopic equipment and the implementation of a surgical mission in November, to progressively expand in collaboration with the Provincial Specialists' teams the "spoke" potential role in the rural area of LGH and work in coordination with the Provincial Medical Director and other partners to enhance specialists' services within the Province in a "hub-spoke" set-up and in line with the MoHCC vision and strategy.

4. Continue developing leadership and governance at all levels of the institution, to maximize evidence-based high-quality management at the various departments, optimize available resources and strengthen stewardship, as well as partnership and collaboration with stakeholders.

5. Promote structural development at the institution targeted to improve cost-saving and sustainability, with particular regards to energy costs (new solar plant project and new structural renovation plan).

Presented by,

Dr Massimo Migani

(Medical Superintendent)

27/10/2024