

ANNUAL REPORT 2020



**“OVERCOMING
ADVERSITY”**



**THE AURUM
INSTITUTE**

“OVERCOMING ADVERSITY”

OUR VALUES



RESPECT



INTEGRITY



INNOVATION

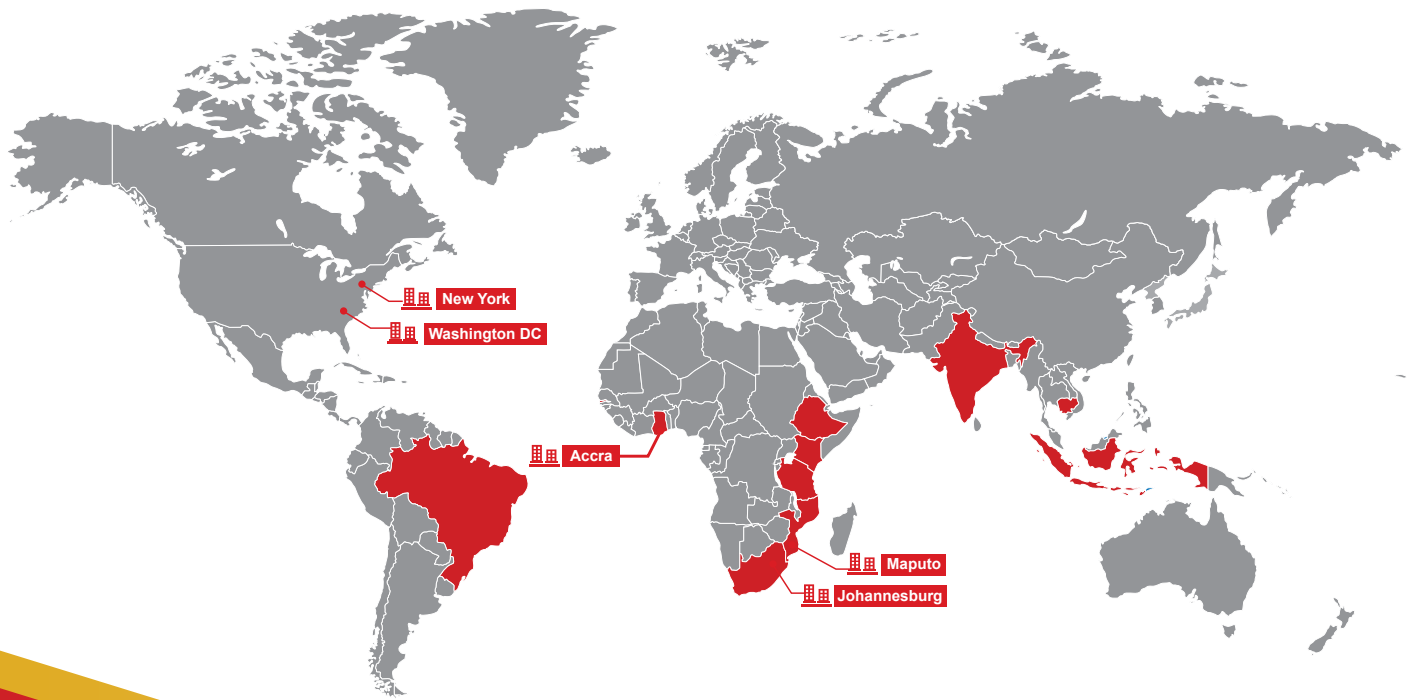


EXCELLENCE



TEAMWORK





Aurum Offices



Aurum Footprint

Aurum's headquarters are in Johannesburg South Africa, with a staff presence in the USA, as well as operations in Ghana and Mozambique.

THE AURUM
INSTITUTE

ANNUAL REPORT 2020

CONTENT

10	Message From The Board Chairperson
13	Board of Directors
14	Message From The Group Chief Executive Officer
18	Group Chief Operating Officer's Report
20	Group Chief Financial Officer's Report
22	Deputy Chief Scientific Officer's Review
24	Highlights Of The Year
28	Highlights From Aurum's Covid-19 Response
30	In Memoriam

HEALTH SYSTEMS DIVISION

33	Overcoming adversity: Sustaining services during COVID-19
34	Direct Service Delivery (DSD)
36	First 90
37	Second 90
41	Third 90
43	Success Stories: Ensuring adherence to treatment in the time of Covid-19: home delivery
45	Success Stories: AS'BANGENE





PUBLIC HEALTH DIVISION

- 47 HIV Self Screening (HIVSS Test Kit Distribution)
- 49 TB In the Mining Sector in Southern Africa (TIMS II)
- 49 Management Development Programme (MDP)
- 50 CDC Divisional Correctional Services
- 51 West Coast HCT
- 52 Shesha-Geza handwash innovation
- 55 Quality Improvement
- 56 Health Systems Division
- 58 Operation Phuthuma (OP)
- 60 Our Impact

IMPLEMENTATION RESEARCH DIVISION (IRD)

- 64 Overcoming challenges to work of IRD due to the COVI-19 pandemic
- 65 Highlights
- 68 Completed Studies
- 69 More newly funded research projects



“to seek,
to find,
to share,
to care.”

CLINICAL RESEARCH DIVISION (CRD)

- 72 Key Activities Of 2020
- 77 Highlights
- 81 Achievements

AURUM INTERNATIONAL

- 85 IMPAACT4TB - Partners and Countries
- 86 IMPAACT4TB: 3HP Implementation Progress
- 87 IMPAACT4TB: Current Status
- 88 IMPAACT4TB: Supporting COVID-19 Response
- 90 Aurum Ghana
- 93 Aurum Mozambique

HUMAN RESOURCES

- 96 Our People
- 97 Strategic Pillars
- 98 Human Resources Workforce Planning Framework and key strategies
- 100 2020 Aurum Group People Snapshot

FINANCE DEPARTMENT

- 103 Finance Deptment

OUR PARTNERS

- 107 Affiliates
- 108 Funders
- 109 International Collaborators
- 109 The Aurum Institute Ghana Collaborators
- 110 Fundação Aurum Collaborators
- 111 Local Collaborators

ABBREVIATIONS

3HP	A short-course tuberculosis (TB) preventive treatment (TPT) combining two drugs, rifapentine and isoniazid	HBV	Hepatitis B Virus
AIG	Aurum Institute Ghana	HCBC	Home and Community-based Care
AGYW	Adolescent Girls And Young Women	HCV	Hepatitis C Virus
AMR	Antimicrobial Resistance	HIV-SS	HIV Self-screening
ANC	Antenatal Clinic	HTC	HIV Testing and Counselling
ART	Antiretroviral Therapy	HTS	HIV Testing Services
ARV	Antiretroviral	HWSETA	Health and Welfare Sector Education and Training Authority
BBBEE	Broad-based Black Economic Empowerment	ICI	Ideal Clinic Initiative
BMGF	Bill and Melinda Gates Foundation	ICM	Individualised Care Management
BOJ	Bojanala District	ICT	Index Case Testing
CAG	Community Advisory Group	IEC	Information, Education and Communication
CBO	Community-based Organisation	IMPAACT4TB	Increasing Market and Public health outcomes through scaling up Affordable Access models of short Course preventive therapy for TB
CDC	The United States Centers for Disease Control and Prevention	MDP	Management Development Programme
CHW	Community Health Worker	MM	Mentor Mother
COP	Country Operational Plan	NMM	Ngaka Modiri Molema District
COPC	Community Oriented Primary Care	MoH	Minister of Health
CSP	Correctional Services Programme	MSM	Men who have Sex with Men
CXR	Chest X-Ray	NCD	Non-communicable Diseases
DCS	Department Of Correctional Services	NCE	No Cost Extension
DKK	Dr Kenneth Kaunda District	NDOH	National Department Of Health
DOH	Department Of Health	NHLS	National Health Laboratory Service
DSMB	Data Safety Monitoring Board	NIH	National Institutes of Health
DSD	Direct Service Delivery	NIMART	Nurse-Initiated Management of Anti-retroviral Therapy
DSP	District Support Partner	NPO	Non-profit Organisation
ePUP	External Pick-up Point	OST	Opioid Substitution Therapy
EKN	Ekurhuleni District	PEPFAR	US President's Emergency Plan for Aids Relief
FSWs	Female Sex Workers	PEP	Post-exposure Prophylaxis
GF	The Global Fund to Fight Aids, Tuberculosis and Malaria	PHC	Primary Health Care
GBV	Gender-Based Violence	PITC	Provider Initiated Testing and Counselling
HAST	Hiv, Aids, Stis and TB	PLHIV	People Living with HIV

ABBREVIATIONS

PLWH	People Living with HIV	STI	Sexually Transmitted Infection
PMTCT	Prevention of Mother-to-child Transmission	TB	Tuberculosis
PMU	Programme Management Unit	TX_CURR	The number of individuals currently on antiretroviral therapy
PPP	Public-private Partnerships	TX_NEW	The number of adults and children newly enrolled on antiretroviral therapy
PrEP	Pre-Exposure Prophylaxis	TLD	Tenofovir Disoproxil, Lamivudine, Dolutegravir
PSA	Public Service Announcement	WBOT	Ward-Based Outreach Team
PSP	Provincial Support Partner	WHO	World Health Organization
PTB	Pulmonary Tuberculosis	XDR-TB	Extensively Drug-Resistant Tuberculosis
PWID	People who Inject Drugs		
PWUD	People who Use Drugs		
QI	Quality Improvement		





THE AURUM INSTITUTE

The Aurum Institute is a proudly global, health impact organisation dedicated to researching, supporting and implementing innovative, integrated approaches to global health.

Since we started our operations in 1998, Aurum has grown to become a leading global health and research institute, employing over 3000 staff. We partner with governments, the private sector and civil society to design and deliver high-quality care and treatment to people in developing communities.

Aurum's projects and programmes cover a wide range of activities from programmatic implementation and technical assistance for HIV/AIDS and TB prevention, care and treatment services, HIV prevention clinical research studies, TB and HIV vaccine studies, voluntary medical male circumcision to large scale TB prevention programmes spanning 12 countries. Aurum's experience in TB case finding, and TB contact tracing is extensive, from implementation research to practical approaches embedded in public health programmes.

OUR MISSION

To impact Global Health through Innovation, Evidence, Implementation, and Integration.



OUR VISION

A leading African organisation dedicated to improving the health of developing communities globally.



MESSAGE

FROM THE BOARD
CHAIRPERSON

MS PHANGISILE MTSHALI

“

During 2021 we are looking forward to embedding the transformative commitments regarding our governance, strategy, structures, and services towards attaining our 100-year vision. These transformative commitments will provide a launchpad for the diversity strategy which in turn will enable the transfer of expertise to ensure sustainability. They have earned us a Level 1 BBBEE status in 2020.”

MESSAGE FROM THE BOARD CHAIRPERSON

During one of the most challenging and unpredictable years in our lifetime due to the corona virus pandemic we at Aurum have responded with compassion, compliance, and consolidation. Year 2020 called for resilience and tested the limits of all aspects of the organisation while we strived to deliver on the commitments made to our patients, funders, and stakeholders.

Firstly, we responded with compassion for our staff and partners, who are mostly frontline workers, as they care for the patients who still had to adhere to their treatment regimens despite the restrictions imposed by the COVID-19 pandemic. We responded with compassion to our employees who were infected by the corona virus and to the families of those who succumbed by ensuring our employee benefits and employee assistance programme were responsive and adequate. This past year left an indelible mark on the organisation with the loss of Professor Gita Ramjee, which was a loss not only to Aurum but also to the country and the global HIV research community at large.

In 2020 we also bade farewell to the longest serving chairman of Aurum, Dr Paul Davis. I am honoured to have taken the baton from him after serving under his chairmanship and as his lead independent Director.

The year in review compelled us to transform the organisation to prepare it for the next decade and beyond. We re-examined how we do business, specifically looking at our internal operations and processes. With our executives' mantra of "no good crisis should go to waste", the organisation leveraged the pause brought by the corona virus lockdown restrictions to review and refine our processes and align the organisation's operations. We fast-tracked the consolidation of our operations by developing a fit-for-purpose structure. As an African-based health impact organisation, Aurum evaluated relationships across our geographic footprint to ensure alignment with our governance and oversight responsibilities.

The remote working conditions allowed us to reevaluate risks and opportunities within our health non-profit sector. Top of mind for our Board and subcommittees was to initiate a compliance programme. We strove to ensure our governance structures and processes were well geared to support and facilitate operational imperatives faced by our nimble executives to delivering outcomes to our funders and stakeholders and provide services to our patients with minimal interruptions. For effective oversight we strengthened the Board's Social and Ethics Committee, especially by enhancing our staff's health and safety and occupational health efforts within its mandate. We are grateful

to all our funders who responded with flexibility to the trying conditions that faced Aurum and this sector at large in the year of pandemic.

Even under these challenging business conditions our executives drove performances and pivoted to bring our expertise and more than two decades' experience in responding to TB and HIV epidemics to confront the COVID-19 epidemic from research to service provision and bringing innovative solutions. To our people, partners, and service providers we acknowledge your response to our call for leadership at all levels of the organisation as we rolled out the Leadership Code emphasising our core values of integrity, respect, teamwork, innovation, and excellence.



In 2020 we also bade farewell to the longest serving chairman of Aurum, Dr Paul Davis. I am honoured to have taken the baton from him after serving under his chairmanship and as his lead independent Director."

During 2021 we are looking forward to embedding the transformative commitments regarding our governance, strategy, structures, and services towards attaining our 100-year vision. These transformative commitments will provide a launchpad for the diversity strategy which in turn will enable the transfer of expertise to ensure sustainability. These commitments earned us a Level 1 BBBEE status in 2020.

On behalf the Board, I want to acknowledge our executives and staff for their dedication and our funders, partners, and stakeholders for their continued partnership in working towards impactful health programmes, research, and ground-breaking initiatives. Gratitude goes to my fellow Board members who have steadfastly ensured that Aurum's vision to be a leading African health impact organisation is entrenched.

Board Chairperson

Ms Phangisile Mtshali



THE AURUM
INSTITUTE

Board of Directors

BOARD OF DIRECTORS



Ms Phangisile Mtshali
Chairperson



Prof Gavin Churchyard
Group Chief Executive Officer



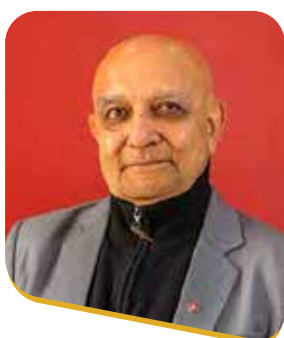
Dr Dave Clark
Group Chief Operating Officer
Chief Executive Officer: Southern Africa



Mr Arshad Hassim
Group Chief Financial Officer



Ms Christine McDonald
Non-Executive Director



Prof Yosuf Veriava
Non-Executive Director



Mr Nigel Unwin
Non-Executive Director



Mr Gary Tamblin
Non-Executive Director



Mr Yaw Peprah
Non-Executive Director



Dr Jerry Gule
Non-Executive Director



Ms Paula Fray
Non-Executive Director



MESSAGE
FROM THE GROUP CHIEF
EXECUTIVE OFFICER
PROF GAVIN CHURCHYARD

“

The Aurum team demonstrated that they had the power to overcome adversity because they faced the COVID-19 challenges by working together and supporting one another in time of need.”

MESSAGE FROM THE GROUP CHIEF EXECUTIVE OFFICER

Michelle Obama, former First Lady of the United States, said “You should never view your challenges as a disadvantage...overcoming adversity is actually one of your biggest advantages.” 2020 was a year characterised by many challenges and hardships, but it also provided many opportunities.

We experienced the ravages of the COVID-19 pandemic at a global level and within all countries in which Aurum operates. Globally in 2020, there were almost 64 million reported COVID-19 cases and 1.5 million deaths. It is sobering to note, that COVID-19 has now overtaken TB as the world’s leading cause of death from an infectious agent. South Africa experienced the spectre of a second wave caused by a mutated variant of the virus that is one and a half times more infectious than the initial SARS-CoV2 viruses responsible for the first wave of COVID-19. As the world went into lock-down, we retreated into our homes fearful of how the pandemic would affect us. COVID-19 introduced a new normal with social distancing, universal masking and hand sanitizing.

Aurum was not left unscathed and we saw similar trends in COVID-19 cases as seen nationally but with some notable differences. The vast majority of Aurum staff who had a positive SARS-CoV2 test, did not have symptoms. Of those with a positive test that had symptoms, the vast majority had mild to moderate disease and recovered fully, whilst only a tiny proportion had severe disease or died. We do however mourn the profound loss of those members of the Aurum team that died from COVID-19. We will remember them by the legacy that each of them left through their work at Aurum to make a difference in the communities in which we serve.

At the inauguration of the United States President Joe Biden and Vice President Kamala Harris, Amanda Gorman, a young African American woman recited a poem that she wrote for the occasion. In her poem she asked, “Where can we find light in this never-ending shade?” referring to COVID-19 and the many other challenges that the US was experiencing. She went on to say that “We did not feel prepared to be the heirs of such a terrifying hour but within it we have the power to author a new chapter, to offer hope”.

All Aurum staff were affected by COVID-19 in some way. Either due to personally having had COVID-19, or having had family members, friends and acquaintances that had COVID-19, whilst some of us have experienced the pain of losing loved ones to COVID-19. The unrelenting pressure of having to continue to deliver on our important work despite the risks of COVID-19 caused a great deal of anxiety and stress among our Aurum team. Despite these difficulties, the Aurum team demonstrated that they had the power to overcome adversity because they faced the COVID-19 challenges by working together and supporting one another in time of need. Furthermore, the Aurum team contributed to the efforts to “author a new chapter, to offer hope”. In the past few months, we had some spectacular advances in the fight against COVID-19 and we now have highly effective COVID-19 vaccines.



We do however mourn the profound loss of those members of the Aurum team that died from COVID-19. We will remember them by the legacy that each of them left through their work at Aurum to make a difference in the communities in which we serve.”

I am honoured to say that Aurum actively participated in conducting some of these COVID-19 vaccine and treatment trials, including the Janssen COVID-19 vaccine trial that generated the evidence to support the national roll out of the vaccine.

In addition to coping with COVID-19, we had to face other major challenges. We had to contend with a major cut in PEPFAR funding, due to the withdrawal of supplementary (surge) funding given to implementing partners in previous years to scale up activities in order to meet ambitious targets for HIV testing and starting and retaining people on antiretroviral therapy. Although the reduction in funding was anticipated, it was nevertheless

MESSAGE FROM THE GROUP CHIEF EXECUTIVE OFFICER

painful and necessitated initiating the process of right-sizing the organisation. In the IMPAACT4TB project, the roll out of the 3HP, a weekly course of two antibiotics given for 3 months to prevent TB, in 12 low-income countries was delayed due to impurities identified in rifapentine, the key antibiotic in the 3HP regimen.

Nelson Mandela said, “Part of being optimistic is keeping one’s head pointed towards the Sun, one’s feet moving forward.” The Aurum team was exceptional in keeping optimistic and moving forward. The Aurum team rapidly adapted to the challenges. Our brave front line workers returned to work to continue to deliver essential services. We rapidly adopted videoconferencing platforms such as Zoom and Teams that enabled us to continue to work effectively and even host international meetings. Due to prudent re-budgeting and a new way of working, no person lost their jobs due to COVID-19. We introduced innovations such as Shesha Geza, a community-based hand sanitizing system, home delivery of antiretroviral therapy so people did not need to come to clinics, and a COVID-19 symptom screening app. During 2020 we had unprecedented media coverage in TV, print and online media, reflecting Aurum’s leadership role in responding to COVID-19 and the TB and HIV epidemics. Aurum had many successes in 2020 that are described in detail in the relevant sections in this Annual Report.

From a strategic perspective, 2020 was devoted to developing a new Aurum Group structure that will enable us to grow sustainably to reach our goal of becoming a 100-year-old organisation and join the ranks of other

centenarians, such as the KNCV Tuberculosis Foundation and the International Union Against Tuberculosis and Lung Disease. We also established a new business unit that will play an essential role in helping us meet our strategic objectives and apply for a lot of new grant opportunities.

In conclusion, Amanda Gorman said, “Let the globe, if nothing else, say this is true: that even as we grieved, we grew; even as we hurt, we hoped; that even as we tired, we tried; that we’ll forever be tied together victorious.” I am immensely proud of the Aurum team, who worked together despite their hurt, grief and exhaustion to emerge victorious from 2020.



Group Chief Executive Officer
Prof Gavin Churchyard

THE HILL WE CLIMB

We close the divide because we know, to put our future first,
we must first put our differences aside.

We lay down our arms so we can reach out our arms to one another.

We seek harm to none and harmony for all.

Let the globe, if nothing else, say this is true:

That even as we grieved, we grew.

That even as we hurt, we hoped.

That even as we tired, we tried.

That we'll forever be tied together, victorious.

Not because we will never again know defeat,
but because we will never again sow division.

In every known nook of our nation, in every corner called our country,
our people, diverse and beautiful, will emerge, battered and beautiful.

When day comes, we step out of the shade, aflame and unafraid.

The new dawn blooms as we free it.

For there is always light,

if only we're brave enough to see it.

If only we're brave enough to be it.

This is an extract from the poem "The Hill We Climb" written by American poet Amanda Gorman.



**GROUP CHIEF
OPERATING
OFFICER'S REPORT
DR DAVE CLARK**

“

We have implemented eHealth solutions and apps, we have invented and invested in new ways to get essential care and research programmes to people in their homes, and we have discovered just how much less space we really need to get our work done successfully.”

How do you keep on going when everything you have come to expect as the usual comes to a stop? On 26th March 2020, everything we had come to take for granted in our world, our homes, our movements, our relationships, the way we interacted, worshipped, shopped and traded, and our daily work all changed radically as the impact of the COVID-19 pandemic took hold. The plain reality is that the way the world works and lives has fundamentally changed.

Yes, as a frontline, essential healthcare organisation, Aurum was differently affected from other organisations but nonetheless the radical changes have affected each one of us, personally and collectively. If the world of work was not enough change to cope with, on top of that, we each faced the heavy burdens of COVID testing, sickness and loss, both at home and amongst colleagues. This would be enough to bring any organisation to its knees. Perhaps we might have thought the changes would be short-lived and we would work through it, but the rest of 2020 just got progressively more challenging and perplexing. So, how did we keep on going?

I have been amazed at the incredible resourcefulness and adaptability that the staff of Aurum through these past difficult months. Before COVID, we had been trying hard to switch to a more digital, online approach to interacting at work – with very slow progress. Online meetings were just not catching on. Fast forward just a few months and the whole picture is different. Just about everything Aurum does that does not operate at the direct patient frontline has gone digital. It has been said that COVID-19 has accelerated the advancement of digital transformation in Africa by the equivalent of over 3 years in just a few months – and Aurum is operating on that curve too.

But even at the frontline of healthcare, Aurum has adapted amazingly well. We have implemented eHealth solutions and apps, we have invented and invested in new ways to get essential care and research programmes to people in their homes, and we have discovered just how much less space we really need to get our work done successfully. I have been in awe of our frontline teams in South Africa, Ghana and Mozambique for their resourcefulness and willing spirit to keep going in the pursuit of Aurum's mission of improving the lives of the people in the communities in which we work. They did not give up on patients needing ART or treatment for TB infection or disease; they did not stop supporting burdened clinical staff; they continued tracking and tracing patients back to care when the world was fearful of venturing outside their homes.

The tenacity of our frontline workers in this unprecedented time of hardship and challenges was matched by similar perseverance and adaptability from the support services at Aurum. Management and leadership teams worked long hours to replan the way we work; the ICT department rapidly put

in place the digital platform necessary to keep the lights on; HR teams found new ways to keep employees engaged and paid, to follow up and comfort the sick and bereaved, whilst finding the time to help us gain a coveted Level 1 BEE status; the corporate services teams used the opportunity of office downtime to attend to much-needed safety, maintenance, space and inventory improvements; whilst the communications team transformed the levels of contact and information sharing amongst Aurum staff in ways never experienced before – consider the company “broadcasts” and townhall meetings as just one example. The finance and grants management teams ensured we maintained accountability for the funds entrusted to us, whereas supply chain colleagues worked hard from behind home computers to ensure we had access to all the PPE and other commodities we needed to keep going under lockdown conditions. And amid all this, a New Business Development Unit was born to pursue the sustainability of the organisation in a world so radically changed.



How did we keep on going? I believe it was through the indomitable spirit of Aurum articulated in our values that we did not give up. Those values held true even in the chaos, uncertainty and volatility.”

I salute each person at Aurum across the globe, Innova, Youth Health Africa and CHAPS, and the families that support you, who found the courage and conviction to keep going in these past months.

But the question remains: How did we keep on going? I believe it was through the indomitable spirit of Aurum articulated in our values that we did not give up. Those values held true even in the chaos, uncertainty and volatility.

And so, as we look to 2021 and the even greater challenges ahead, I urge each one to commit to the Aurum values afresh – EXCELLENCE, INTEGRITY, INNOVATION, RESPECT and TEAMWORK and a sense of purpose in our mission will see us through all the obstacles towards a stronger, sustainable Aurum in 2021 and what follows after that.

Group Chief Operating Officer
Dr Dave Clark



**GROUP CHIEF
FINANCIAL
OFFICER'S REPORT
MR ARSHAD HASSIM**

“

Due to prudent re-budgeting and new ways of working, no person lost their jobs due to COVID-19.”

It was my great privilege to take over the CFO reins in June 2020. I have benefited from an incredible depth in skill and experience in the Finance team and I am surrounded by a diverse group of individuals who are committed to the highest levels of financial intelligence, discipline, reporting and corporate governance.

It has not been an easy year for our team as we navigated the successful implementation of the IFRS 16 Lease standards whilst still providing valuable strategic, professional and administrative support to the Aurum Group, particularly through the unprecedented circumstances of the COVID-19 pandemic.

The decisive measures that we deployed, including driving cost efficiencies at all levels of the Group to limit the financial impact of the global COVID-19 pandemic, enabled the Aurum Group to continue to deliver on our mission which is "To Impact Global Health through Innovation, Implementation and Integration" in the most challenging socio-economic conditions experienced in decades. Due to prudent re-budgeting and new ways of working, no person lost their jobs due to COVID-19.

The pandemic resulted in the suspension of a number of clinical research studies for the period of the initial lockdown, although these resumed when HIV and TB clinical trials were declared as essential services. Fortunately, Aurum's major funders elected to continue their programmes and funding.

In compliance with the national state of disaster in South Africa, Aurum had all non-clinical staff working from home. The change to the remote working environment was well managed and all services continued uninterrupted. Frontline staff have continued working in the field as planned although their outputs were hampered by the effects of the pandemic and state of disaster. Occupational health and safety risks were closely managed and mitigated to the best extent practicable.

A key priority for our board and subcommittees in FY 2020 was to formalise our Risk & Compliance programmes at Aurum. We plan to implement comprehensive risk and compliance management frameworks that cover risk and compliance assessment, evaluation, monitoring and embedding of internal controls, registers and action plans.

As part of improving processes and systems at Aurum, we have restructured the Finance team to ensure that there is clear independence of the Finance Department. This restructure has allowed us to map out clear roles and responsibilities to ensure clear lines of accountability and equitable workload management.

Aurum has identified the need to transform its systems to become more agile and adaptable to the ever-demanding needs and requirements of its donors. With multiple disparate systems and disconnected business processes, Aurum has embarked upon the implementation of the Microsoft Dynamics 365 Enterprise Resource Planning (ERP) system in FY2021 which will enable Aurum to transform and automate its business processes and consolidate its technologies, thereby streamlining the entire organisation.

My focus going forward is to make an impact and create value for the Aurum organisation by adopting a continuous improvement mindset in order to achieve the Aurum Group strategic objective of driving financial sustainability that is geared for long term growth.



Aurum has identified the need to transform its systems to become more agile and adaptable to the ever-demanding needs and requirements of its donors."

In conclusion, I would like to thank our finance teams across the business as well as our external auditors for completing the annual financial reporting and auditing processes so efficiently while working under the constraints of the COVID-19 restrictions. I would also like to acknowledge our valued funders for their continuing support in these difficult and financially constrained times.

Most of all, I extend my sincere appreciation to the Aurum teams, specifically those on the front line, who have worked with urgency and determination to put rigorous health and hygiene measures in place to protect our employees and patients, and to keep our operations functioning at a time when our stakeholders needed us the most.

Chief Financial Officer

Mr Arshad Hassim



**DEPUTY CHIEF
SCIENTIFIC
OFFICER'S REVIEW
PROF SALOME CHARALAMBOUS**

“

The Aurum Institute's Scientific Department faced the most challenging of years, unlike any we have seen before, but I believe we have risen to the challenge and have shown our strength and determination to improve health in the countries in which we work.”

As a child, I always watched the Sydney Opera House fireworks on New Year's Eve with awe and inspiration. It was with great excitement that I looked forward to being in the great city on New Year's Eve in 2019. Unfortunately, this evening turned out to be uncharacteristically sombre as wildfires were spreading across the territory of New South Wales and friends spoke with dread of what the next few days were going to bring.

Nearly 3 billion animals and more than 46 million acres were scorched by Australia's worst wildfire season that burned that year. It seems now that the New Year was predictive of the year ahead. On that same day, 31 December 2019, the World Health Organization (WHO) China country office reported a cluster of pneumonia cases in Wuhan City, Hubei Province of China. On 7 January 2020, the causative pathogen was identified as a novel coronavirus (2019-nCoV), which later became known as SARS-CoV2. At the time, little did we know about how this virus would change our lives drastically for the next few years and maybe forever.

The Aurum Institute's Scientific Department faced the most challenging of years, unlike any we have seen before, but I believe we have risen to the challenge and have shown our strength and determination to improve health in the countries in which we work. In 2020, we completed the CORTIS and WHIP TB Trials, which were presented at the CROI conference virtually in March 2021. Aurum scientists have been in the forefront of the fight against COVID-19. We have contributed to the tremendous effort on vaccine development with involvement in the ENSEMBLE and Novavax trials. We have also assisted the mining and health sector through epidemiological analyses and support to policy and guideline development. We have worked to understand the COVID-19 epidemic and to propose projects appropriate to its control in all the countries in which we operate.

As the COVID-19 epidemic led to restrictions on movement and new way of remote working, we used this opportunity to run paper-writing workshops to capitalise on additional time that we may have had from reduced travel and reduced social interactions. These workshops turned out to be very fruitful with 60 Aurum publications in 2020, 21 publications with Aurum first or last authors, and 11 with a high impact factor. The publications included the DOLPHIN Trial study results, which gave evidence for the safety and pharmacovailability of rifapentine, a new drug for TB preventive therapy, in patients already on HIV treatment. Other high impact publications included a review in Lancet Respiratory medicine highlighting post-tuberculosis mortality and morbidity, a publication

describing HIV treatment initiation in a prison setting and one looking at presumptive TB treatment in patients with advanced HIV.

Even though COVID-19 caused a fair amount of distraction, we have continued our efforts to support the control of tuberculosis and HIV. We look forward to some large new multi-country projects in the field of TB and HIV. The OPT4TPT project, which will run in South Africa, Zimbabwe and Ethiopia, will ascertain how TB preventive therapy (TPT) implementation can be optimized and cost data will update and refine ongoing analyses of cost-effectiveness of TPT. The CUT-TB project will run in South Africa, Lesotho and Tanzania, and will evaluate new models for TB contact tracing and will provide important economic, microbiological and paediatric insights into TB Contact tracing. We look forward to the challenges and new discoveries that these projects will bring.



Even though COVID-19 caused a fair amount of distraction, we have continued our efforts to support the control of tuberculosis and HIV.”

During 2021, we look forward to also growing our Scientific Department as we welcome back Dr Kavindhran Velen from his post-doctorate fellowship, and as we welcome two new PhD graduates, Dr Tonderai Mabuto and Dr Noriah Maraba. During the year, we hope to consolidate all the efforts that have been made towards capacity building to grow an even stronger integrated Science Core that will take us to new heights and further contribute to our growth, and to our vision to improve the health for all in the countries in which we work.

Deputy Chief Scientific Officer

Prof Salome Charalambous

HIGHLIGHTS OF THE YEAR

2020



Aurum Health and Science Advisory (ASHA)

In 2020, The Aurum Institute established the Aurum Health and Science Advisory (ASHA) unit to provide global health and science expertise to countries and organisations. ASHA can leverage a diverse team to respond rapidly to programmatic needs in the health sector.



WHIP3TB results

The results of the Aurum-led WHIP3TB trial were announced at the Conference on Retroviruses and Opportunistic Infections (CROI) in March 2020. The study found that there is no need to repeat short-course TB preventive therapy after one year and finds that shorter regimen nearly doubles treatment completion rate. The WHIP3TB finds a single course of weekly rifapentine and isoniazid for three months (3HP) provides lasting protection against tuberculosis (TB) and does not need to be repeated year after year.



Vanderbilt University appointments

As part of Aurum's efforts to build partnerships with academic institutions around the world, ten senior staff members were appointed in various adjunct positions at the Department of Medicine in the Vanderbilt University School of Medicine in September.



Humentum Award

Aurum's Technical Director for Health and Pharmacy Services Dr Petra Kruger was awarded the Humentum Operational Excellence Award for developing the Management Development Programme (MDP). The MDP is a training programme which helps primary healthcare managers gain practical skills in managing and running a facility. Humentum is a global organisation that provides training, convening, and consulting support for member organizations and clients working in global relief and development. Humentum announced the winners of its 2020 Operational Excellence Awards during the online launch of its annual conference OpEx365 in September 2020. The awards recognise individuals or teams who showcase innovation, collaboration, and collective and lasting impact through their inspiring work.



The 51st Union World Conference

The 51st Union World Conference on Lung Health was held virtually. Prof Gavin Churchyard, Group Chief Executive Officer moderated an oral abstract session on TB preventive therapy in HIV and presented during a plenary session on innovations in TB therapeutics. Karin Turner, Director: Global Health Programmes also presented at the four-day conference, her oral abstract presentation detailed the preparations for introducing a short-course treatment regimen to prevent TB in 12 countries; while Dziedzorm Awalime, Aurum Ghana's Monitoring and Evaluation Manager presented an e-poster on free TB care in private care facilities.



Aurum awarded grant by NIH for Clinical Trials Unit

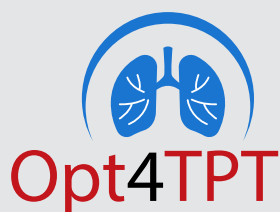
In December, Aurum was awarded a seven-year grant by the National Institutes of Health (NIH) for a Clinical Trials Unit (CTU) to participate in the scientific agendas of two NIH HIV/AIDS Clinical Trials Networks: the HIV Vaccine Trials Network (HVTN) and the AIDS Clinical Trials Group (ACTG). The CTU will implement multi-centre studies that could help accelerate progress in finding new HIV and TB prevention and treatment options.

HIGHLIGHTS OF THE YEAR



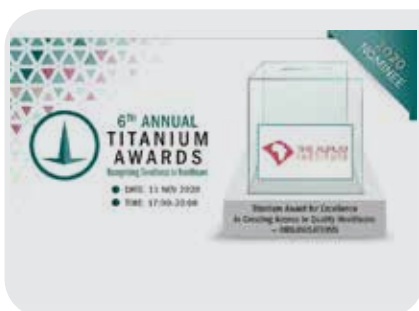
Aurum to host SAHTAC as Secretariat

The Aurum Institute was in December, announced as the new host for the South African Health Technologies Advocacy Coalition (SAHTAC) — a coalition of civil society organisations that supports evidence-based policy change and implementation and improved coordination of health research and development funding.



Opt4TPT

The Aurum Institute was awarded a Bill and Melinda Gates Foundation grant to implement a new study to assess the delivery of TB preventive treatment (TPT) in three countries, to generate critical knowledge to improve TPT uptake, implementation and outcomes. Optimising the delivery cascade for tuberculosis preventive treatment among people living with HIV (Opt4TPT), is being implemented in collaboration with Johns Hopkins University School of Medicine, as well as KNCV (Ethiopia), Clinton Health Access Initiative (Zimbabwe) and Ministries of Health in project countries as well as the IMPAACT4TB project. The three-year programmatic assessment will be led by Professors Violet Chihota, Aurum's Senior Lead Researcher and Hoffmann, Associate professor at the Johns Hopkins Bloomberg School of Public Health and Senior Scientist at Aurum.



Aurum nominated for Titanium Awards 2020

In October 2020, Aurum was nominated for a Titanium Award for our innovative initiatives to provide uninterrupted healthcare services while adapting to the COVID-19 pandemic. The 6th annual Board of Healthcare Funders' Titanium Awards recognised individuals or organisations which were driving change by creating affordable, accessible and sustainable healthcare. Aurum was nominated for excellence in creating access to healthcare through the Shesha Geza, Pelebox and home deliveries initiatives.



HIGHLIGHTS FROM AURUM'S

COVID-19 RESPONSE



Since the outbreak of the COVID-19 pandemic, Aurum has been at the forefront of the national response in Ghana and South Africa.

Ghana:

Aurum Ghana donated 10 000 sputum containers, provided personal protective equipment and transport for contact tracing and developed educational and anti-stigma pamphlets and videos.



South Africa:

Donations Committee

Aurum set up a Donations Committee in order to raise funds for its response to COVID-19 in the country and manage the incoming donations. Aurum's efforts were bolstered by a R1 million donation from Nedbank, to scale up mobile testing of COVID-19 in KwaZulu Natal, one of the worst affected provinces. Donations were also received from Mancosa, Eaton and GHI Architectural Solutions as part of Aurum's donation drive to amplify the COVID-19 response. Staff members also contributed to this effort, by pledging a portion of their salaries.



Knowledge Attitudes and Behaviours study

The Implementation Research Division conducted and subsequently released findings of a research study on the knowledge, attitudes and behaviours which could be driving the COVID-19 pandemic. The study was aimed at ultimately making recommendations on a locally tailored behaviour change intervention to curb the spread of COVID-19. This socio-behavioural survey was conducted online with 1200 respondents, assessed their adherence to control measures essential during lockdown. The North West and Gauteng were selected to assess these measures between low (NW) and high (GP) burden provinces between 21 May and 6 June 2020.



Aurum doctors support national clinician's hotline

A team of Aurum doctors joined the National Institute of Communicable Diseases (NICD) clinician's hotline, guiding medical staff at the coalface of the pandemic on COVID-19 patient management.

Prof Regina Osih, Senior Technical Expert, Drs Mpho Maraisane, Technical Director: Clinical Services, Mamotho Makgabo, Technical Specialist and District Clinical Advisors Nomcebo Nene and Zonke Mlokoti-Fikeni, drew on their expertise and national guidelines and clinical information, to give potentially life-saving guidance at a time when very little was known about the virus.



Community screening

Aurum staff members were deployed to conduct community screening door to door and at interprovincial roadblocks, contact tracing over the phone and in person as well as testing. This was to prevent local transmission and was in support of the Department of Health in the various districts that we work in.



Dikeledi Tsukudu appointed to Ministerial Advisory Committee on COVID-19

Senior Programme Manager, Dikeledi Tsukudu was appointed to the Ministerial Advisory Committee (MAC) on COVID-19 by South Africa's Health Minister Dr Zweli Mkhize. Tsukudu was appointed to serve on the MAC after it was reconfigured in September 2020, to expand its expertise, address gaps and target new challenges in the COVID-19 pandemic. Tsukudu: "I am a passionate health activist. I therefore view this deployment as an opportunity to put both my professional expertise and activism to use, for the benefit of the country. I have no doubt that I will have the very wide range of expertise from the whole Aurum family to draw from and I look forward to that."

IN MEMORIAM



◀ Gita Ramjee

On 31 March 2020, the Aurum family lost our Chief Scientific Officer for HIV Prevention, Professor Gita Ramjee.

Ramjee suffered COVID-19 related complications and died in hospital in Durban after returning from an international trip.

She had joined Aurum in 2019, to continue work on finding HIV prevention solutions for women, for which she was globally renowned.

Paying tribute to her, Group CEO Professor Gavin Churchyard; “The world has lost a bold and compassionate leader in the response to HIV. Gita Ramjee firmly believed in health as a fundamental human right. Her ground-breaking research in HIV prevention contributed to the global response to HIV and AIDS. Our thoughts during this difficult time are with her family, colleagues and the many people her life and work touched.”

Prior to taking up her appointment at Aurum, Prof Ramjee was the Specialist Scientist and Director of the HIV Prevention Research Unit at the South African Medical Research Council. She held Honorary Professorships at the London School of Hygiene and Tropical Medicine, University of Washington in Seattle and University of Cape Town.

Professor Ramjee was a critical player in the field of HIV prevention clinical trials and was acknowledged internationally for her expertise in the field of microbicide research, including a Lifetime Achievement Award for HIV Prevention. In 2018, she was honoured with the “Outstanding Female Scientist” Award by the European Development Clinical Trials Partnerships (EDCTP) for her life’s work that has focused on finding new HIV prevention methods.

Professor Ramjee has published more than 200 research articles. She was a reviewer and editor of several scientific journals and a member of several local and international committees and advisory groups including the Academy of Science of South Africa (ASSAf) and the South African National AIDS Council (SANAC).

“The Aurum Institute and the global HIV research community will mourn Gita Ramjee’s passing and celebrate the huge contribution to the response to HIV she made in her life,” said Churchyard.



◀ **Maria Eleanor Lobelo**, Senior Management Mentor based in NMM District in the North West, passed away on 27 August 2020. She worked for Aurum for six years and brought not only the wisdom and leadership skills she had gained over a long career as health service manager and CEO, but more importantly, a team spirit and energy that belied her age and made her the beloved Mme to her team. Her resilience and maturity carried her during challenging times, and her sense of humour that delighted in the good times.



◀ **Marieta Booysen**, Project Manager based in Ekurhuleni East, passed away on 21 December 2020. She started working at Aurum as a Clinical Nurse Mentor in June 2013 and was later promoted to Clinical Nurse Advisor. Earlier this year she moved to an Acting Project Manager position, responsible for community services: decanting and tracing. She will be missed for her bubbly and loving personality. She had a heart of gold and big shoulders which she offered to anyone in their time of need. Marieta was more than a colleague, she was a friend, a sister, a mother, a pastor to many of the Aurum, DoH, and CoE staff. She had the ability to invoke love in everyone's heart, a true and proud servant of the Lord.

Marieta was a true soldier when it comes to operations, she never shied away from getting her hands dirty to get the job done, she lived the Aurum values and was a pillar, pioneer, fighter and inspiration for the Ekurhuleni East team. She will never be forgotten for how she embraced life, loved people and gave selflessly to others.



◀ **Reneilwe Molenka** who was a NIMART Nurse based at Joy Clinic in Ekurhuleni East, passed away on 22 November 2020. He joined Aurum in July 2019 as a Professional Nurse and was later promoted to the position which he held at the time of his passing. Affectionately known as Riri, he will be remembered as a big-hearted and caring person. His love for his work made him a favourite among patients and the person colleagues turned to when they needed assistance. He will be missed for his firm but gentle nature and sense of humour. His colleagues at Joy Clinic described him as having good leadership skills, wearing his heart on his sleeve and speaking his mind.



◀ **Thandiswa Betana**, was a Home Tracer based in Sunriseview Clinic in Katlehong. She passed away in hospital 14 July 2020. She joined Aurum at 1 March 2020 and soon earned the respect and love of her colleagues due to her dedication and hard work. Those who had the privilege to work with her described her as an introvert who was reliable and honest, and embodied the spirit and values of the Aurum Institute.



Health Systems Division

HEALTH PROGRAMMES



Overcoming adversity: Sustaining services during COVID-19

South Africa began to feel the impact of the COVID-19 pandemic at the beginning of 2020, with the country's first case identified on 5 March. The South African government responded quickly, and a hard lockdown was enforced from the end of March, with restrictions on movement and non-essential services. As a strategic partner supporting the Department of Health (DOH), Aurum staff were mobilized to ensure that not only should all health services remain functional but that the communities served should still retain access to health services. The Aurum Direct Service Delivery staff were the heroes at the frontline, refusing to abandon their stations despite the fear, anxiety and high rate of infections that surrounded them.

Aurum also had to swiftly ensure rapid personal protective equipment (PPE) deployment and training, to protect both Aurum and DOH staff, and developed innovative measures to remain in contact and to supervise staff on the ground.

Aurum supported the national COVID-19 response by collaborating on roadblock and door-to-door screening teams, while developing plans to ensure that services continue and that patients continue to receive the best quality of care notwithstanding the challenging environment. Aurum started sending SMS reminders to clients from the first week of April reminding them of the importance of adhering to treatment during lockdown and emphasizing that clinics are still open.

The SMSes continued during May until the new TIER made this no longer possible. Decanting and decongesting efforts were stepped up, and at the end of April the home delivery project was launched to ensure that clients still collect their medication despite transport challenges and restrictions on movement.

The COVID-19 pandemic affected facilities with closures and resulted in many of our staff testing positive for the virus or being affected by it at work or in their personal lives, with many bereavements, grief and personal loss. This resulted in uncertainty and anxiety amongst our staff. The HSD Leadership team and Communications unit embarked on a series of support visits, virtual Town Halls in each district, newsletters, and messages of support through SMSes to support staff and address the anxiety and concerns that staff members had regarding COVID-19, job security, concerns about patient and staff safety and how to continue to work as a team in this new environment.



99.5% rate of staff at work

Despite clinic closures and staff infections, Aurum maintained a 99.5% rate of staff at work.



DIRECT SERVICE DELIVERY (DSD)



2600
Aurum staff
deployed in
four districts

There are almost 2600 Direct Service Delivery staff members, including lay counsellors, clinicians, data and admin staff, that have been deployed by Aurum in the four supported districts.



1900 000
people tested
for HIV

During COP19 (October 2019 – September 2020) the Aurum-supported districts have tested 1,9 million people for HIV, despite the disruptions to service delivery resulting from the COVID-related restrictions in the second half of the year.



85 000
new clients on
antiretroviral
treatment

The Aurum-supported districts initiated 85,000 new clients on antiretroviral treatment (ART) and are supporting more than half a million (560,000) clients on treatment.

HEALTH PROGRAMMES HEALTH SYSTEMS DIVISION

District	Counsellors		Data Team		Nurses	Case Management		Aurum Youth (other)	Total DSD District
	Aurum	Aurum Youth	Aurum	Aurum Youth	Aurum	Aurum	Aurum Youth		
EKN	341	15	290	67	195	547	25	99	1579
BOJ	145	5	181	10	52	47	8	0	448
DKK	67	0	67	0	41	30	0	0	205
NMM	91	20	130	26	68	31	0	0	366
Total DSD	644	40	668	103	356	655	33	99	2598

Table 2: Deployment of DSD Staff for COP19

“



We have a difficult journey ahead of us and it is essential for us to keep our eye on our goals. But there is one simple way for us to succeed - focus on the work at hand and execute against our plans effectively. We will be judged long-term on our performance, and I welcome that. Its all in our hands.”

Dr Ntombifikile Mtshali, Managing Director: Health Systems Division

THE AURUM
INSTITUTE



90% of all people living with HIV will know their HIV status.

From October 2019 to March 2020, Aurum ramped up efforts to test as many clients as possible through the provision of facility level HIV testing services (HTS) in 362 facilities - 99 in Ekurhuleni (EKN), 122 in Bojanala (BOJ), 97 in Ngaka Modiri Molema (NMM) and 44 in Kenneth Kaunda district (DKK) - across the four districts. To achieve maximum coverage and impact, HTS is provided through a variety of methods including Provider Initiated Counselling and Testing (PICT), Index Testing Services (ITS) and HIV Self Screening (HIVSS). At facility level HTS implementation is provided by a multidisciplinary team that comprises doctors, nurses, lay counsellors and tracers. They work very closely with data capturers and data monitors, who oversee and maintain best practices in data management and data quality assurance and filing and administration clerks who contribute to efficient HTS delivery in facilities. Other

critical members of this team include the Quality Improvement (QI) team, who are quick to identify barriers to efficient service delivery and the multidisciplinary SWAT team, which is responsible for addressing these gaps and solving any issues that affect programme performance. Clinical technical advisors are always at hand to provide mentorship and support to the clinical teams and the Strategic Information (SI) team is responsible for providing on-going programme performance monitoring, analysis and reporting.

During October 2019 to September 2020 (COP19), the Aurum-supported districts tested 1,935,879 clients for HIV, which is 135% of the COP19 target for facility level HIV testing. Of those tested, 88,524 clients tested HIV positive (4.6% yield).

District	Annual HTS target	HTS Achieved (Oct-Sept)	% of Annual Target Achieved	Positivity target	Positives identified	Yield
EKN	635 758	887 799	140%	12.0%	50 777	5.7%
BOJ	400 700	533 387	133%	7.3%	21 501	4.0%
DKK	187 961	222 742	119%	6.9%	8 281	3.7%
NMM	206 298	291 951	142%	7.1%	7 965	2.7%
Total	1 430 717	1 935 879	135%	9.3%	88 524	4.6%

Table 3: Targets achieved for the First 90, Oct 2019-Sept 2020



90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy.

In addition to testing the 'right' people and improving the positivity yield, Aurum recognises the importance of linking them to care and initiating at least 90% of them on ART as soon as possible. During the period under review, efforts to achieve this were intensified, with the collaborative support of DOH and Aurum DSD staff, including Medical Officers, Clinical Nurse Mentors, Clinical Nurse Advisors, NIMART Professional Nurses, Patient Navigators, PICT and Index Lay counsellors, Data Monitors and Data Capturers at facilities. By the end of September 2020, 51,249 individuals had been newly initiated on ART, bringing the performance for the year to 28% of the TX_NEW COP19 target of 181,402, and 57% of the six-month TX_NEW target.

DSD Contribution towards initiating clients on ART

Across all four districts, DSD staff deployed by Aurum worked alongside their DOH counterparts to ensure that as many PLHIV as possible are identified, linked to care and initiated in ART as quickly as clinically possible. In EKN, around half (49%) of initiations in the district were done by Aurum staff; in BOJ, 38%, in DKK 42%, and in NMM 31%.

District	TX NEW Annual Target	Achieved Oct-Sept	% of annual target achieved
EKN	104414	47 755	46%
BOJ	40163	21 417	53%
DKK	17781	8 020	45%
NMM	19044	8 062	42%
Total	181402	85 254	47%

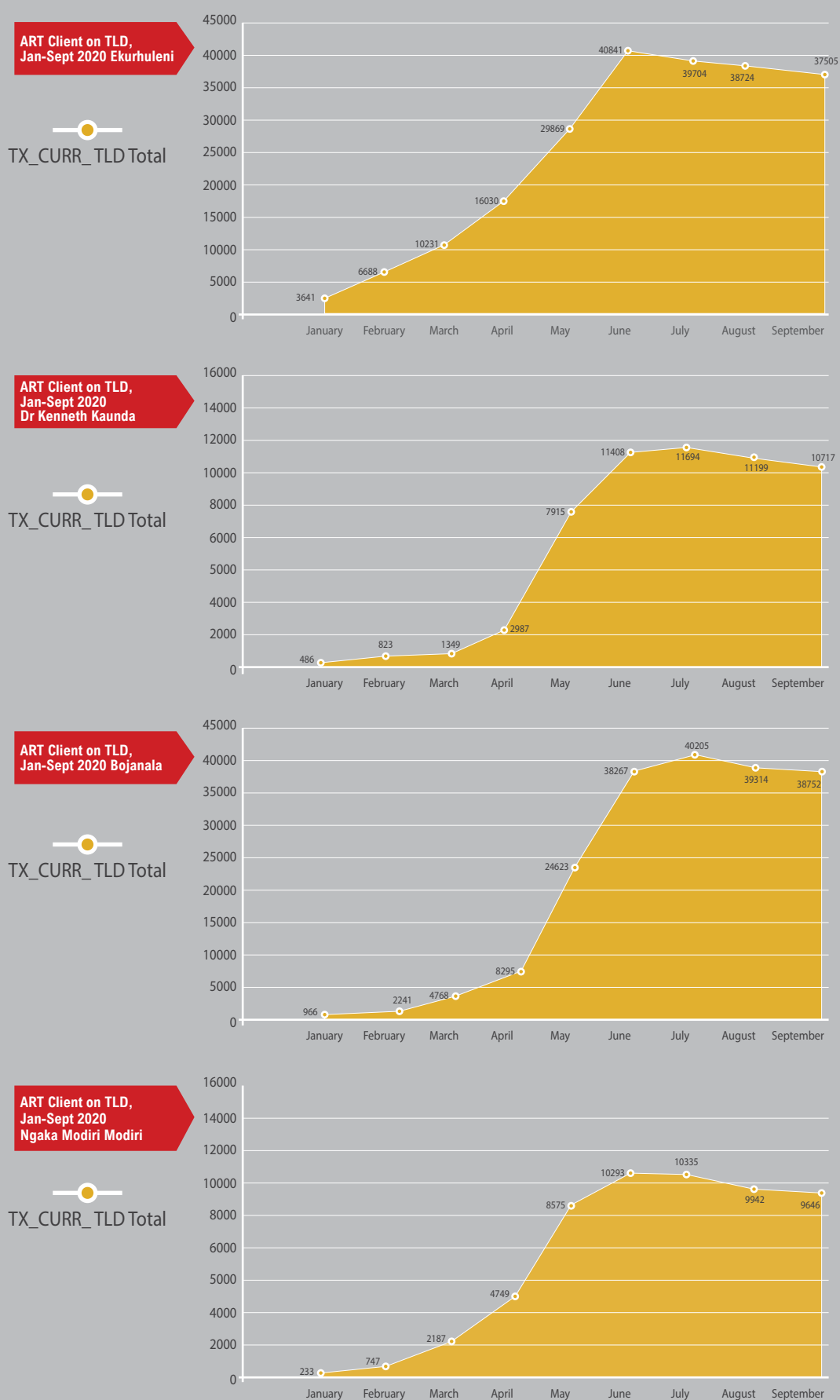
Table 4: Targets achieved for the Second 90, Oct 2019-Sept 2020



Aurum support for initiating clients on TLD

TLD is a combination of three ARVs: Tenofovir, Lamivudine and Dolutegravir (DTG). The drug Dolutegravir has a very well-established superior efficacy compared to Efavirenz with better tolerability in terms of fewer side effects and adverse events. DTG has a high genetic barrier to resistance, which means that patients who forget to take some pills in the month are at a lower risk of drug resistance compared to other drugs such as Efavirenz. Further to this, DTG does not require dose adjustment in renal dysfunction and therefore can still be safely prescribed in patients with renal pathology. Although neural-tube defects risks may be higher with DTG compared to Efavirenz, there is evidence to support fewer deaths among women as well as fewer overall HIV transmission and therefore DTG should still be prescribed in women of child-bearing age while encouraging these women to use reliable contraceptives.

Figure 10: Progress with starting clients on, and switching clients to TLD, COP19



Bearing this in mind the focus towards the end of Q1 and in Q2 was to encourage uptake of the DTG based regimen for both patients newly initiated on ART and existing patients on ART with viral suppression. The implementation of the new DTG guidelines was initially slow in Q1 but a steady increase in switching patients who were previously on an Efavirenz based regimen onto a DTG based regimen picked momentum in Q2. DSD staff continued to drive the implementation of the policy around TLD, making good progress towards ensuring that 80% of new clients were started on TLD, and switching eligible clients already on treatment to TLD. This process was monitored closely by clinicians monitored, with weekly feedback on the number of patients that they had managed to start and switch onto TLD.

Aurum conducted TLD training in the first part of the year and provided mentorship and refresher training where necessary, usually on-site for individuals or small groups due to the restrictions on gatherings and big training sessions. After being alerted about preliminary research around TLD and weight-gain in patients, Aurum clinicians worked with SI to identify facilities with substantial numbers of clients who were initiated on TLD earlier in the year; sampling was completed and file reviews will be conducted at a selection of sites with more than 150 clients on TLD. Patients' weight at the start of TLD initiation versus current weight will be assessed.

There has been ongoing training and mentoring on the benefits of a DTG based regimen and this has seen more clinicians being comfortable to initiating more patients and switching more patients onto a DTG based regimen. Aurum continues to provide support both DSD and TA to the facilities in order to encourage further uptake of DTG based regimens.



Don't wait until you are sick
START ARVs TODAY



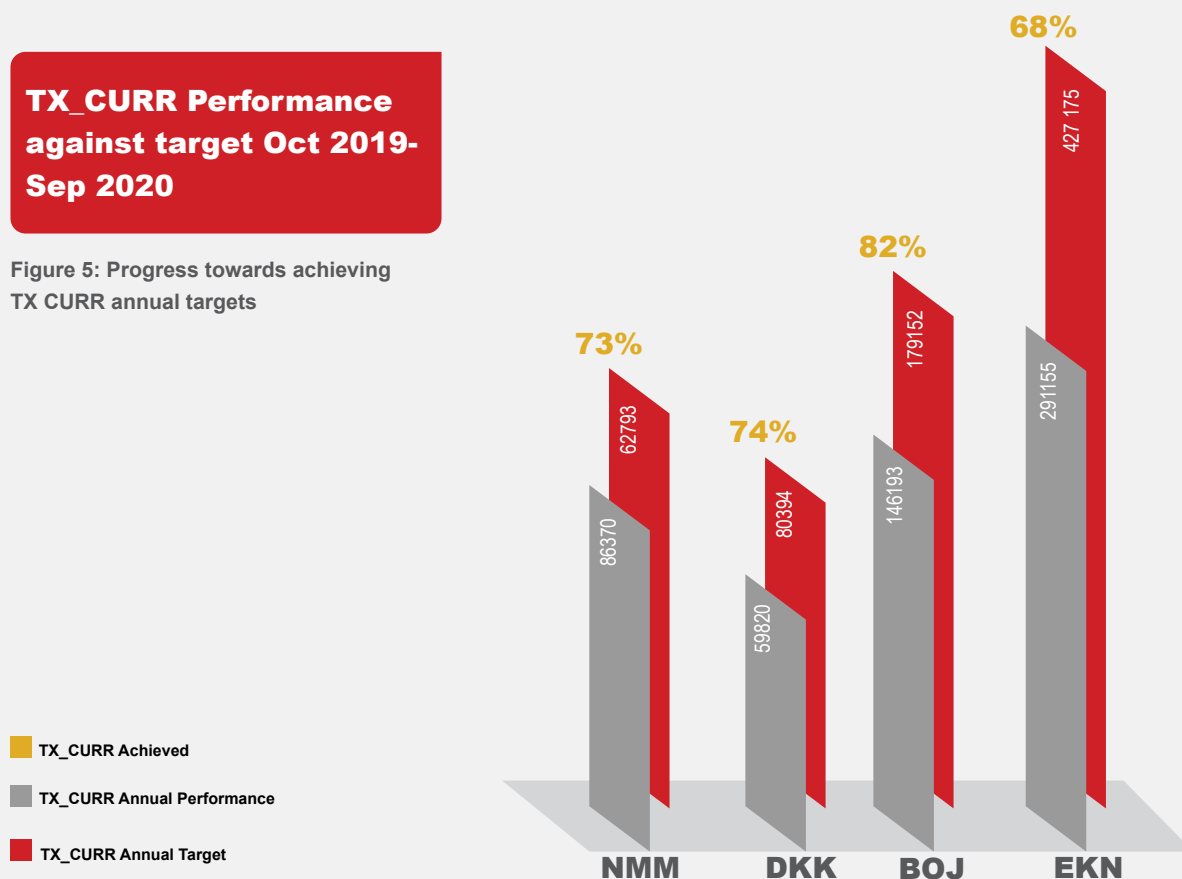
90% of all people receiving antiretroviral therapy will have viral suppression.

In line with the third 90 of the UNAIDS 90-90-90, it is critical that all clients on treatment are retained in care to ensure that at least 90% of all PLHIV who are on ART remain virally suppressed. From October 2019, Aurum has made this a priority, injecting additional resources towards achieving these objectives. To support facilities across all four districts, this year saw the deployment of additional key staff cadres, such as case facilitators and tracers.

By September 2020, 559,961 clients were remaining on ART (TX_CURR) across the four Aurum-supported districts, which translates to 72% of the annual TX_CURR target (773,091). This represents a 'NET NEW' (growth in the numbers on treatment) of 12,156 between COP18 and COP19.

TX_CURR Performance against target Oct 2019-Sep 2020

Figure 5: Progress towards achieving TX CURR annual targets



Aurum staff play an important role in retaining clients in care, bringing missing clients back into care, and ensuring viral loads are done and clients are virally suppressed. During this period, the team continued to work under increasingly difficult conditions, and the impact of COVID-19 on Aurum staff, DOH staff and facility closures is reflected in TX CURR performance by the end of the year. In the first half of the year, the case management programme was stepped up, and they were assigned a specific responsibility for increasing the viral load completion rate and follow up with clients who were due for viral loads. Aurum enrolled nurses and phlebotomists supported this activity and Aurum clinicians continued to offer Advanced Clinical Care (ACC) to patients on ART patients with an emphasis on those that had defaulted on their treatment and successfully brought back to care.

Retention of clients became more challenging in Quarter 3 with the hard lockdown and restrictions on movement. Many clients went 'home' to different districts and provinces; others were afraid to come to the clinic out of fear of COVID-19. The economic impact of the virus and the lockdown also had an impact on clients. Life was disrupted for many clients and there were various challenges with coming for their appointment. Aurum staff implemented various interventions to assist clients, including issuing patients with multiple month medication scripts to reduce the need to visit facilities for repeat scripts, and decanting all eligible clients.

A home delivery project was started in May to improve adherence by taking medication right to the client's home, and also to decongest facilities. In Quarter 4, the programme

was expanded to additional facilities in EKN and to the North West. Around 5000 parcels were delivered every month in EKN during Quarter 4, with a total of 31 clinics participating in the programme in EKN and 20 facilities in the NW.

Aurum tracing teams continued to track and trace all patient that had missed their appointments, and they helped to prevent missed appointments from becoming uLTFU, which were anticipated to increase as a consequence of the COVID disruptions.

In April and May, Aurum made use of a bulk SMS reminder system to remind clients who had an appointment in the next week. The system included USSD response options so that patients could engage with the clinic. We had a success rate of getting through to clients of 64%, with more than 100,000 SMSes confirmed as delivered to the recipient out of the 157,000 sent. Around 14% of clients engaged through the USSD options, some confirming their appointment date, and some asking to change their appointment. Clients sent messages expressing appreciation for the service, and only 126 clients (out of the 100,000 delivered SMSes) opted out. After the initial excitement and optimism around this service, it was forced to cease through the introduction of the new TIER version in June.





SUCCESS STORIES

ENSURING ADHERENCE TO TREATMENT IN THE TIME OF COVID-19: HOME DELIVERY

The national COVID-related lock-down was implemented from 26 March 2020, and Aurum immediately began to find innovative ways to ensure patient care was not compromised. COVID-19 prompted facilities to try to reduce the number of patients attending healthcare facilities, and Aurum supported this drive through the development and implementation of a home delivery Project. Home delivery uses tracers to call patients to offer home delivery and drivers to physically meet up with patients to deliver their medicine parcels.

The project leverages off the NDoH SyNCH system to identify patients collecting meds from facility pick-up points and adherence clubs. Each team supports 3-5 facilities. Stigma remains a challenge, and around 65% of patients in Ekurhuleni were unwilling to receive a medicine parcel delivered to their front door, compared to 30% in the North-West province. The approach to reach these patients with home deliveries is called “Collect on the Corner” which allows patients to specify a delivery point outside their home but still within the catchment area of the relevant facility. To date, the project in EKN is reaching more than 4987 patients per month, and in Q4 home delivery was expanded to the other three Aurum-supported districts. At the end of September, BOJ had 624, DKK 829 and NMM 190 patients accessing their medication through home delivery.

HEALTH PROGRAMMES

HEALTH SYSTEMS DIVISION



”

As'bangene - Let's do this is a movement which encourages young people to make healthy lifestyle choices”

SUCCESS STORIES

AS'BANGENE

Aurum commissioned the Community Media Trust (CMT) to design and implement a communications campaign to create awareness about making healthy choices and increase the uptake of health services especially in relation to HIV testing, treatment initiation and adherence. The target audiences include adolescent girls and young women (AGYW) 15-29 as well as older men aged 24-35.

Initially the AS'BANGENE movement made use of social media, radio and events in order to attract and engage with the audience. As a result of COVID restrictions, these were replaced with 13 new and innovative WhatsApp Squads across Ekurhuleni. Each WhatsApp Squad operates in a neighbourhood or area, disseminates localized information, and assists clients to access

health services. The squad leaders also assist with the dissemination of COVID-19 prevention messaging. The squad leaders also dispense condoms, sanitiser and masks where appropriate at the health facilities or pick-up points. All media and material created carries a unique WhatsApp number which is managed daily and allows for both qualitative and quantitative measurement of the campaign elements. Radio took the form of weekly interactive AS'BANGENE health and lifestyle talk shows on 3 community radio stations, EK, Kasi and Voice of Tembisa. The show format allows the audience to ask questions via the WhatsApp line and Facebook page and these are answered on the show. The Facebook and Instagram pages are managed daily and have a high level of interaction in English, isiZulu and seSotho.



Public Health Division

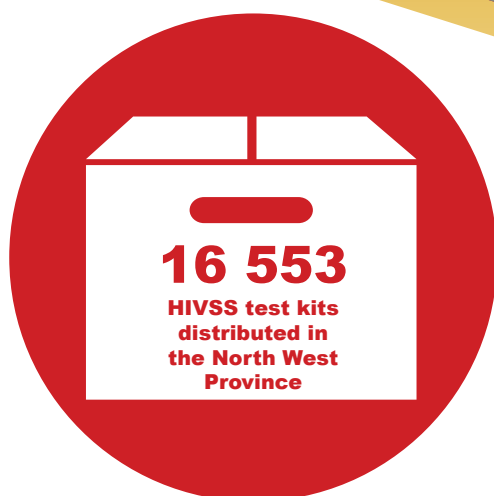
HEALTH PROGRAMMES



“

Our resilience and agility to bounce back and embrace change contributes to our success in overcoming adversity.”

Marinda Bower, Managing Director: Public Health Division

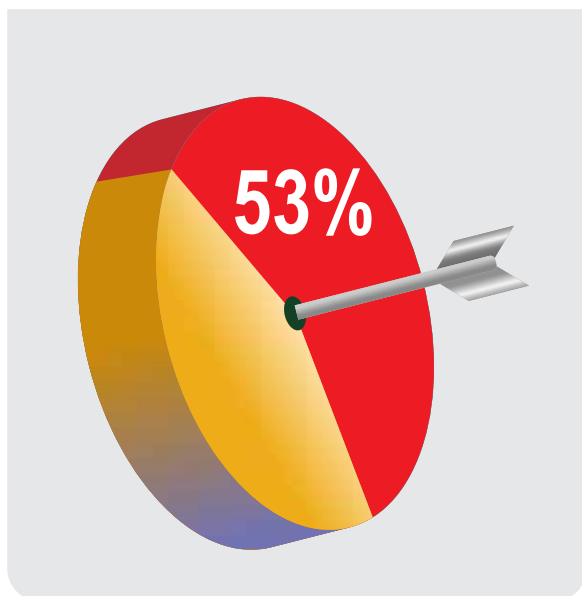


HIV Self Screening (HIVSS Test Kit Distribution)

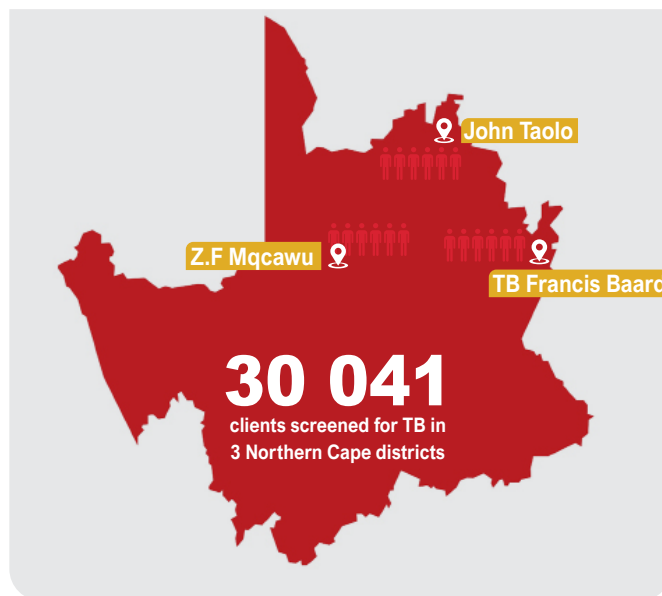
As part of the HIV Self-Testing in Africa (STAR) initiative, WITS Reproductive Health and HIV Institute (WRHI) appointed the Aurum Institute to distribute HIVSS test kits to key populations at various transport hubs in Gauteng and at workplaces in the North West. A total of 9,019 HIVSS test kits were distributed in Gauteng. The distribution model was implemented through campaigns and distribution points at major taxi ranks in the inner city of Johannesburg and surrounding metropolitan transport hubs. HIVSS distribution in the workplace was implemented in Bojanala and Dr Kenneth Kaunda districts in the North West Province, with a total of 16,553 HIVSS test kits being distributed.



**THE SCREENING PERFORMANCE
OF 53% WAS ACHIEVED AGAINST
THE TARGETS**



**TB SCREENING
IN NORTHERN CAPE**



TB In the Mining Sector in Southern Africa (TIMS II)

The Enhancing Care Foundation (ECF) Consortium, which includes SAfAIDS and Baines Occupational Health Services, awarded Aurum a grant to implement TIMS phase 2 interventions to reduce the burden of TB in the targeted sites. This grant is supported by the Global Fund, with Wits Health Consortium as Principal Recipient, and implementing a regional TB Programme in the following 5 countries, South Africa, Eswatini, Lesotho, Mozambique, and Namibia. Aurum implemented the grant in John Taolo Gaetsewe, ZF Mqacawu and Francis Baard District in the Northern Cape. Implementation started from September to December 2020.

From September to November 2020, a total of 30 041 clients were screened for TB in 3 Districts in Northern Cape namely, Francis Baard, John Taolo and Z.F Mqacawu districts of the Northern Cape. The screening performance of 53% (30 041 / 56 709) was achieved against the targets. Of the total screened, 2 940 were miners, 2 438 were ex-miners, 3 797 were family members of current miners, 5 648 were family members of ex-miners while 15 218 were community members in the mining community. The project was implemented in collaboration with community organisations supporting Department of Health's facilities in three implementing districts.

Management Development Programme (MDP)

2020 has been a challenging year for the MDP programme, however some of our MDP learners made major strides in their careers, attributing this to their training. Six of the MDP attendees who were operational managers have advanced in their careers to senior positions.

MDP supporting COVID-19 response

Aurum's MDP mentors provided support and assistance to the Western Cape health department in the form of training

and debriefing sessions the department's staff, while MDP learners played a pivotal role in the COVID-19 response. One MDP learner for instance was involved in the opening of the two COVID hospitals in Cape Town Metro, namely the Hospital of Hope at the Cape Town International Convention Centre (CTICC) which opened its doors as one of the first COVID-19 field hospitals in South Africa; as well as Brackenage Intermediate Care Facility (ICF) in Brackenfell, Cape Town, a 338-bed facility.

CDC Divisional Correctional Services

While there have been significant strides in strengthening HIV treatment programmes within correctional settings, progress in HIV prevention programmes has lagged. Furthermore, the magnitude of hepatitis B (HBV) and hepatitis C (HCV) in correctional settings is understudied, in a context where morbidity and mortality from these infections is projected to increase. Using a mixed-methods approach, we conducted a situational analysis among inmates in two correctional centres in South Africa between May and December 2019 to explore the socio-behavioral and structural factors associated with prevalent HIV, HBV, and HCV infections.

We enrolled sentenced offenders and awaiting trial detainees from Kgosi Mampuru II and Polokwane correctional facilities and collected behavioral data using a standardized questionnaire. All participants consented to providing blood samples for point of care (POC) for HIV antibody testing, Hepatitis B surface antigen test (HBsAg) and HCV rapid antibody. Samples were sent for laboratory testing of HIV antibody testing for newly diagnosed and viral load testing, HBV DNA testing to assess for active chronic hepatitis B and Hepatitis B “e” antigen testing for active chronic hepatitis B, HCV antibodies (anti-HCV) and HCV ribonucleic acid (RNA) to test for viral load. Furthermore, we purposively selected inmates to participate in in-depth interviews (IDI) and lastly, enrolled non-inmates for qualitative focus group discussions to explore the inner setting in which prevention and treatment services were provided. Three focus group discussions (FGD) were conducted with healthcare workers and corrections staff employed by the Department of Correctional Services (DCS) and non-governmental organisations providing healthcare services in the survey sites.

Overall, quantitative data was collected from 633 participants and qualitative data from 26 participants' IDIs and three FGDs with 9-12 participants each. The overall HIV prevalence was 19.6% and was significantly higher in Kgosi Mampuru II 25.6% than Polokwane Correctional facility 13.6% and was in female compared with male inmates. HIV infection was associated with self-reported injection drug use and per year increase in age.

The overall proportion of HIV-positive participants aware of their positive status was 79.0%. Of these, 93.4% were on treatment and, of those, 80.4% achieved viral load suppression. Of the total 124 participants testing HIV positive, 13 were co-infected with HBV and 10 with chronic HCV. HBV was found in 18 participants, all male. HBV was mostly observed in those who self-reported sharing piercing equipment in the facility (25.0% vs 1.5%), and injection drug users. (14.8% vs. 2.5%). The overall prevalence of HCV infection was 4.4% and was higher in males (5.2%) than females (2.5%). HCV was observed in ages between 18 and 34 years and in sharing of tattoo tools. Inmates who were awaiting trial were less likely to be HCV infected.

Qualitative findings revealed access to drugs smuggled into the facilities. These drugs are combined with ARVs and administered intravenously. Sharing of equipment such as razors and tattoo tools was frequently reported.



HBV was mostly observed in those who self-reported sharing piercing equipment in the facility, and injection drug users. HCV was observed in ages between 18 and 34 years and in sharing of tattoo tools.”



There was a general concern of exposure to blood during violent encounters with other inmates or inadequate disposal of sanitary products used during menstruation. Generally, there is low knowledge of HBV and HCV and these conditions are not routinely screened. Lastly, cases of sexual abuse in correctional facilities driven by gangs where inmates are forced into sexual relationships in exchange for protection, food or material items were mentioned.

Our findings recommend maintaining the existing routine HIV surveillance which is important to identify and address gaps that may impede the monitoring the HIV burden in the correctional facilities. In addition, setting up surveillance systems to monitor levels of HBV and HCV disease burden and efforts to increase awareness among inmates is encouraged. The surveillance system will be a platform for increased screening, surveillance, education/prevention and treatment interventions. Lastly, there is need to strengthen substance use prevention and treatment programs in correctional facilities. The link between HCV and injection drug use underscores the need for treating substance use disorders within this setting which may include medication-assisted treatment (MAT) and needle and syringe programmes.

West Coast HCT

The Aurum Institute has played a major role within the West Coast District since 2015 and has positively contributed to the overall performance of the district. We currently support 27 facilities with 65 facility-based counsellors.

Our holistic approach towards the management of chronic and lifestyle diseases enhanced the programme and encourages clients to take responsibility for their own health. Through our counsellors we provide information, health education and promote healthy behaviour and disease preventions, conduct structured community and facility screening and profiling to identify health needs, finding those at risk and provide direct counselling and mental health support for individuals. This links into appropriate referrals for health, rehabilitation and social support services to the West Coast District multi-disciplinary teams. The counsellors also provide adherence support and create awareness on health diseases through awareness campaigns and assist with the Western Cape on Wellness (WOW) initiative.



Shesha-Geza handwash innovation

The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and its partner, The Aurum Institute (Aurum), launched innovative mobile hand hygiene stations, aptly named Shesha Geza, which means "hurry up and wash" in isiZulu. The stations have been placed at several public health facilities in Ekurhuleni, Gauteng, as part of efforts to help curb the spread of COVID-19.

Funded through the U.S. Centers for Disease Control and Prevention (CDC) South Africa, Aurum rolled out 15 hand hygiene stations valued at R375,000 in total at clinics throughout Ekurhuleni in May and June 2020. An additional 36 units were deployed across Ekurhuleni and the North West Province in June and July 2020, in staggered fashion as part of phase 2.



20 000
Hand washes

**Shesha
Geza**

**600 l
tank**



4 000

**hand washes per
one cycle**



The Shesha Geza handwashing stations feature a diluted, chlorine-based sanitizer liquid, which can be utilized to sanitize hands when washing with soap or using an alcohol-based hand rub is not feasible or available. In this case, a chlorine solution is both more feasible and cost effective than other alternatives for the locations where Shesha Geza units are deployed. The stations are operated by a foot pump to reduce the need to touch water faucets. Balancing mobility and water storage capacity, the 600-liter tank equates to 4,000 hand washes per one cycle. The water in the tank can be used safely for a minimum of 5 cycles, facilitating over 20,000 hand washes before needing to be refilled. The design also allows for hand washing with soap as an alternative to the diluted chlorine-based solution where feasible.

Hand hygiene is an important part of the South African response to the international emergence of COVID-19. Practicing hand hygiene, which includes hand washing with soap for a minimum of 20 seconds, using alcohol-based hand rub, and, where necessary, use of a diluted chlorine-based solution, is a simple yet effective way to limit the spread of COVID-19 and other infections.

During a site visit to Goba Clinic in Katshehong, CDC South Africa Acting Country Director Dr Romel Lacson applauded Aurum for this innovation. He thanked the organisation for its continuous efforts in ensuring that the basics of the PEPFAR program are implemented.



Quality Improvement

HEALTH PROGRAMMES



The Quality Improvement Division is a specialised unit that provides specialised technical support to Aurum Institute and other organisations. The support is focused on improving the experience and efficiencies of healthcare, improving the health of the population and reducing costs of delivering health care.

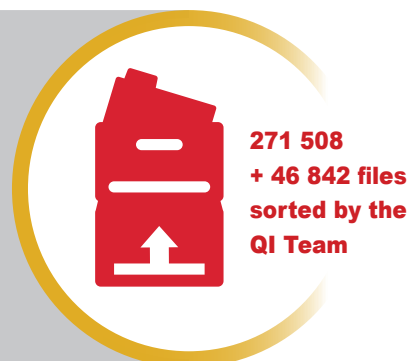
1. Health Systems Division

The QI team support the Aurum operations team in all the CDC supported districts:

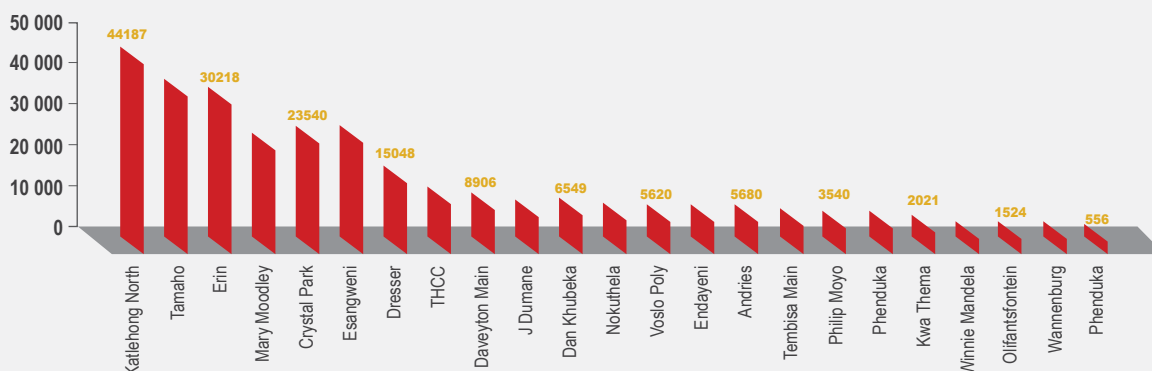
HIGHLIGHTS:

File sorting

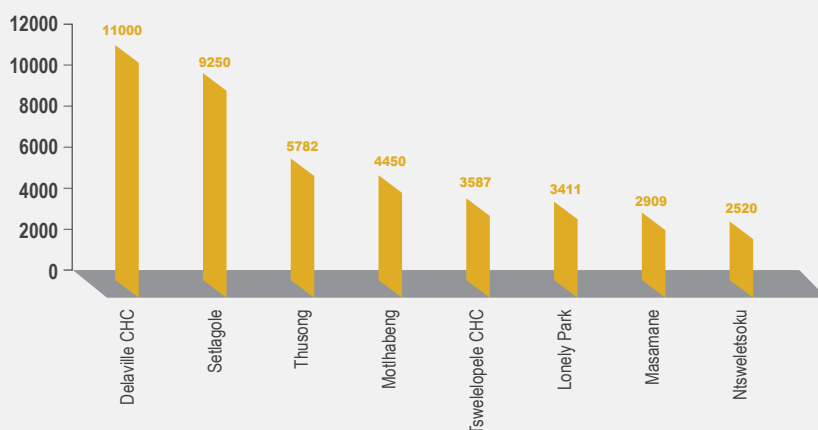
File sorting improvement projects continued to take priority in 2020. A total of 271 508 and 46 842 (Ekurhuleni and NMM respectively) files were sorted by the QI team with the assistance of the roving filing clerk teams. The records management improvement projects were started as a response to the data that was not reflecting patient experiences in the facility. Most of the health systems improvement efforts were poorly reflected in the outcome data that was reported on monthly basis. The filing project was initiated to rectify the inaccuracies that were realised in the outcome data through rectifying the documentation as well as the flow of patient records in the facilities.



Ekurhuleni Files sorted:Q1-Q2 [N=271 508]



NMM- Files sorted [Oct 19-Sep 20] N=46842



File tracking innovations

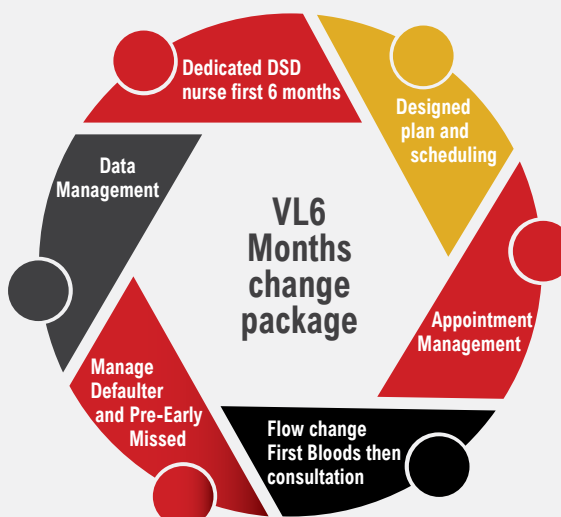
The charge out cards concept, which was developed from benchmarking at a local community library in Ekurhuleni was implemented in over 30 facilities across the district facilities. This innovation entails placing laminated coloured cards in the filing cabinets when the patient file is retrieved. Some facilities use different colours for each day of the week, whilst others use different colours for the different services that the patient files are retrieved for.

The benefit of the file tracking innovation has been the production of a quick visual system to identify files that are not in the filing cabinets when they are supposed to be filled back. It has also resulted in accountability for the movement of the files in the facility as duplicate files are no longer randomly created simply because a file cannot be found in the cabinets. Tracing files has become much easier for filing clerks as the charge out cards indicate where the file could be or when it was retrieved.



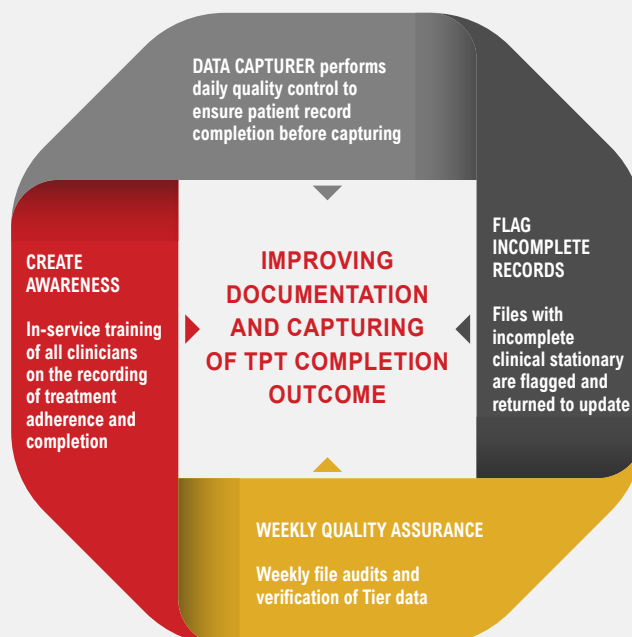
Viral load completion change package

Ekurhuleni East sub district selected six facilities to participate in the cluster approach to improvement of viral load completion. A comprehensive change package (indicated below), developed to address the identified systematic gaps, was tested in these facilities. The patients who miss their appointments affects the viral load completion as observed on the second week of the results in some of the facilities.



Improving TPT completion

TB preventative therapy completion rate was improved in Ekurhuleni East and South sub-districts through the implementation of an inclusive change package which focused on improving the data documentation and reporting gaps. The facility quality improvement teams displayed their project charts to get other facility staff involved in the projects.



2 . Operation Phuthuma (OP)

Regional Director, Lauren de Kock is part of the National Department of Health HIV response “Operation Phuthuma”(OP), where she heads the QI arm for OP. OP provides technical leadership and project management support to National HIV Cluster. A key purpose of the grant is to identify gaps and challenges with the HIV programme that are generalisable to the entire country and to find sustainable ways to address them while strengthening the health system. The QI Gates grant staff consist of 6 quality improvement specialist who integrate and provide quality improvement technical assistance to nerve centres, facilities, districts and provinces around the country.

OUR IMPACT

Below are a few of the projects we have undertaken with the HIV Cluster this year:

Prevention of Mother to Child Transmission

Supported 2 Projects

(Gauteng and Kwa-Zulu Natal)

• Maternal Viral load uptake

The National Department of Health has provided guidelines that all HIV positive pregnant, delivering and breast-feeding women require more regular HIV viral load monitoring to prevent vertical and horizontal HIV transmission. The NHLS has created a gatekeeping code for maternal viral loads to bypass the gatekeeping system. There has been poor utilization of these codes resulting in low performance of the Maternal Viral load as a health outcome.

Working in collaboration with National Health Laboratory Services (NHLS), Aurum conducted a Root cause analysis at 4 health facilities and 2 NHLS hub centres; problematic factors were identified at these facilities and NHLS hub centres which included, Poor knowledge levels and understanding of the gatekeeping system and EGK codes in general by implementers, poor processes to ensure completion and recording of EGK codes on clinical stationary, poor communication between facilities and NHLS hub centres to confirm and verify correct recording and usage of EGK codes which should be captured on the NHLS hub centre

Picture: Root Cause Analysis work at a Health Facility that volunteered to test out the below mentioned interventions.

Below are the interventions that were tested and implemented at 2 facilities and their corresponding NHLS hub centres in Ekurhuleni District (Gauteng Province);

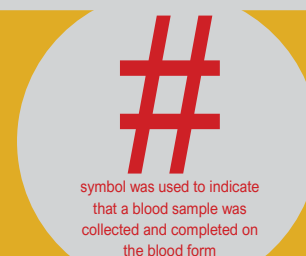
1. Posters to address lack on knowledge

Posters informing and demonstrating how and where to record EGK codes were designed for health facilities and NHLS hub centres. These posters were distributed nationally to provide education and mentoring on EGK codes



2. Creating a source document process

A process was designed where a hashtag (#) symbol was used on the specimen register to indicate that a blood sample was collected and completed on the blood form. This created a verifiable source (footprint) of EGK codes at facility level to enable the verification of recorded codes on the blood form when they are handed over to NHLS hub centre.



3. Verification with NHLS Laboratory

Health facilities created a system of compiling a list of all PMTCT viral blood specimens taken and handed over to NHLS for processing with an indication of the corresponding EGK code completed on the blood form and barcode. This list was shared with the NHLS hub centre monthly to support the verification and error management at the NHLS hub centre.

Capacity Building

- **Nerve Centre Support**

The National Department of Health has developed the structures to report and think tank on key priority areas in the HIV programme. The Nerve Centres are collaborative meetings held at facility, sub-district, district and provincial level. A toolkit to guide and support nerve centres in currently being developed to guide and support the Nerve Centre operations to utilise the quality improvement approach to plan, implement, monitor and evaluate the required implementation plans.

Online Quality Improvement tracker

Through the Gates Grant, we have been afforded the opportunity to further develop our very own online Quality Improvement tracker. This system aims to provide past and real time reporting and feedback on the improvement testing process. The vision is to optimise and expand the online tracker to be utilised by various stakeholders to increase accessibility to improvement work and foster collaborations.

OUR IMPACT

Differentiated Model of Care

Supported 2 Separate Projects (National scale)

- **(Six-month) Multi-month dispensing of anti-retroviral therapy**

Operation Phuthuma has adopted the quality improvement approach as the implementation model in a demonstration project to provide 6 months multi-month dispensing therapy to HIV patients. This demonstration project will inform and guide the roll-out of six-month multi-month dispensing therapy to HIV patients nationally.

In preparation of the demonstration project, the Quality Improvement team performed assessments in 16 health facilities. These assessments were to identify the systemic and process issues that could inhibit the uptake and rollout of multi-month dispensing. Findings were compiled and shared through Operation Phuthuma structures to inform the project decision-making and planning.

- **Blood results management**

NHLS has developed and successfully rolled out the LabTRAK (NHLS -TrakCare) to ensure easy access and retrieval of blood results for clinicians. Facilities

often struggle to effectively operationalize such health technologies as they cling to old systems or succumb to some infrastructural challenges. To support full usage and efficacy of the LabTRACK system, the quality improvement team has been working with 3 health facilities to design a streamlined standard process to access blood results from LabTrack, consistently document results in patient records and prompt clinicians to respond to poor patient health outcomes.

The highlight of this project was a health facility that **had 1932 hardcopy blood results not recorded in patient files at the beginning of project in May 2020 that improved to all current blood results recorded in patient files in November 2020**. The project has inspired the usage of the ideal clinic designed blood results form that captures all blood results for each patient, including the non-communicable disease patients, who do not have a central document to record all their blood test results. If this change is implemented nationally, it has the potential to ensure health facilities fully utilise the NHLS LabTrack which will result in significant cost savings due to reduced blood results needing to be printed and delivered by courier services.

Total Remaining in ART

- **Data Quality**

Total Remaining on ART is a key HIV health indicator closely monitored by the National Department of Health. Multiple factors impact the performance of this indicator. The Quality Improvement work has been focused on improving system and process bottlenecks and problems that negatively impact the quality of data routinely reported and monitored.

To support the work done nationally to de-duplicate known positives in the TROA data, the quality improvement team has worked with 1 health facility for 8 weeks to test an idea of providing counsellors with

limited access to the NHLS LabTRACK. This system is key in the de-duplication process as it identifies any known positives immediately so that they are not re-entered into the system as a new patient but are rather given appropriate care and treatment as someone who may already have been initiated on treatment.

Preliminary data from this testing process shows that on a weekly basis, **an average (median) of 5 known positives** are identified per counsellor. If this intervention is scaled nationally, resources will significantly be reduced, and patients will be provided with a more tailored approach to their clinical management.



“

Operation Phuthuma has adopted the quality improvement approach as the implementation model in a demonstration project to provide 6 months multi-month dispensing therapy to HIV patients.”

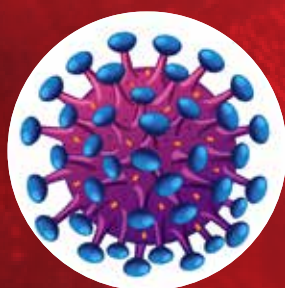


Implementation Research Division (IRD)

HEALTH RESEARCH PROGRAMMES



**TB prevention and
treatment**



**HIV prevention and
treatment**



**COVID-19
implementation
research**

The Implementation Research Division (IRD) was involved in 22 research projects focusing on TB prevention and treatment, and HIV prevention and treatment and COVID-19 implementation research.

4 Completed

9 Continued

9 Newly-funded

Two IRD staff obtained their PhDs, and two others completed their Masters Degree and Post-graduate Diploma respectively. Dr Tonderai Mabuto and Dr Noriah Maraba completed their PhDs in Public Health from the University of the Witwatersrand in 2020.



◀ DR TONDERAI MABUTO

Director HIV AIDS Research, explored the journeys of people living with HIV to understand how they made decisions on whether to engage in medical care. He also identified ways that healthcare workers can use to improve their interaction with patients receiving HIV care. Some of his findings are already being used to develop interventions in Aurum health programmes.

DR NORIAH MARABA ▶

looked at what people undergoing TB testing in clinics were dying from and found TB and HIV to be leading causes of deaths. She then tested a case manager and mHealth (mobile health) application strategies. She then tested a case manager and mHealth application strategies to assist these types of patients to start their TB and HIV treatment to reduce deaths.



Overcoming challenges to work of IRD due to the COVID-19 pandemic

Data collection in health facilities and in the community for all IRD research projects was halted during lockdown levels 5 and 4 from March to July 2020. During this time, most projects retrained their data collection staff to capture data they had collected and to be able to work from home. Work recommenced with data collection thereafter, during level 3, subject to strict observance of COVID-19 regulations. Staff were trained on how to protect themselves and respondents from COVID-19, provided with personal protective equipment (PPE) and provided with guidelines and support in case of infection. The division developed new approaches by conducting virtual interviews, focus group discussions and links for participants to complete surveys online on their mobile phones, laptops or tablets, allowing work to continue while safeguarding staff and research participants.

HIGHLIGHTS



TB Monitoring Adherence and Treatment Endpoints (TB MATE) project

The aim of this study is to implement and evaluate the use of an adherence monitoring system (using the Wisepill evriMED device) with a differentiated response to patient care, among drug-sensitive TB patients (DSTB) in three provinces (Gauteng, KwaZulu-Natal and Western Cape) of South Africa.



ASCENT - Adherence Support Coalition to End TB Empowering Patients Through Technology

Recruitment has started in the ASCENT project which works collaboratively with the National TB Program (NTP) in South Africa to leverage smart information and (mobile) communication technologies and support TB patients with their treatment. The project uses digital adherence technologies such as smart pill boxes, medication sleeves and video supported treatment and aims to make future scale up possible so that these digital innovations can be available to all TB patients worldwide.



TB Sequel

This is a cohort study of 1600 TB-diagnosed individuals that will be followed for two years to investigate long-term sequelae of TB focusing on the host, agent, and socio-economic factors. The project is being conducted in South Africa, Mozambique, Tanzania and The Gambia. In Tanzania, an additional component of the project is a clinical trial investigating N-acetyl cysteine as an additional treatment to reduce long term lung damage from TB.



Resistance to Mycobacterium tuberculosis infection in HIV positive South African gold miners (HETU-2)

The overall objective of the project is to identify HIV-1-infected individuals who have remained TB uninfected despite prolonged and intense TB exposure, and to determine the epidemiologic and cellular immune functions associated with apparent resistance to TB infection.



PSC Evaluation study

IRD researchers working with NHLS colleagues conducted a field evaluation of a novel viral load monitoring tool (Plasma Separation Card) in stable ART patients attending routine HIV care at public healthcare facilities in Ekurhuleni and Bojanala Districts.



DRTB Data Management Support project

The IRD project team conducted a monitoring and support for Bedaquiline (BDQ) implementation and provision of quality data on effectiveness of DRTB treatment. The main objectives of this study were to 1) support routine DRTB data quality 2) Strengthen BDQ data reporting (patient information register) and 3) Support Ototoxicity Prevention Programme.



SA TB Think Tank

Aurum provides secretariat functions for the TB Think Tank which is co-chaired by Department of Health and a representative from partner organisations.



2 Way Texting study

The aim of this NIH-funded project is to expand and scale 2 Way Texting (2WT) to reduce unnecessary follow-up and improve identification of adverse events among Voluntary Medical Male Circumcision (VMMC) clients in South Africa.



AZIKO study

Aurum is leading a study in the mining sector investigating the social risk factors for mineworkers to HIV at three mines in South Africa. Data collection for the study was delayed due to COVID-19. This study has been repurposed to use a syndemic or gendered lens to analyse a syndemic index of four socio-behavioural factors - risky sex, violence, alcohol and substance misuse, gender attitudes and tuberculosis history.



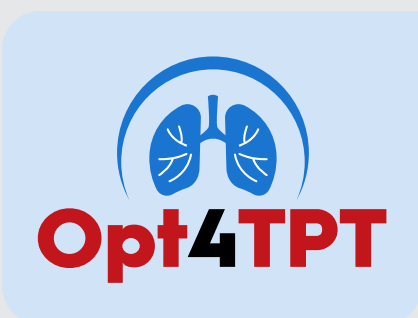
Recency study

The aim of this study is to assess the feasibility and acceptability of a rapid recency test for HIV Infection. IRD researchers and partners used the Asante recency test to differentiate between recent (less than 12 months) and long-term infections (> 12 months) 10 facilities in Ekurhuleni District. Recency testing will help health services to increase the numbers for index testing and to help identify hotspots for new infections.



CUT-TB study

The overall goal of the international Community Universal Testing for TB (CUT TB) study is to evaluate contact tracing strategies for optimizing active case finding and delivery of preventive therapy in high/medium burden tuberculosis TB settings. The project is organised into nine main research tasks as follows: Cluster RCT, project management, communication and dissemination, socio-behavioural, economics and modelling, microbiology, paediatrics, capacity building, data management and statistics.



OPT4TPT study

A prospective cohort study to optimise the delivery cascade for tuberculosis preventive treatment among people living with HIV: a multi-country (Ethiopia, Zimbabwe and South Africa) program evaluation. In order to generate critical knowledge to improve TPT uptake, implementation, and outcomes, this proposed evaluation will 1) describe patient journeys, 2) define clinic-level processes and provider attitudes and 3) explore patient preferences for TPT regimens, and 4) conduct a cost-effectiveness analysis.

COMPLETED STUDIES



Online COVID-19 KAB Study

A socio-behavioural survey conducted online with 1200 respondents, assessed their adherence to control measures essential during lockdown. The North West and Gauteng were selected to assess these measures between low (NW) and high (GP) burden provinces. The objective of the Knowledge, Attitudes and Behaviours (KAB) survey was to ultimately make recommendations on a locally tailored behaviour change intervention, to curb the spread of COVID-19.



WHO costing

IRD submitted final data on this national TB costing survey funded and supported by the WHO and National Department of Health.



INSTI Study

Submitted policy brief on the scale-up of INSTI HIV self-testing following completion of pilot projects in health facilities and in the community to the National HIV Think Tank, the Department of Health and other key stakeholders.



Endline study on HIV KAP

IRD completed this endline study of HIV knowledge, attitudes and practices (KAP) among young people in Mpumalanga and Eastern Cape provinces for the German cooperation (KFW), GFA Consulting and the National Department of Health.

MORE NEWLY FUNDED RESEARCH PROJECTS



Opioid maintenance study among inmates on antiretroviral treatment (ART), an R21 funded by the National Institutes of Health (NIH).



Sentinel surveillance of COVID-19 among mineworkers



Data capturing of COVID-19 for mineworkers employed by Anglo American mines in South Africa.

Community Initiated Preventive Therapy for TB (CHIP-TB) study is a global project that will compare the effectiveness of community-based versus facility based child contact investigation and delivery of TB preventive care to inform the optimal implementation strategy for investigating paediatric household TB contacts.



Life will always throw curveballs at us and some may hit harder than others. When that happens, we need to make peace with the situation, refuse to give up, and trust the process.”

Fadzai Munedzimwe, Junior Research Manager Research Management.

4

Clinical Research Division (CRD)

HEALTH RESEARCH PROGRAMMES

“



Our work provides purpose because we have either been affected or have lost loved ones and experienced the tragedy and havoc wreaked by the TB, HIV and now Covid-19 ”

Professor Vinodh Edward, Aurum Regional Chief Operating Officer: Health Research

The Clinical Research Division is experienced in running clinical trials ranging from large scale public health studies, to highly regulated clinical trials of new medications.

For the past 16 years, The Aurum Institute's Clinical Research Division (CRD) has conducted numerous Randomised Controlled Trials (RCTs) of HIV vaccines, treatment, and prevention (Pre-exposure Prophylaxis [PreP]: oral, topical and soon long acting oral and or injectables), and TB treatment, adjunctive Host Directed Therapies (HDTs), TB vaccines and oral TB preventative therapy, COVID-19 treatment, prevention and vaccines and diagnostics and socio-behavioural studies across all indications.



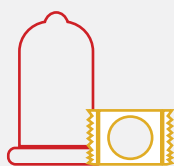
COVID-19



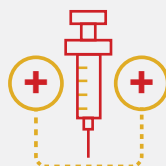
TB Treatment



TB Vaccine



HIV Treatment
and PreP



HIV Vaccine



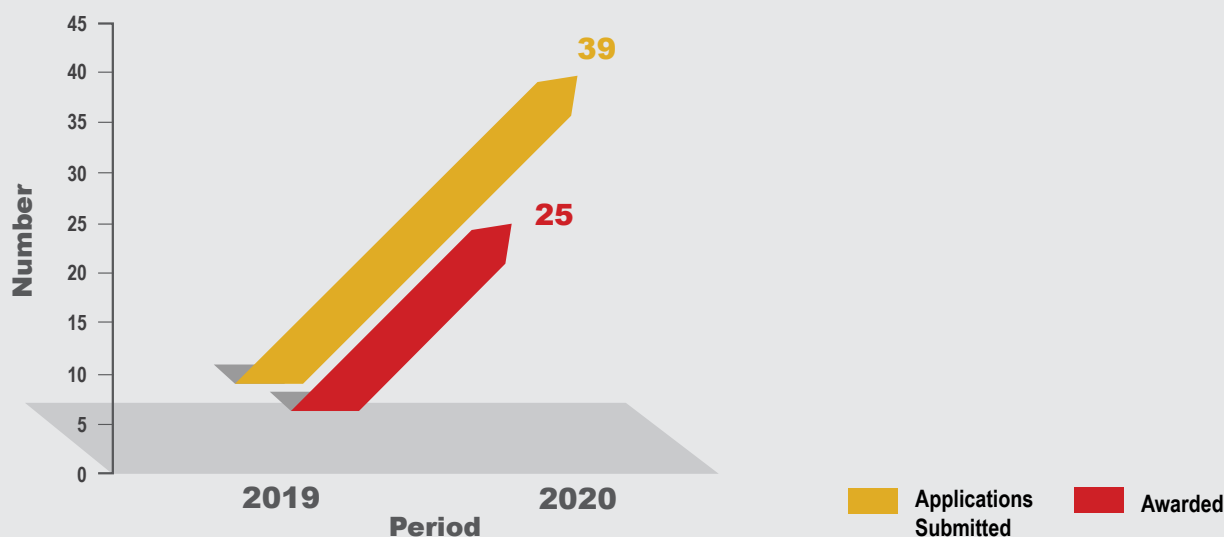
Special
Projects

We focus on these key defined programmatic areas:

KEY ACTIVITIES OF 2020

Historically we have focused on TB and HIV prevention and treatment research and we remain committed to making a difference in those areas, but more recently a lot of time and energy have gone into the fight against COVID-19. We have spent the last 6-8 month intensively preparing for the unknown territory of conducting COVID-19 research and we continue to learn daily. Focusing on three epidemics simultaneously is more than a full-time job, but lessons learnt will be applied to continue to improve trials implementation going forward.

Grants, Contracts and projects Bids by period



Clinical Research Applications

CRD Applications	2020	Total % 2020
Applications Submitted	43	100%
Submitted/Pending Outcome	0	0%
Awarded	31	72%
Unsuccessful	12	28%

Grants, Contracts and projects Bids by period

Status	Tembisa	Rustenburg	Klerksdorp	Pretoria	Total
Planned	Dolphin-TOO METHOD Sudoco Decode DRTB-HDT Pan-TB Imatinib-HDT	BPAMZ/SEM Sanofi VAT002 MSD-PreP CoVPN5001	MSD-Prep CoVPN5001	53718678RSV2002	
Total	7	4	2	1	14
Enrolling	A055-POR CoVPN 5001 C3-RCT Ensemble I HVTN 405 Sisonke	PHOENIX Ensemble I Sisonke	A055-POR MESA-TB Ensemble I Sisonke	Ensemble II GS-US-216-0128 GS-US-200-4625	
Total	6	3	4	3	16*
Follow-up / close-out	Crown Coronation HVTN 702 HVTN 705	YFS HVTN 702 HVTN 703 HVTN 705 HVTN 405	HVTN 702 HVTN 705 HVTN 405	Novavax GS-US-380-1474 GSK201585 ESP 1002-043 LPS15023 D5290C00004 D5290C00005	
Total	3	5	3	7	18*

* 34 active projects over the course of 2020 compared to 14 in 2019.

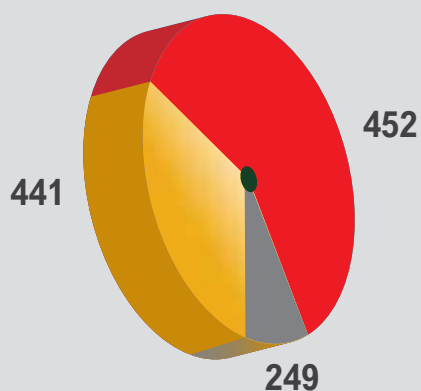
HEALTH RESEARCH PROGRAMMES

CLINICAL RESEARCH DIVISION

In 2020 alone, the clinical research division enrolled a combined total of 1142 participants across its established research centres: Rustenburg (since 2008), Klerksdorp (since 2006) and Tembisa (since 2008), into 7, 6 and 7 ongoing / active trials respectively.

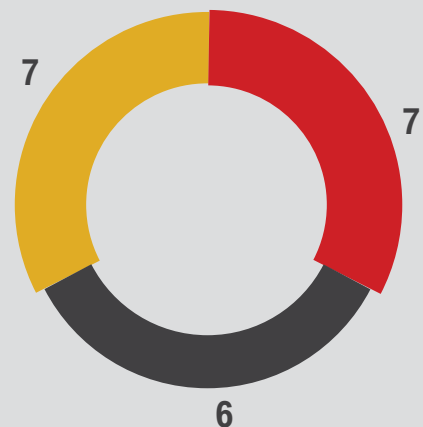
Simultaneously, the acquisition of the in-patient Pretoria site in July 2020, previously Syzygy Clinical Research Services (established 2009) and Vx Pharma (2014), came with experience in the form of 13 trials specialising in the areas of HIV, COPD, Asthma, diabetes (type I and II), dyslipidaemia and infant influenza 13 clinical trials experience. In addition 7 current trials (paediatric RSV, HIV ART (paediatric and adult), asthma and dyslipidaemia were transferred under the Aurum Clinical Research Division's umbrella and oversight. In the midst of surging Covid-19 pandemic, the Aurum Pretoria Clinical Research Centre site rapidly enrolled 122 participants into the Novavax Covid-19 preventative vaccine trial over a period of less than 6 weeks.

Eligible participants Enrolled across 20 Active Clinical Research Protocols



● Rustenburg ● Tembisa ● Klerksdorp

Number of Trials



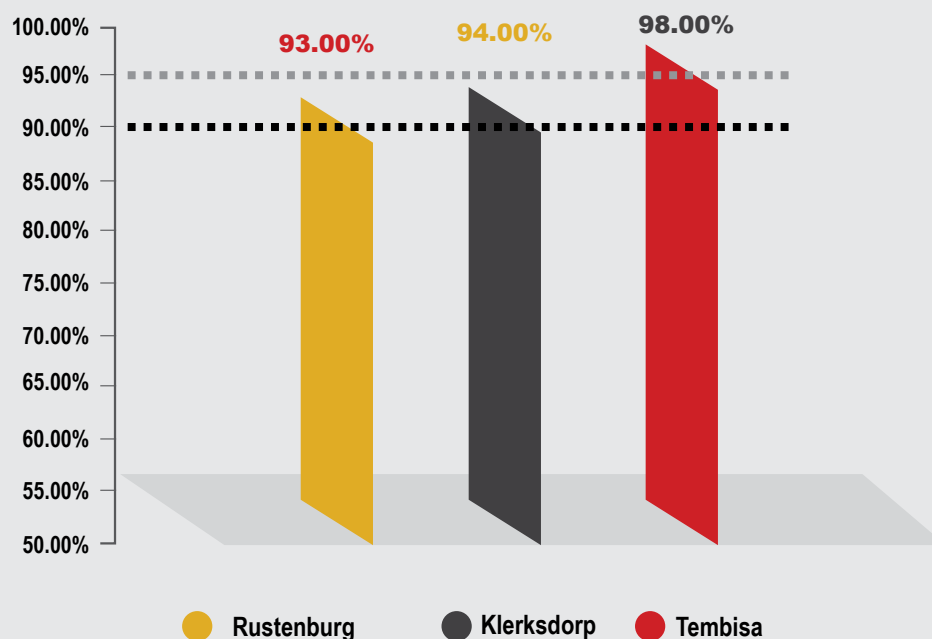
● Rustenburg ● Tembisa ● Klerksdorp



“In the midst of the adversity of COVID-19 in SA, I realized challenges are there to make us realize there is more resilience to our human souls than we think and if we put our mind to it, we will make it through, one day at a time. I survived Covid-19 infection with a daily battle in my mind, that I have to survive to tell the story to the next generation and focus on a better hope for the future by daily doing my bit in research to help conquer the giant of COVID-19, all despite the “linger longer” after-effects of infection.”

Pearl Selepe, Clinical Research Site Leader, Research Center Klerksdorp

Percentage (%) of Anticipated Visits Completed

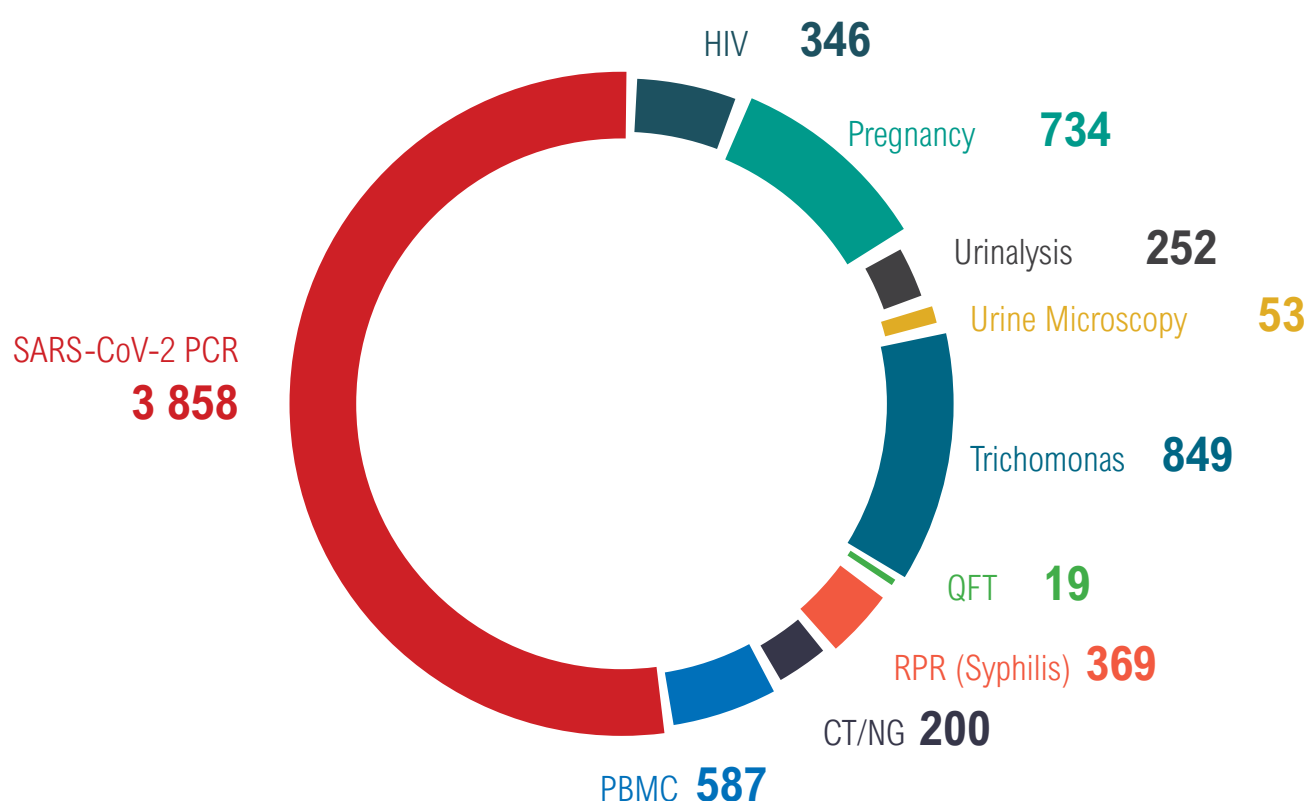


Percentage (%) of Anticipated Visits Completed

RUSTENBURG		KLERKSDORP		TEMBISA	
HVTN 703	100.00%	HVTN 705	98.00%	Crown Coro	100.00%
HVTN 705	84.00%	HVTN 702	80.00%	C3-RCT	100.00%
HVTN 702	80.00%	Ensemble I	99.00%	Ensemble I	99.00%
Phoenix	99.00%	HVTN 405	100.00%	HVTN 405	100.00%
YFS	91.00%	MESA-TB	99.00%	CoVPN5001	100.00%
Ensemble I	99.00%	A055 POR	91.00%	HVTN 705	92.00%
HVTN 405	100.00%				

LABORATORY:

- Samples received: **6 249**
- Samples shipped: **33 863**
- Total number of samples processed: **2 854**



PHARMACY: Total number of prescriptions dispensed – 2385

	Tembisa	Klerksdorp	Rustenburg	Totals
IP	380	182	388	950
NSP	81	170	98	349
Contraceptive	212	245	232	689
STI	53	143	114	310
PEP	1	2	7	10
PrEP	55	12	10	77

HIGHLIGHTS



1. MESA-TB:

Following the success of the GSK TB M72 AS01E vaccine trial in 2019, the Aurum Klerksdorp Clinical Research Site (KCRS) was invited to another efficacy and safety study as that above, now to determine the efficacy in HIV positive individuals who are on ARV treatment and have a history of viral suppression. The study titled “A randomized, placebo-controlled, observer-blind, phase 2 study to evaluate safety and immunogenicity of the investigational M72/AS01E Mycobacterium tuberculosis (Mtb) vaccine in virally suppressed, antiretroviral-treated participants with human immunodeficiency virus (HIV)”, is currently underway and is planned to conclude in quarter 3 of 2022. In addition to KCRS, there are four other sites in South Africa who are participating in the study, where it is aimed to enroll and follow 400 participants, male and female, aged 16 to 35 years old, to determine safety and efficacy in an HIV infected population. Each participant is aimed to be randomized to get either the active vaccine or a placebo, where following two vaccinations they will be followed for period up to one year.



2. A055-Prevention of Recurrence:

Klerksdorp and Tembisa CRC are participating in a prevention of recurrence (POR) TB vaccine trial entitled, A Phase 2, Double-blind, Randomized, Placebo-Controlled Study to Evaluate the Safety and Efficacy of H56:IC31 in reducing the rate of TB disease recurrence in HIV negative adults successfully treated for drug-susceptible pulmonary tuberculosis. The first POR trial completed with this vaccine, was the dose ranging study in 2014 at the Tembisa CRC. Which lead to the selection of the safest and most immunogenic dose of 5ug being elected for further research.



3. HIV Vaccine Trials Network:

The Aurum Institute sites (Klerksdorp, Tembisa, Rustenburg) also conducted the HVTN703/HPTN081 trial, which looked at broadly neutralizing antibody infusions in females at risk of HIV acquisition. Preliminary results indicated that the study was a success, however, we await the final results. All participants have since been terminated from the study. The sites maintained a >90% retention rate throughout the life of the study.

All HIV vaccine trials are monitored on a monthly basis to ensure that all sites meet the sponsor set metrics. The metrics measures Pages Entered, time to entry, number of queries, as well as time to query resolution, and AE reporting. All sites have met their monthly metrics consistently for the past 2 years.

4. HIV Treatment and Prevention:

Following many years of working in HIV prevention studies such as the MTN-VOICE, FACTS001 and ECHO trials, we sparked the interest of two pharmaceutical companies, MSD and GILEAD who approached us to conduct HIV Pre-exposure Prophylaxis (PrEP) Trials. Following a long history of development of two long-acting PrEP drugs, the two companies are now moving their new antiretroviral (ARV) compounds to Phase III stage testing. The long-acting action of these ARV compounds allows for less regular dosing of drugs, and hereby it is envisaged that this would improve user adherence, which have plagued previous drug candidates where daily dosage is often required. The Clinical Research Division was approached by these companies given our history from the afore mentioned trials, where we have demonstrated a great ability to recruit and retain the young women most at-risk for HIV. We had as well demonstrated reasonably high HIV incidence rates in these studies, an indicator of the vulnerability of this population group in need of PrEP. MSD has awarded for our Klerksdorp and Rustenburg sites to participate in their PrEP prevention study. GILEAD has further notified us that our Klerksdorp, Rustenburg, Tembisa and Pretoria sites will be participating in their PrEP prevention trial testament to our unique pleuripotency. These are two studies are anticipated to durate between 4 and 6 years to complete. The Pretoria site has as well been awarded to conduct a similar prevention study in MSM (males who have sex with men) and TGW (transgender women).

COVID Vaccines – ENSEMBLE

The Klerksdorp, Rustenburg and Tembisa (clinic 4) sites participated in the ENSEMBLE trial sponsored by Janssen (Johnson & Johnson). Combined the sites enrolled 675 in 22 working days. This equals to an average of 30 participants per day. This is a rapid upscale in recruitment and enrolment compared to any other trial performed to date.

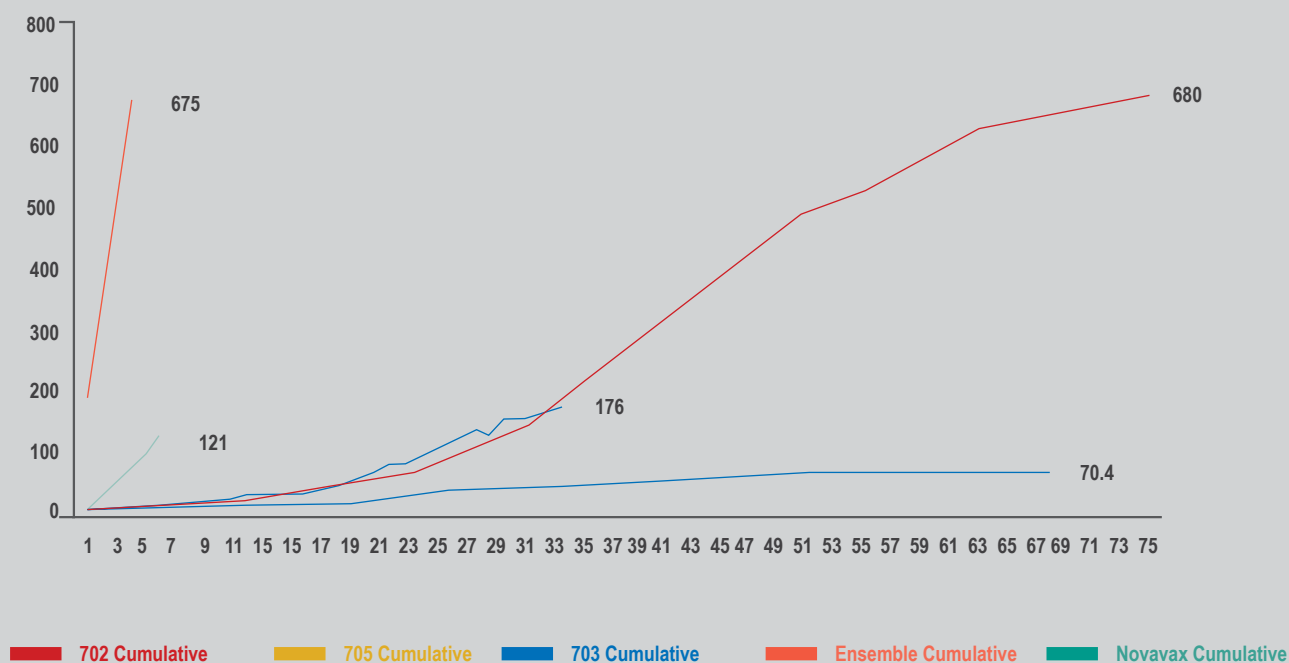
This trial has gone to show 100% protection against COVID related hospitalization and death and currently the only product tested against the SA discovered variant known as the 20H/501Y.V2, B.1.351 lineage. This vaccine is currently being rolled-out as an open-label, single arm, phase 3B **trial** (Sisonke) to allow early access for front-line healthcare workers. The Klerksdorp and Rustenburg sites are the official partners of the Department of Health in the North West Province and are the main custodians of vaccine.



Accrual Summary

Study	HVTN 702	HVTN 705	HVTN 703	Ensemble	Novavax
# Aurum Sites	3	3	3	3	1
Enrollment	Per Site/Week	Per Site/Week	Per Site/Week	Per Site/Week	Per Site/Week
Week 1	0.3	0.0	0.0	64.3	8
Week 2	0.3	0.0	0.0	53.0	21
Week 3	0.3	0.3	0.0	63.3	20
Week 4	0.3	0.7	0.0	44.3	22
Week 5	0.7	1.0	0.3		21
Week 6	0.7	1.0	0.3		29

Weekly Accrual Comparison HIV vs COVID-19 Vaccine Trials



HIGHLIGHTS



5. Adjunctive HDTs:

December 2020 marked the closure of a Bill and Melinda Gates Foundation funded trial entitled, "A Phase 2, Randomized, Open-Label Trial to Evaluate the Safety, Preliminary Efficacy, and Biomarker Response of Host Directed Therapies added to Rifabutin-modified Standard Antimicrobial Therapy in Adult Patients with Drug-Sensitive Smear-Positive Pulmonary Tuberculosis (TB HDT)." The Aurum Institute filled the role as Sponsor and highest enrolling site. The trial was conducted across 3 sites in Gauteng where 200 adult HIV negative DS-TB positive with moderate to far advanced TB disease graded by radiographic assessment were enrolled at Tembisa CRC (n=105), Wits Clinical HIV Research Unit (CHRU; n=56) and Soshanguve's Setshaba CRC (n=39) across 5 arms stratified by site and extent of disease as follows:

- Rifabutin substituted standard TB therapy alone (n=40) / control
- Rifabutin substituted standard TB therapy plus AMG-634, formerly CC11050 200mg BID, (n=40).
- Rifabutin substituted standard TB therapy plus everolimus 0,5mg QD, (n=40)
- Rifabutin substituted standard TB therapy plus auranofin 3 mg QD for 1 week, then 6 mg QD, (n=40)
- Rifabutin substituted standard TB therapy plus Vitamin D2 , a total of 3 doses: 5 mg initially (day 0), then 2.5 mg Q month for 2 doses, days 28 and 56, (n=40).

The overall results were promising, although only 40 participants per arm contributed to powering the study, nevertheless two shining HDT candidates were identified as beneficial in preserving lung function with a trend towards earlier sputum culture conversion. The outcome of this study will be published early 2021 in the peer-reviewed journal Lancet Respiratory Medicine.

- a. The pluripotency of all trial sites was well demonstrated as we expanded beyond TB and HIV treatment and prevention and into COVID-19 treatment and prevention trials at pace previously unknown to the division
- b. Tembisa Laboratory setup and training to conduct COVID-19 testing completed within 2 weeks and being one of the few laboratories in South Africa approved by the Department of Health to conduct COVID-19 testing
- c. Not only the significant increase in number of new projects awarded and increase in diversity of funding streams, but also an increase in the number of projects that would result in local and global impact
- d. The acquisition of the Aurum Pretoria site with in-patient overnight PK capacity.
- e. Funding to upgrade the clinical spaces at sites and begin renewing our vehicle fleet.

ACHIEVEMENTS

SAHTAC

The Aurum Institute received a three-year grant from the Bill & Melinda Gates Foundation to host the South African Health Technologies Advocacy Coalition (SAHTAC). SAHTAC completed the process of transitioning the secretariat function from the previous host, PATH, to Aurum. The transition process began in 2019 and was finalized by the end of 2020. The official handover took place at the coalition's annual general meeting (AGM) in February 2021. The coalition consists of a wide range of stakeholders that are involved in health R&D advocacy and/or implementation. SAHTAC's activities will be used to strengthen advocacy by creating an enabling environment for research, development, and access to life-saving health technologies and innovations. The Aurum Institute is fully committed to supporting the coalition to achieve its strategic goals.



COVID-19 Laboratory - Tembisa

Tembisa Laboratory setup and training to conduct COVID-19 testing was completed within 2 weeks to ensure rapid testing capacity. The Tembisa laboratory is proud to be one of the few laboratories in South Africa approved by the Department of Health to conduct COVID-19 testing and has been offering testing to private clients, Aurum staff and supporting the Clinical Research Division by conducting COVID-19 testing for active clinical trials.



CTU Award

The Aurum Institute was awarded a seven-year grant by the National Institutes of Health (NIH) for a Clinical Trials Unit (CTU) to implement the scientific agendas of two NIH HIV/AIDS Clinical Trials Networks: the HIV Vaccine Trials Network (HVTN) and the AIDS Clinical Trials Group (ACTG). This grant provides funding for two clinical research sites (CRSs) in Klerksdorp and Rustenburg to participate in the HVTN and ACTG Networks, respectively. Other CRSs affiliated to the CTU include the Tembisa CRS and the Uganda Virus Research Institute-International AIDS Vaccine Initiative (UVRI-IAVI) CRS. These sites may be considered for protocol specific activity during the grant cycle. The CTU will implement multi-centre studies that could help accelerate progress in finding new HIV and TB prevention and treatment options as part of a comprehensive epidemic response. Some of these clinical trials will be designed to investigate the safety and efficacy of HIV treatment and preventive vaccines and evaluate novel TB prevention and treatment strategies.



ACHIEVEMENTS



Aurum Institute Clinical Research Site - Pretoria

The Aurum Institute and Vx Pharma announced the merger of their Clinical Research Operations on 1 Jul 2021 to offer an enhanced and comprehensive solution to clinical trial site and research management in South Africa. The Clinical Trial component of Vx Pharma was re-named the Aurum Institute Clinical Research Site – Pretoria and we are very proud of the addition of a 4th Clinical Research Site within the Clinical Research Division with an experienced research team under the leadership of the CRS Leader, Dr Coert Grobbelaar.



RAMP Scholarships

RAMP (Research and Mentorship Programme) scholarships runs from mid-year to the next mid-year and mentors medical students from previously disadvantaged communities in the US. The programme is managed by the HIV Vaccine Trials Network (HVTN) with Aurum involvement detailed below:

- 2019/2020: Dr Kathryn Mngadi (CRS Leader Tembisa Clinic 4) supported Hussein Magale. Project Title: Basal Metabolic Index and HIV-1 Vaccine-induced Immune Responses

Poster presentation accepted at HIV R4P end 2020

- 2020/2021: Yajna Duki (Project Manager Tembisa Clinic 4) and Dr Kathryn Mngadi are co-mentors for Aliah Fonteh and Jeremy Fagan

Project Title: Assessing HIV risk and factors related to HIV seroconversion among low risk participants in North America and sub-Saharan Africa in the HVTN 100, 107, 108, 111 and 120 studies. Oral Presentation accepted for virtual HVTN May FG Meeting 2021 – slide deck currently in review (data collated, results pending)

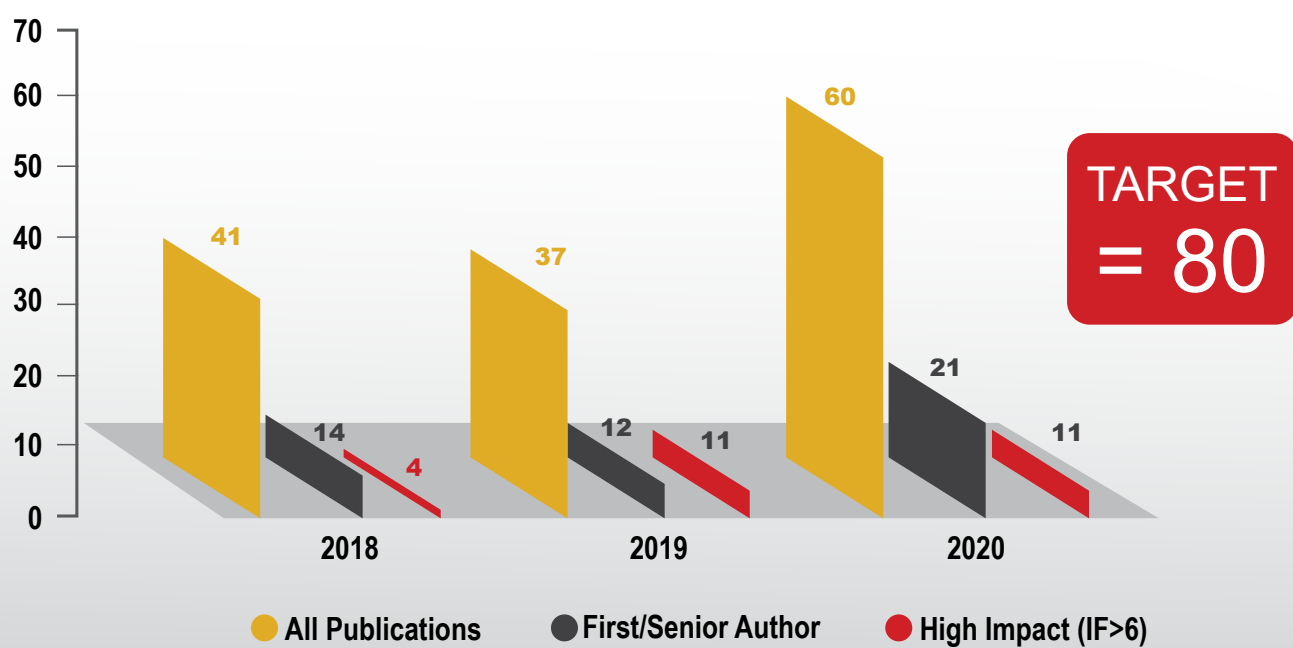


PUBLICATIONS

In 2020 the CRD staff contributed to 19 scientific publications, including three senior author papers. Eight papers were published in high impact peer-reviewed journals (impact factor >6).

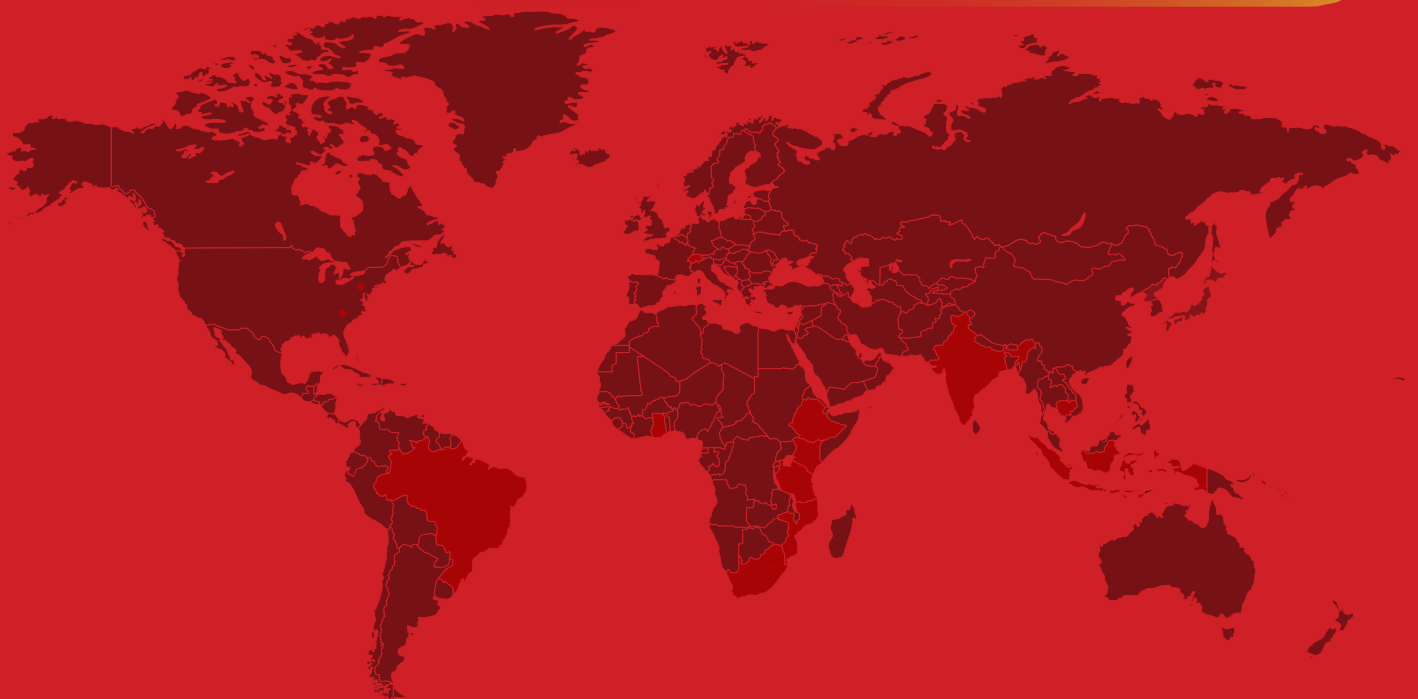


PUBLICATIONS



50

Aurum International



Globally, Aurum oversees the IMPAACT4TB project, responsible for reaching vulnerable and affected communities in South Africa, Ghana and Mozambique. In this project, we are supported by internationally recognised consortium partners: the KNCV Tuberculosis Foundation (running IMPAACT4TB in Malawi, Tanzania, Ethiopia and Indonesia), the Global Drug Facility, Johns Hopkins University and the Clinton Health Access Initiative as lead implementing member in Cambodia, India, Kenya and Zimbabwe. Collaborating partners in this project include the WHO and the South African non-governmental organisation Treatment Action Group (NGO). The goal for the International division is to continue with the successful implementation of the project and extend it for two more years, while expanding Aurum's foothold and presence globally. Aurum will need to strengthen its strategic alliances and focus more on networking to gain stronger global partnerships with new funding mechanisms.



IMPAACT4TB - Partners and Countries

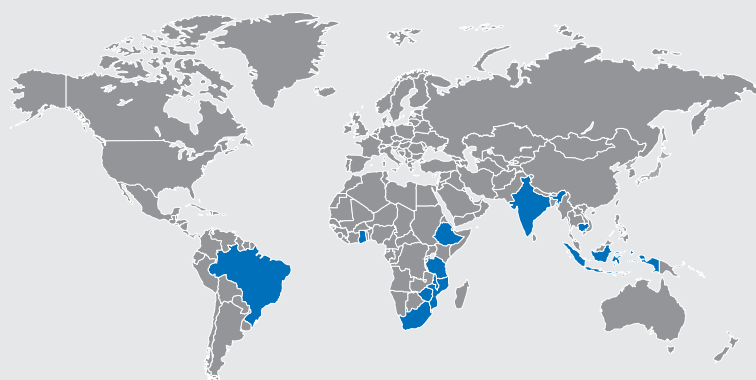


Project Countries	
Low income Countries	Zimbabwe, Tanzania, Mozambique, Ethiopia, Malawi
Low Middle Income Countries	Indonesia, Kenya, Ghana, India, Cambodia
High Middle Income Countries	South Africa, Brazil

Consortium Partners		
 THE AURUM INSTITUTE	 JOHNS HOPKIN UNIVERSITY	 TAG Treatment Action Group
 Stop TB Partnership GLOBAL DRUG FACILITY	 KNCV TUBERCULOSIS FOUNDATION	 CLINTON HEALTH ACCESS INITIATIVE

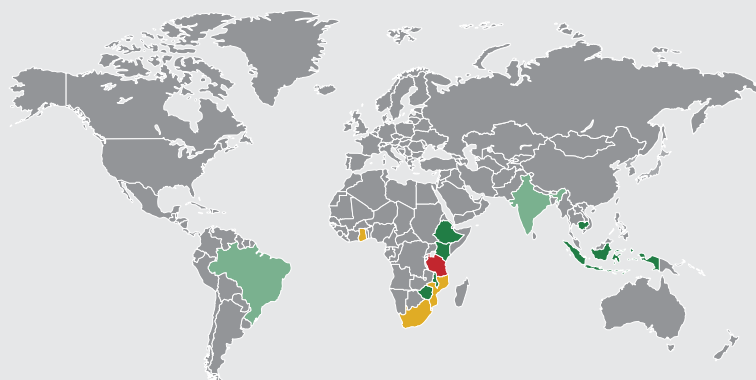
IMPAACT4TB: 3HP IMPLEMENTATION PROGRESS

3HP ALREADY IN COUNTRY Feb 2021



South Africa | Ethiopia | Zimbabwe | Cambodia | Kenya | Malawi | Indonesia | Ghana | Mozambique (pending India and Brazil but ordered)

WILL START DELIVERING 3HP (Fixed-Dose Combination (FDC) and singles) by end of 2021



Tanzania | Pending* Donation of 3HP to Bangladesh

3HP INITIATION SCHEDULE

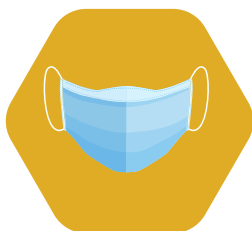
July 2020	●	Cambodia	March 2021	●	Mozambique
July 2020	●	Zimbabwe	March 2021	●	Ghana
August 2020	●	Ethiopia	April 2021	●	South Africa
August 2020	●	Kenya	June 2021	●	India
September 2020	●	Malawi	June 2021	●	Brazil
December 2020	●	Indonesia	TBD 2021	●	Tanzania

IMPAACT4TB: CURRENT STATUS

Other donors providing support to 3HP rollout



IMPAACT4TB
Supporting COVID-19 Response



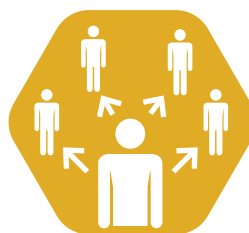
Country teams that supported PPE in response to COVID-19:
Ghana, Malawi, Mozambique, South Africa, Zimbabwe



Country teams that supported training in response to COVID-19:
Brazil, Kenya, Mozambique, South Africa



Country teams that supported IEC materials in response to COVID-19:
Ghana, Kenya, Malawi, Mozambique, South Africa



Country teams that supported COVID-19 M&E activities in response to COVID-19:
Brazil, India, Kenya, South Africa



The goal for the International Division is to continue with the successful implementation of the IMPAACT4TB project while expanding Aurum's foothold and presence globally."





Aurum Ghana



AURUM GHANA RESPONSE TO THE COVID -19 PANDEMIC

The first two cases of COVID-19 in Ghana were reported in Accra on March 12, 2020. The disease progressively spread within the Greater Accra Region and subsequently to other parts of the country.

Aurum Ghana responded very early to a call by Government for support by undertaking the following:

- Donating 10,000 sputum containers for use in the early stages of contact tracing.
- Donating PPE and supplies (protective overalls, gloves and hand sanitizer, hand wash soap) to the Ayawaso West Municipal Health Directorate. The Ayawaso West Municipality was one of the hot spots of COVID-19 at the beginning of the pandemic and is the Municipality within which the Aurum Ghana offices are located
- Releasing fuelled Aurum vehicle and driver for a month to support Ayawaso West Health Directorate's contact tracing activities.

IMPAACT4TB: Scale Up of Short Course TB Preventive Therapy (3HP)

The Aurum Institute Ghana (AIG) is collaborating with the Ghana Health Service (GHS) to implement the scale-up of TB preventive treatment under this project. This initial phase is implemented in 12 health facilities in four administrative regions of the country. Two of the facilities will serve as sentinel sites for evaluation of the project.





PARTNERSHIP WITH THE WORLD FOOD PROGRAMME ON COVID-19 ANTI-STIGMA CAMPAIGN

The United Nations World Food Programme (WFP) provided funding to Aurum Institute Ghana to promote education and sustain the campaign on COVID-19 prevention in the country. AIG initiated educational activities, which included an anti-stigma campaign to address the negative effects of COVID-19 associated stigma and demystify the disease by empowering people with correct and appropriate information. The campaign was conducted over five months, from August to December 2020. The activities undertaken as part of the campaign included:

- Development of educational and anti-stigma messaging materials and videos using influential people in Ghana
- Distribution of educational leaflets to health institutions.
- Conducting community anti-stigma campaign at Ayawaso West Municipality by community health volunteers
- Engaging a COVID-19 Ambassador to sensitize hotspot communities on stigmatization.
- Dissemination of anti-stigma messages on traditional and social media

Anti-Microbial Resistance (AMR) Grant

In December 2020, Aurum was awarded a 7-month grant (Country Grant 1a) by Mott MacDonald, with funding from the Fleming Fund, to support the development of an AMR surveillance system in human and animal health.

Specific deliverables under this bridge grant include:

Contract and manage the contractor on behalf of the Fleming Fund. Oversee refurbishment of all laboratory sites.

- Work with other service providers to ensure sites are ready for equipment installation and training by equipment providers.
- Work with the Ghana Health Service to ensure appropriate transport, asset management and installation processes are followed, as well as building capacity of the Ghana Health Service to manage equipment maintenance effectively.
- Work with service providers and Ghana Health Service to support maintenance planning for laboratory equipment, as well as ensuring adequate service maintenance plans are in place with equipment providers.
- Procure consumables and reagents on behalf of the Fleming Fund for sites and ensure the Ghana Health Service is engaged and capacitated to take over this function.
- Support sites to indicate predictive consumable and reagent supply is maintained.
- Support the Management Agent to ensure government relations are maintained and are adequately informed of progress to date by site.

Implementation of the planned activities will be completed by July 2021.

This is an exciting new area for Aurum Ghana with the potential for a longer-term partnership with Mott MacDonald beyond the current 7 months of implementation of this award.



LOOKING AHEAD: STRATEGIC DIRECTION

For long-term sustainability of Aurum Ghana, AIG has commenced the process of finalizing a three-year strategic plan for the period 2021-2023.

The goal of the strategic plan is to support the Ghana Health Service to improve the health of people and communities living in poverty and afflicted by diseases of poverty through innovation in global health research, systems, and service in Ghana.

Corporate objectives identified as critical for the success of the plan include securing an anchor project in Ghana to establish sustainability in 3 years, establishing Aurum Ghana's presence as a strong health support partner to the Ghana Health Service,

and progressively localizing the organisation while still adhering to the vision principles of the Aurum Group.

Programmatic objectives of the strategic plan include; supporting access to health services in Ghana through private sector engagement and partnership, supporting the Ghana Health Service in the delivery of innovative health interventions targeted at priority health challenges such as non-communicable diseases.

Key to this process is understanding the funding landscape in Ghana, identifying which organizations who we can identify as comparators are implementing which health programmes as well as identifying opportunities for partnership, including with Research institutions.





Aurum Mozambique



Registered in Mozambique as a foreign organisation in January 2019, Aurum Institute Mozambique has completed its journey to become a local entity, and Fundação Aurum was registered as a local non-governmental organisation in November 2020. The Fundação collaborates with the National TB Control and the HIV/STD Programmes from the Ministry of Health of Mozambique to implement research projects and programmatic interventions with a relevant public health impact.

Fundação Aurum will try to leverage the close connection with the Aurum Institute South Africa to bring to Mozambique the South African experience in TB and HIV research and public health interventions, partnering with other relevant health providing entities, both NGOs and government institutions.

Since its establishment in Mozambique, the Aurum Institute has received funding for the implementation of UNITAID and Stop TB Partnership TB Reach Wave 8 projects. The IMPAACT4TB project is funded by UNITAID and is intended to start and promote expansion of 3HP, a short course regime to treat latent

TB infection. The project funded by Stop TB Partnership looks to establish simple and functional pathways to improved TB patient reference from the private health sector to the public National Health System. Furthermore, Aurum has entered into a partnership with Vanderbilt University from Nashville, Tennessee, US, to collaborate in the implementation of the PRISM project, aiming to build capacity for research project set-up and data management at the University Eduardo Mondlane.

The main objective of Fundação Aurum for 2021 is to consolidate the organisation as a relevant partner in the Mozambican health sector, and to obtain additional funding to reduce economic dependency on Aurum South Africa. Fundação Aurum has submitted applications for TB Reach Wave 9 and a CDC call for operational research. We are also preparing two important applications to get funding through CDC to establish Fundação Aurum as a clinical PEPFAR partner in Mozambique.



Human Resources

2020 started as 'business as usual', with Human Resources primarily focusing on its Strategy, Service Delivery and Governance models to continue the delivery of consistent high-quality services across the Group. However, focus changed rapidly in the first quarter of the year frantically addressing associated COVID-19 challenges as well as ensuring the delivering of the Human Resources objectives and obligations.

The COVID-19 global pandemic impacted on society, business and people which resulted in a wide range of COVID-related measures.

The health of our employees was our highest priority, however business continuity had to be ensured. As an organisation we were compelled to build on existing flexibility measures and link them to address the COVID-19 pandemic. With the emerging COVID challenges a "New Way of Work" arose in meeting these challenges.



HUMAN RESOURCES

At the very beginning of the pandemic, the quickly convened COVID-19 taskforce made it possible for Aurum to implement effective measures to ensure the well-being of our employees along with business continuity:

- Proactive and rapid formation of the organisation's crisis response teams;
- Early preparation and execution of organisational communications activities;
- Creation of a dashboard with the most important COVID related figures, including an infection tracking dashboard;
- Expansion of ICT bandwidth and infrastructure such as Teams to allow for employees to work from home;
- Offering of advice and execution of measures to provide employees with flexibility in terms of time and location of their work activities;
- Development of standard operating procedures on managing the COVID cases in the organisation; and
- Provision of psychosocial support to all staff and their families through-out the period of the pandemic.

Despite these pandemic challenges, Human Resources was able to develop and drive our Human Resources strategic thrusts and business deliverables of **PEOPLE ATTRACTION and RETENTION, PEOPLE MANAGEMENT, VALUE BASED CULTURE and PEOPLE GROWTH**. These activities were underpinned by the Human Resources Solution Centre that provided consistent and timely Human Resource information and support during all forms of employee engagement as well as e-HR through the automation of many of the Human Resource Transactional activities.

OUR PEOPLE

People are centre to our actions. Dedicated, healthy and engaged employees are paramount to Aurum's vision to expand as an organisation and to shape a successful impactful future for the next 100 years.

This has guided in aligning the Human Resource journey across the Group to provide support, facilitate collaboration, offer advice, and guide the strategic direction of all Human Resource practises and strategic thrusts to meet expectations of the years to come.

Professors
in the
Organisation:

13

81%
of Staff are
between the
age of 18 and
40 years

PHD
Qualifications:

13

Number
Active Staff:

4195

Medical
Doctors:

57

Pharmacists:

11

Master's
degrees:

59

Health
Economists:

2

Professional
Nurses:

57

Women in Senior and
Professional Level Leadership Positions: 61%

Achieved
B-BBEE
Accreditation
Level 1

Successfully hosted **886**
Unemployed Youth during the course
of 2020

Strategic Pillars

The Human Resources journey is oriented towards four long-term strategic focus areas. These pillars are the basis for the ongoing formulation of the focal points of our work.

In developing these focus areas, we have taken Aurum's strategic drivers and business scorecard, as well as external trends and developments into account and also engaged with our employees throughout the organisation. The strategic focus areas include both existing and new topics. Based on these priorities, we have defined specific individual goals for the next three (3) years and will work to achieve these goals within the organisation.

Priorities include a range of strategic shifts and adjustments in policy and processes and the implementation of related tools intended to enable the organisation to adapt to the changing demands in the environment and among stakeholders.

For the year under review, these priorities included:

- Continued implementation and refinement of the performance management framework, together with a senior leadership 360° Behavioural assessment, in association with a Group remuneration policy and mechanisms, to ensure alignment to the organisation's culture and support of performance delivery;
- Scoping, with the intent to introduce a Human Resources Manpower Planning programme, to effectively plan human resources needs and succession throughout the organisation and provide and support various mechanisms designed to address talent needs and skills gap within the organisation that may exist between the current human resources needs to that of future human resources needs of a growing organisation;
- Continued implementation of executive and leadership development together with coaching programmes and strategies for learning and skills transferal that offers development opportunities to all employees;
- Evaluation and improvement of the Aurum Employment Equity and BBBEE programmes; and
- Continued efforts of digitisation of certain of the administration functions and activities in the organisation in order to improve Human Resources service delivery to the organisation.

Employee Performance Management Framework

The overall aim of the Performance Management Programme (PMP) and 360° Assessment evaluation is to enable the organisation and its employees to strive for excellence in the achievement of set goals at all levels by facilitating effective performance planning; performance and behaviour monitoring and measurement; and appropriate skills, behaviour, knowledge and attitude development.

More specifically, the objectives of the PMP are to facilitate and ensure the following:

- Alignment organisational, entity, divisional, departmental and individual goals and objectives;
- Agreement on clearly defined employee performance goals and objectives in alignment with business goals;
- Monitoring and measurement of employee and team performance against agreed-on goals and objectives;
- Provision of regular feedback between management/supervisors and their direct reports on performance relative to agreed-on goals and objectives;
- Improvement of performance through multi-faceted employee development approaches and appropriate skills, knowledge and behaviour development;
- Effective discussions on succession planning, career-pathing, which may inform the Human Resources Manpower Plan as well as employee development and movement considerations; and
- Enhancement and reinforcement of a culture of performance and teamwork among employees at all levels in the organisation.



Human Resources Workforce Planning Framework and key strategies:

The objective is to attract, recruit and retain skilled and capable staff. The main objective of Aurum's Human Resources Workforce Planning Framework is to align the organisation's Human Resources strategically with its business direction, thereby ensuring that the correct number of people with the right skill sets or competencies are in the right jobs at the right time.

The process, therefore, enables the organisation to:

- Determine and source human resources that are capable of meeting strategic and operational objectives;
- Obtain the required quality and quantity of staff;
- Make optimum use of available staff;
- Anticipate and manage surpluses and staff shortages; and
- Develop a multi-skilled, representative and flexible workforce that enables the organisation to adapt rapidly to the changing environment in which it functions.

This planning process is integrated, both in approach and in the engagement of senior and line management. It takes into account the organisation's strategic direction and is reconciled with available budget.

Key to the Framework is succession planning where the reviewing of staff and succession and development plans for identified individuals into key positions occur.

This systematic process ensures that:

- Current and future human resources risks to the organisation are managed;
- Human resources are optimally used or future needs are identified and sourced; and
- Sustainability in terms of optimal current and future, short-to medium-term implementation plans, staffing of the organisation is assured.

People and Leadership Development

People and Leadership focusses on the development of employees and managers.

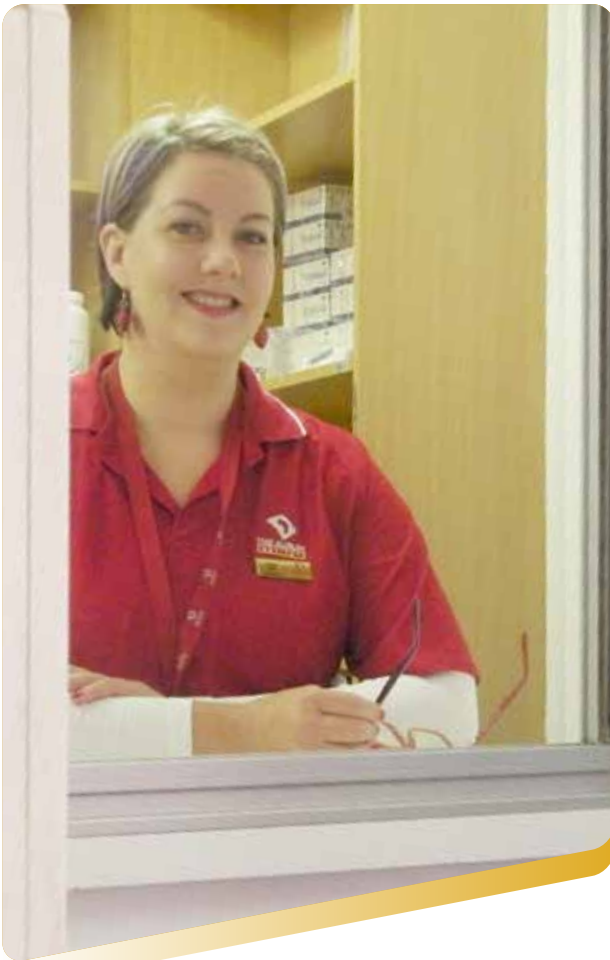
These activities centre on the expansion and addition of innovative and appropriate learning formats as well as on the introduction of digital learning and development platforms. Further aspects are the ongoing reinforcement of Aurum's Leadership Principles, the update of the career path framework and offering competitive compensation which is commensurate with the position in the organisation.

Additionally, the Human Resources team, in collaboration with the Training and MDP team, continue to deliver the in-house Management Development Programme geared towards the mid-level managers who were identified through succession planning and performance management processes to need soft managerial skills training.



In 2020, I took comfort from the words of J. K. Rowling. The knowledge that you have emerged wiser and stronger from setbacks means that you are, ever after, secure in your ability to survive.”

Samantha Smith, Head of Risk and Compliance, Finance



Employment Equity

The Employment Equity Plan is at the core of the organisations commitment to transformation and diversification and to achieve representivity at all occupation levels and categories of staff, as well as to give effect to the Employment Equity Policy.

The organisation's Employment Equity Plan sets out the measures to be taken to ensure legal compliance with the Employment Equity Act, Act 55 of 1998, as well as the business imperative to be representative of the areas and countries in which the organisation operates. This includes the setting of objectives, activities, numerical goals and targets to move progressively towards achieving representivity of the designated groups across the organisation's structure.

Progress towards achievement of long-term employment equity targets continue at a steady pace.

Once again, The Aurum Institute NPC achieved a BBBEE Level 1 status, effective until August 2021. The objective is to retain this status.

Healthy Employees, Healthy Working Environment

The health and well-being of our employees is of paramount importance to Aurum.

Accordingly, we ensure a compliant and healthy and safe working environment to help our employees master the challenges of the current world of work. Our Group Health Management programme provides support in the form of various measures to promote employee wellness, occupational health and safety to healthy lifestyles and work styles.

As an organisation, we offer a wide number of programmes and initiatives for all our people, ranging from the employee wellness programmes, corporate social counselling services (employee, manager and team counselling) and medical health check days. This COVID year, the psychological health of our employees was core to our wellness programme. Support and offerings were made available to reduce stress and encourage dealing openly with psychological illnesses at the workplace, which was of particular importance in this time of COVID-19.

HR Processes and Infrastructure

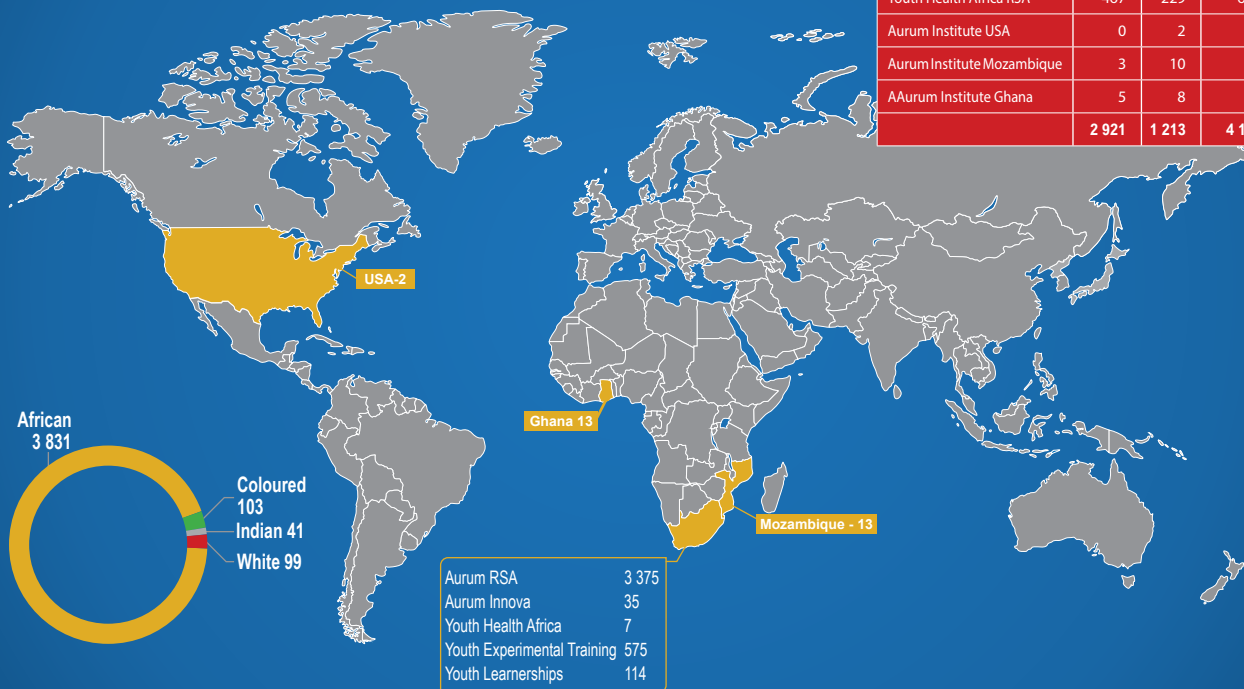
Our employees and managers are at the centre to all Human Resources Processes and Infrastructure actions. Accordingly, we maintain a Group focus on harmonised and offering of centralised core Human Resources support and services based on a consolidated and user-friendly processes and tool landscape and work environment.

Human Resources systems, automation, technology and processes are continuously optimised so as to provide these services and support in high-quality, transparent and efficient manner.

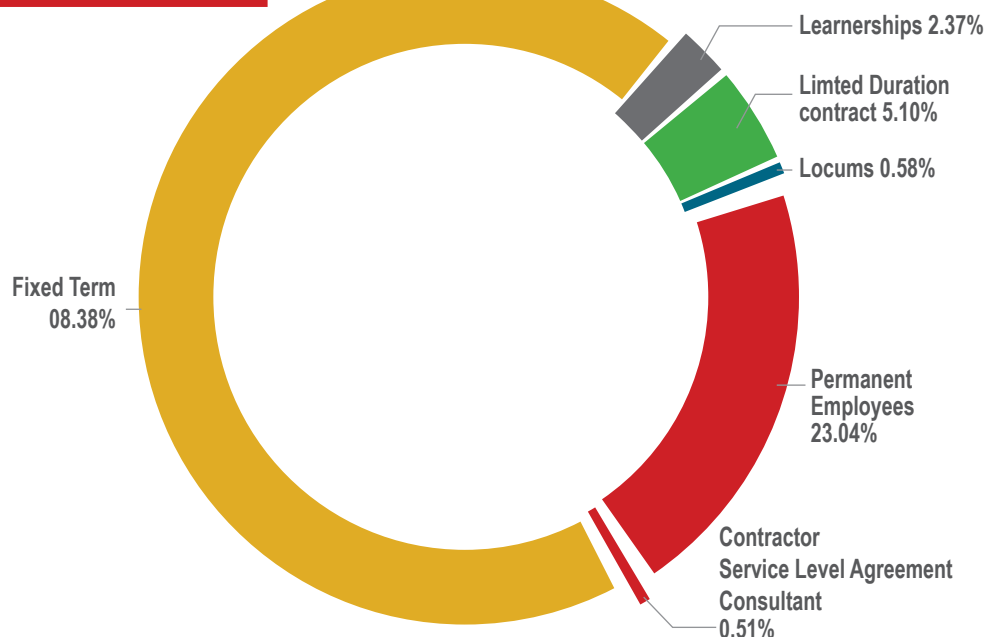
In addition, the digital performance of standard processes, digital signatures and archiving processes were piloted and expanded during the year. All these improvements supported the reduction of repetitive and high-volume processes, as well as in the further reduction of errors on a project-related basis. As a result, the information is available to employees and managers on our SharePoint page and Dashboard and is constantly being enhanced and expanded.

2020 AURUM GROUP PEOPLE SNAPSHOT

Total Employee Count

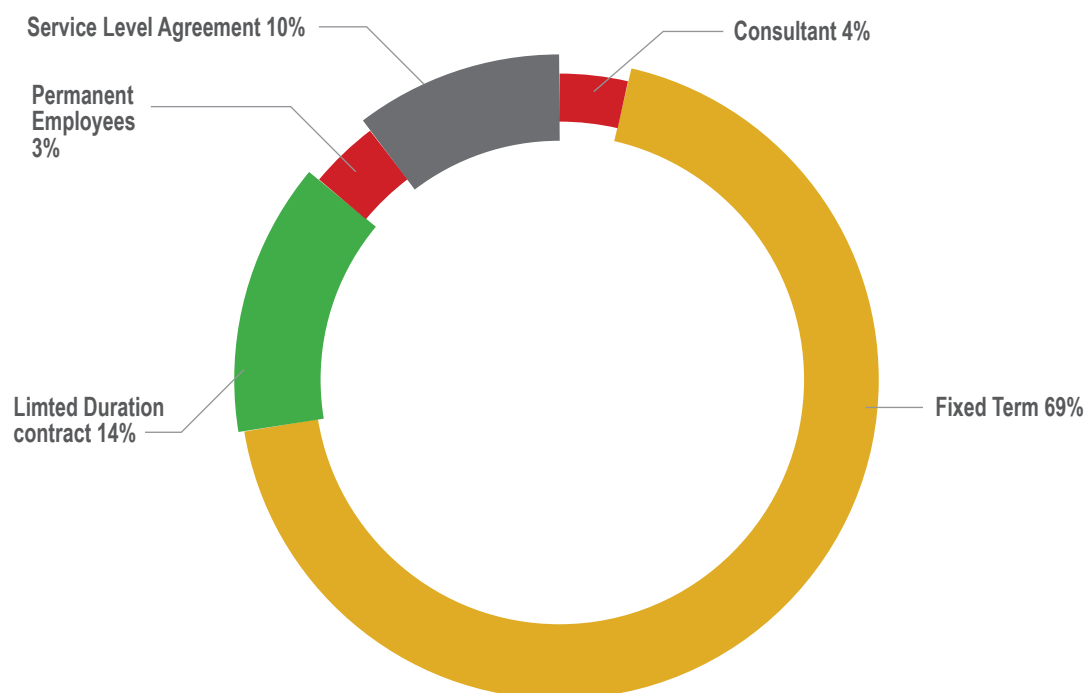


Employee Contract Type

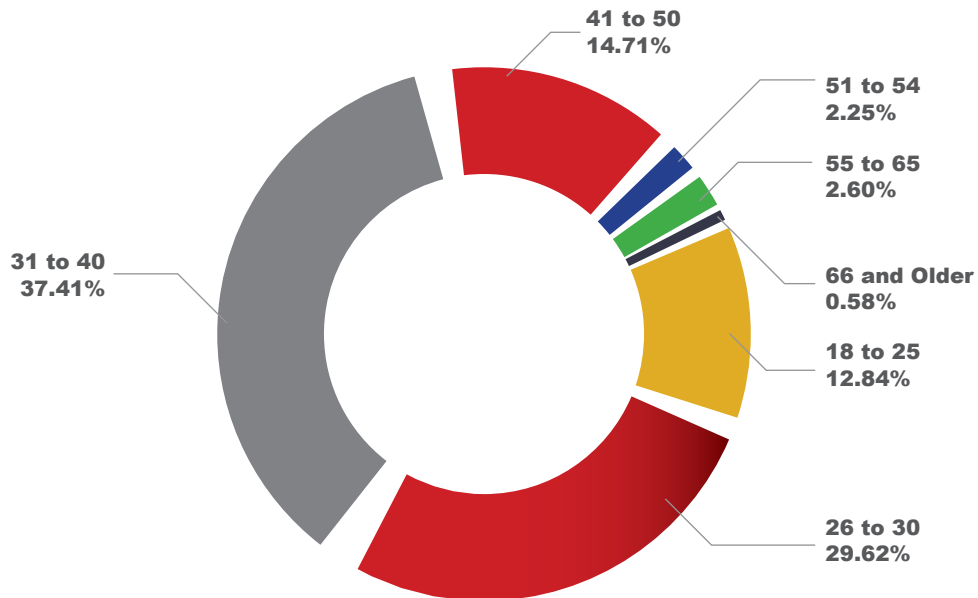




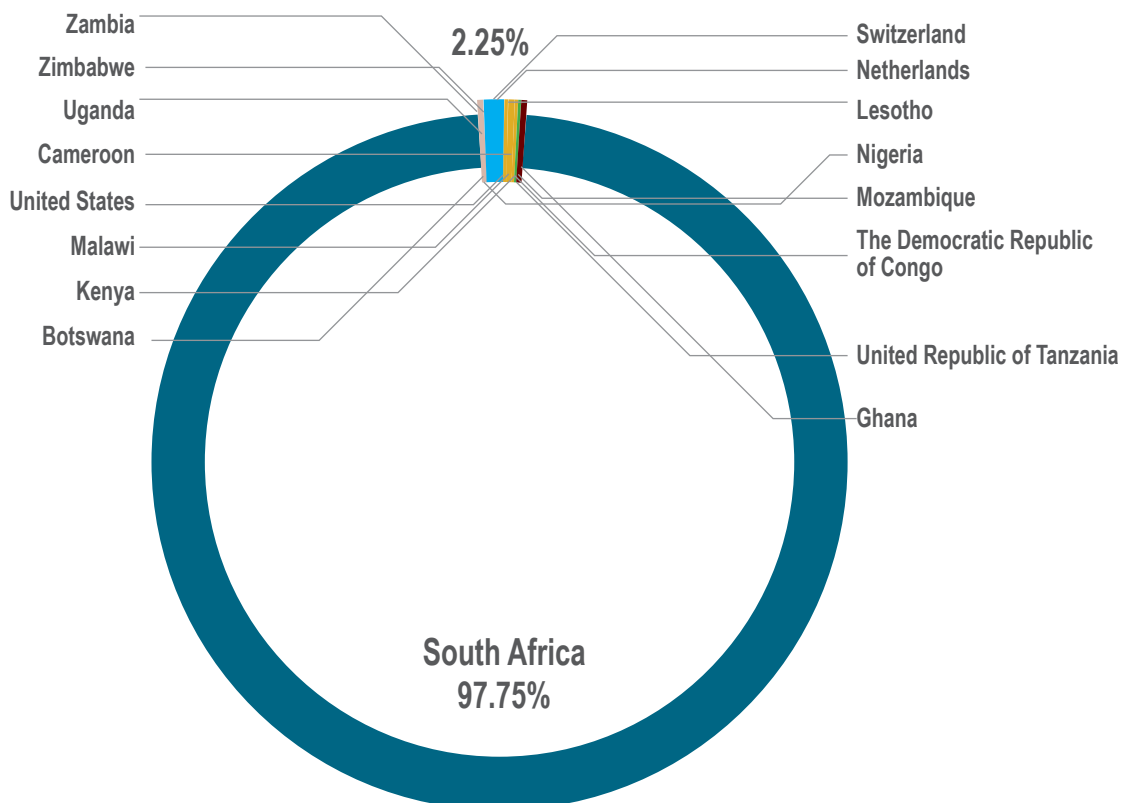
International Contract Type



Total Age Profile



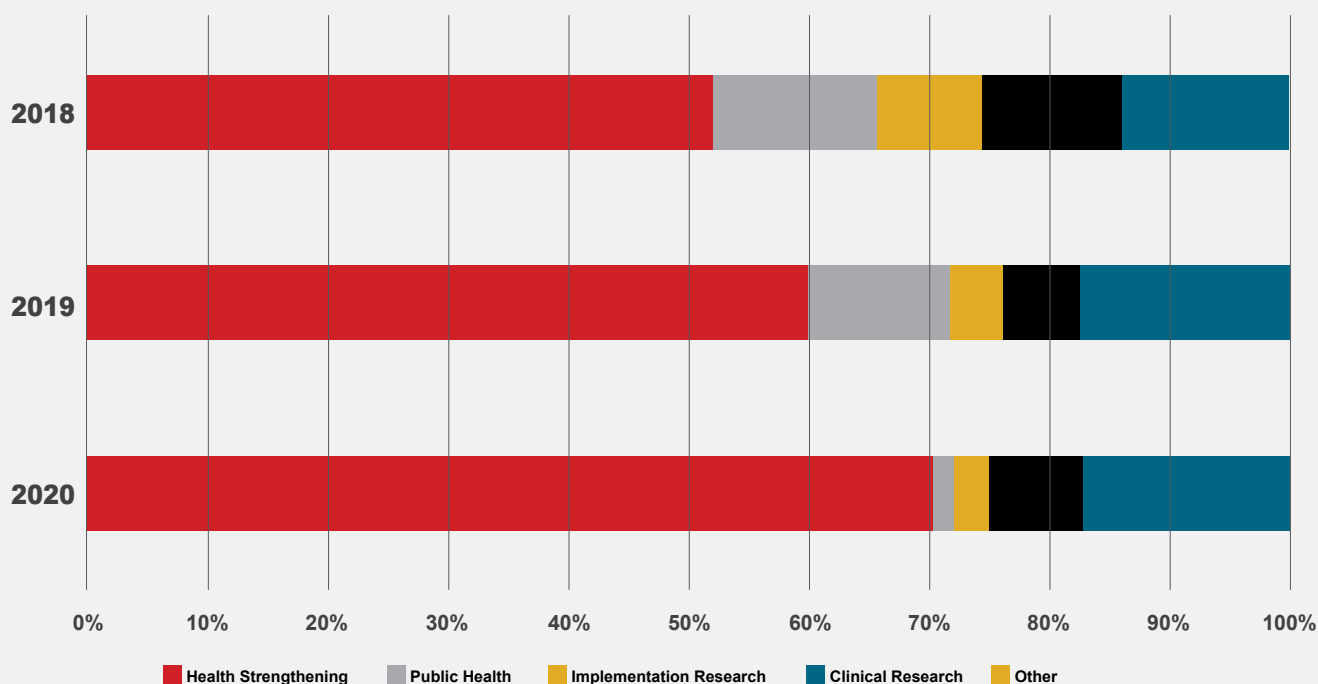
Nationality Differentiation Within The Group





Finance Department

Revenue Composition by Division



Statement of Profit or Loss and Other Comprehensive Income 31 December 2020

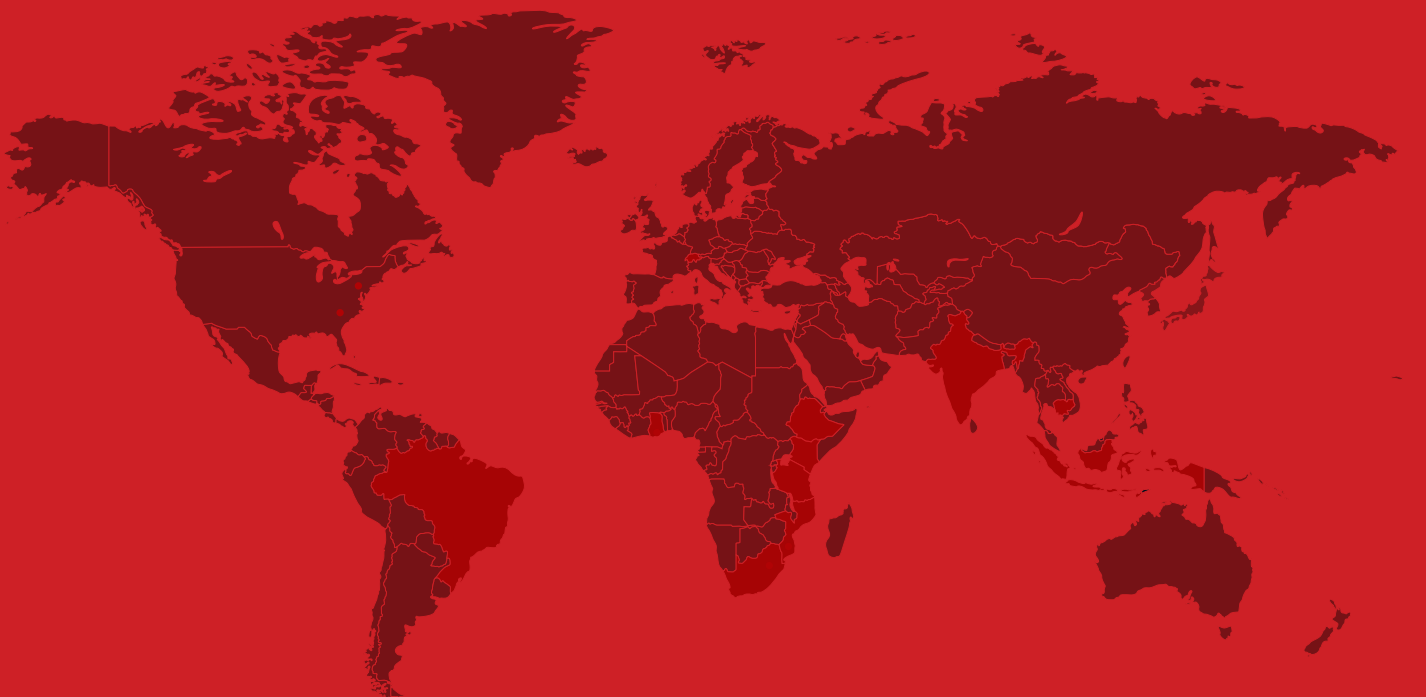
	2020 R	2019 R
Project revenue	1 432 407 360	1 459 777 563
Service and Training	10 048 494	251 657
Total revenue	1 442 455 854	1 460 029 220
Total other income	200 126 044	210 274 720
Total income for the year	1 642 581 898	1 670 303 940
Total operating expenses	1 558 301 881	1 611 080 625
Surplus for the year	84 280 017	59 223 315
Other comprehensive income	74 031 916	27 860 382
Total comprehensive income for the year	158 311 933	87 083 697

**Statement of Financial Position as at
31 December 2020**

	2020 R	2019 R
Assets		
Non-Current Assets		
Property, plant and equipment	89 365 620	87 683 296
Investments in subsidiaries	100	100
Loans to group companies	607 262	59 164
Right-of-use asset	6 518 247	11 165 876
	96 491 229	98 908 436
Current Assets		
Project funds receivables	68 461 503	88 164 388
Other receivables	43 710 711	24 380 984
Other financial assets	107 471 579	37 556 261
Cash and cash equivalents	497 033 952	232 009 519
	716 677 745	382 111 152
Total Assets	813 168 974	481 019 588
Equity and Liabilities		
Equity	402 819 501	244 507 568
Liabilities		
Non-Current Liabilities		
Lease liability	2 429 573	5 999 966
Long term loan	5 587 194	6 094 554
	8 016 767	12 094 520
Current Liabilities		
Current portion of lease liability	5 416 531	6 059 736
Trade and other payables	121 406 968	167 344 872
Funder advances	269 281 399	46 413 398
Provisions	5 557 639	3 864 991
Current portion of long term loan	670 169	734 503
	402 332 706	224 417 500
Total Liabilities	410 349 473	236 512 020
Total Equity and Liabilities	813 168 974	481 019 588

8

Our Partners



AFFILIATES



FUNDERS



INTERNATIONAL COLLABORATORS



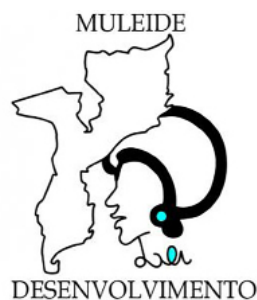
NIMRI



THE AURUM INSTITUTE GHANA COLLABORATORS



FUNDAÇÃO AURUM COLLABORATORS



República de Moçambique
Ministério da Saúde



THE AURUM INSTITUTE SOUTH AFRICA COLLABORATORS



ANNUAL REPORT **2020**

OVERCOMING ADVERSITY

"To seek, to find, to share, to care."

Head Office: 29 Queens Road
Parktown, Johannesburg
South Africa, 2193
Tel: (+27) 10 590 1300
Email: info@auruminstitute.org

Copyright © 2021. The Aurum Institute.