The Pathology Network

Edition 2

Celebrating Advances in Africa's Diagnostic Ecosystem

THE PATHOLOGY REPORT

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OUR COVER

TABLE OF CONTENTS

Foreword

PROGRESS IS A TEAM SPORT

The world of medicine is moving at break-neck speed. From AI breakthroughs to shifting models of healthcare financing, every region is being forced to rethink how it secures the health of its people. In Africa, this conversation is more relevant than ever. As Western nations scale back donor support to focus on their own internal pressures, our continent is confronting the hard but liberating question of self-reliance.

In this edition, Dr. Maureen Waithaka shares how earlier this year she presented our work at the European Congress on Digital Pathology in Barcelona, showcasing how Africa is building its own diagnostic systems. Our story resonated. It was notable proof that African-led institutions are engineering solutions fit for Africa's realities. In addition to fostering deeper collaborations with our partner pathologist in Spain, that platform opened new conversations—with researchers, with partners and with investors.

Artificial intelligence is one of those frontiers where Africa must lead rather than follow. AI can—and should—make African healthcare more accessible, more efficient, and more affordable. But technology is only as powerful as the environment in which it operates. That is why, we are working to champion the safe, context-aware use of AI: for workflow, for diagnostics, and ultimately for patients.

We also highlight an often overlooked but vital link: diagnostics and pharmaceutical access programmes. While global pharma spends billions to bring life-saving medicines within economic reach of patients in developing countries, weak diagnostic systems mean patients are too often identified too late, undermining these well-intentioned efforts. Our work at TPN is to close that gap—to make diagnostics a reliable bridge between patients and these programmes

There is much to explore in these pages—new partnerships, new technologies, and new momentum. We also pause to honour the memory of our late mentor Prof. Farzana Rana, whose influence continues to guide us.

I want to thank everyone who contributed in anyway to this edition from the thoughtful paragraphs submitted by Dr. Onyuma and Dr. Kirimi to the in-depth analysis of telepathology in Africa by Dr. Mary Achakolong. We welcome you contribute to our upcoming end-of-year edition - send us your stories!

That said, we wish you happy reading and hope you find these pages both informative and inspiring.

Dr Joshua Kibera
Founder/CEO

EDITORIAL TEAM

Dr. Joshua Kibera

Dr. Joshua Kibera is a pathologist and health-systems architect. He leads The Pathology Network in building equitable, technology-enabled access to diagnostics across Africa. He also brings an independent voice on healthcare reform, advocating for resilient systems that put patients at the center.

Marleen Groen

Marleen Groen has over four decades of experience in financial services and global private equity. She was the founder of Greenpark Capital Ltd and has served on various boards in Europe and the USA. She brings senior strategic insights to the editorial team and while also serving as the current TPN Board Chair.

Lucy Nolan

Lucy Nolan contributes to TPN's editorial team with a focus on storytelling, strategy, and communications. She works across healthtech, edutech and coaching, bringing a unique perspective on connecting people and purpose in diagnostics.

Titus O'Connor

Titus O'Connor is a writer, communications coordinator and MPH student who transforms Africa's complex diagnostic landscape into accessible narratives at The Pathology Network. He is passionate about health innovations that empower communities to take control of their health.

Are you a pathologist, clinician, or lab medical professional interested in sharing perspectives on Africa's diagnostic space? Write to us at communications@tpn.africa.

CONTRIBUTORS

Dr. Maureen Waithaka, M.Med. Anat Path

Dr. Maureen Waithaka is a consultant pathologist with 17 years of experience practising medicine. She is a graduate of the University of Nairobi (MBChB) and Aga Khan University (postgraduate). She currently works with TPN, carrying out histopathology diagnostics and creating medical communications content.

Dr. Mary Achakolong, M.Med. Anat Path

Dr. Mary Achakolong is an Anatomic Pathologist with more than 5 years of experience in histopathology, autopsy pathology and cytopathology. She holds an M.Med in Anatomic Pathology from the Aga Khan University Hospital and an MBChB from Makerere University.

Dr. Timothy Onyuma, M.Med Anat. Path

Dr. Timothy Onyuma is a consultant pathologist with over 20 years of experience in the field. He holds an M.Med in Anatomical Pathology from the Aga Khan University Hospital and an MBChB from the University of Nairobi. He works at M.P. Shah Hospital

Dr. Jesca Muthoni Kirimi, M.Med. Anat Path

Dr. Jesca Muthoni Kirimi is the Chief Anatomical Pathologist at Dr Kalebi Labs. She has over 18 years of experience across East Africa's leading diagnostic centres, including Aga Khan Dar es Salaam and Lancet Kenya, throughout her distinguished career. She holds an M.Med in Anatomic Pathology from the Aga Khan University Hospital.

Carol Nyaga

Caroline Nyaga is a histotechnologist with over a decade of experience in diagnostic pathology. She spearheads quality assurance programmes and optimises laboratory workflows to ensure efficiency and compliance with international standards at The Pathology Network.

Pascal Olulo

Pascal Olulo Okoko leads Partnerships and Programmes at The Pathology Network. With experience in public health and professional training, he focuses on leveraging partner expertise to maximise health outcomes in line with TPN's partnership framework. Pascal believes in mutually beneficial collaboration to deliver practical, impactful solutions.

A KEY SHIFT IN NATIONAL CANCER DIALOGUE

Kenya

THE 2ND NATIONAL CANCER SUMMIT HIGHLIGHTS KEY PILLARS IN THE FIGHT AGAINST CANCER

Carol Nyaga and Pascal Olulo

The Pathology Network (TPN) participated in the 2nd National Cancer Summit, organised by the National Cancer Institute of Kenya from 27th–30th July 2025. The four-day event brought together more than 1,000 stakeholders and marked a notable shift in Kenya's national dialogue on cancer towards focusing more on diagnostic coordination and effective communication across the care pathway.

Over the four days, discussions centred on a multidisciplinary approach, community awareness, early diagnosis, care coordination, health financing, strategic partnerships, and digitalisation

Kenya's Pressing Cancer Statistics

47,000
New cancer cases annually

32,500
New deaths annually

86,000
Prevalent cases lasting 5+ years

as key pillars in the fight against cancer.

The Conference's theme, *"Uniting Our Voices and Taking Action"*, aimed to address Kenya's pressing cancer statistics—over 47,000 new cases and 32,500 deaths annually—by fostering collaboration across sectors, regions, and stakeholders to tackle the prevailing challenges in cancer detection, treatment, and management with urgency and innovation.

The experience broadened our perspective on Kenya's cancer care landscape and reaffirmed our conviction that intersectoral collaboration is key to achieving sustainable and effective cancer management. Furthermore, the breadth of innovation and best practices showcased from across

the country was impressive. One could only imagine the compounded impact these efforts could have if they were systematically aligned through coordinated national partnerships. It was equally inspiring to learn how leading healthcare firms...

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FROM SEARCH BARS TO CONVERSATIONS:

Digital Trends

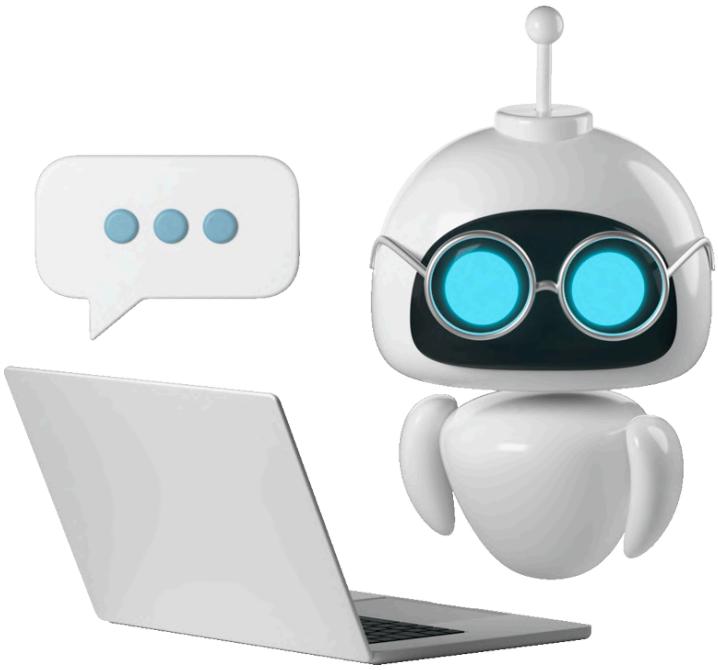
THE HEALTHCARE CHATBOT ERA IS HERE - IS AFRICA READY?

Lucy Nolan

The way people seek health information is changing fast. Typed search queries are no longer the default. Instead, conversational AI such as chatbots and virtual assistants, are rapidly becoming the first point of contact between patients and healthcare systems.

In 2025, 59% of healthcare providers report deploying AI-powered virtual assistants for tasks like appointment scheduling and triage. AI chatbots already resolve 67% of patient inquiries in under 10 minutes, freeing up clinicians and improving access in overstretched systems.

This is not just about speed. In mental health, 76% of digital therapy platforms rely on conversational AI, while in remote care settings, AI support has boosted patient follow-up adherence by 24%.
The global market is expected to double from USD 22.4 billion in 2023 to nearly USD 45 billion by 2026.



The African Opportunity and the Risk of Delay

Already, Africa is producing home-grown solutions: low-cost digital microscopes, mobile triage tools, and WhatsApp-style bots that bring information closer to the patient. However if we do not lead in shaping how conversational AI works in our context, we will import systems that do not reflect our realities, cultures, or infrastructure.
Conversational AI in healthcare is not science fiction. It is here. The warning for Africa is simple: we must design and own these systems now or others will do it for us.

And once patient expectations shift to "Ask the bot" rather than "Search the web," there will be no going back.

SHARING OUR INNOVATION STORY IN BARCELONA

Europe

NOTES FROM THE 21ST EUROPEAN CONGRESS ON DIGITAL PATHOLOGY

Dr. Maureen Waithaka

I recently had the incredible opportunity to represent The Pathology Network at the 21st European Congress on Digital Pathology (ECDP2025), which was held at the Palau de Congressos de Barcelona, situated in the heart of Barcelona, Spain. It was an honour to not only attend, but also to present our innovative digital pathology workflow to a global audience of peers and experts.

The conference was an invaluable experience, offering a look into the future of our field. I was particularly impressed by the

presentations showcasing the results of studies on the clinical application of various AI diagnostic models. It got me thinking that we need to include more African data on such studies in order to diversify and comprehensively evaluate AI models, which are likely to become a fundamental part of routine pathology practice.

"By adopting these cutting-edge solutions, we can bypass traditional limitations and significantly improve access to surgical pathology for our communities."

For us at The Pathology Network, digital pathology holds immense potential to transform healthcare across the continent. By adopting these cutting-edge digital solutions, we can bypass traditional limitations and significantly improve access to surgical pathology services for our communities.

I returned with new connections, fresh ideas, and a reinforced belief in our mission. I'm excited to apply what I learned to our work and look forward to forging new collaborations that will help advance the practice of digital pathology, both globally and right here at home.

DRUG ACCESS PROGRAMS NEED DIAGNOSTIC COORDINATION TO SUCCEED

Pharma

DIAGNOSTIC CONNECTORS ARE THE MISSING PIECE IN AFRICA'S COMPLEX CARE LANDSCAPE

Titus O'Connor & Dr. Joshua Kibera

Pharmaceutical access programmes (PAPs) are powerful lifelines that ensure patients, especially in low- and middle-income countries, can obtain life-saving medicines that would otherwise be out of reach due to cost, distribution challenges, or weak health systems. They represent hope and are proof that global collaboration can bridge the gap between drug discovery and delivery.

These programmes often involve partnerships between governments, NGOs, and pharmaceutical companies to subsidise treatment, streamline supply chains, and provide affordable care. Yet their success is heavily dependent on timely and accurate diagnoses to help identify the right patients for the programmes.

20%

Sub-Saharan Africa's burden of disease

Weak or broken diagnostic systems mean that deserving patients pile up in the diagnostic stage, mixed in with others, waiting for their diagnosis while their disease continues to progress. The sad reality is that late diagnoses or misdiagnoses render access programmes tragically ineffective. Free or subsidised medicine is of limited use to a stage three or stage four cancer patient. The five-year survival rate for a stage four cancer patient ranges between 5% and 30% depending on the treatability of their cancers.

Susan's story is illustrative of these challenges. A single mother of five living in one of Kenya's poorest slums, Susan has been a food vendor in Mathare for years. She earns barely enough to feed her two children, but she has managed to do well for herself despite the difficulties. Two months ago, she was diagnosed with stage three ...

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PREPARING AI FOR AFRICA AND AFRICA FOR AI

Futurism

REFLECTIONS ON AI IN AFRICAN DIAGNOSTIC SYSTEMS: PART I - TERRAFORMING

Dr. Joshua Kibera

The more I learn about AI, the more fascinating (and slightly unnerving) it becomes. Something monumental has shifted. We all sense it. How we work, play, and interact is being fundamentally altered, forever. Machines are now performing tasks we once thought only humans could do. Those who use AI to turbocharge productivity

are leaving the rest of humanity behind, especially those with limited access to the technology.

Knowledge is cheap. The new gold? **Context**. And in healthcare, nothing is more powerful than deep medical expertise combined with clinical and local situational context.

So when I read that in July 2025, Kenya led the world in ChatGPT usage as a percentage of its connected population, I had to pause. What! Who would have thought that would happen? What happens when energetic, creative, youthful Kenyans pour tons of local context into powerful AI tools? How will it change Kenya? What will it mean for Africa? And more importantly for me, how will it shape healthcare?

Terraforming: A Sci-Fi Analogy with Real-World Relevance

As a teenager, I loved science fiction. One idea seared itself into my imagination: the terraforming of Mars. Bold, audacious, probably a bit cocky, the notion of re-engineering a barren planet into a breathable, water-filled world.

42.1%

of Kenyans aged 16 & above use ChatGPT, the highest globally.

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EMBRACING TELEPATHOLOGY:

Telepathology

THE USE OF DIGITAL TOOLS AND AI IN HISTOPATHOLOGY REPORTING IN AFRICA - OPPORTUNITIES AND COSTS

Dr. Mary Achakolong, M.Med Anat. Path.

Histopathology is the cornerstone of accurate diagnosis and management of cancers, infectious diseases, inflammatory conditions, genetic syndromic diseases, and many other disorders. Despite the great demand for histopathology diagnostic services across most African countries, there exists a critical shortage of well-trained pathologists who are mostly centred within urban regions.

In some nations, the ratio is as low as one pathologist per one million people, compared to one per twenty thousand in high-income countries. There is a severe workforce gap which contributes to delays in diagnosis, misdiagnosis, and inequitable access to specialised expertise.

Digital pathology and artificial intelligence (AI) tools are transformative enablers of telepathology (remote interpretation of pathology images) ; however, their uptake in strengthening

diagnostic services in Africa still remain wanting. Telepathology refers to the practice of pathology using telecommunications technology to transmit digitised histology slides for nterpretation and reporting. The provider and user need not exist within the same geographical location for the services to be effective. Traditionally, histopathology relies on glass slides examined under a light microscope.

There is a severe workforce gap which contributes to delays in diagnosis, misdiagnosis, and inequitable access to specialised expertise.

Telepathology disrupts this model by digitising slides using scanners or microscope cameras and enabling remote access through secure networks. The main modalities used in telepathology are static telepathology, where selected still images are captured and shared, dynamic or live telepathology, where robotic microscopes can be controlled remotely, and whole-slide imaging (WSI), where entire slides are scanned at high resolution, allowing pathologists to pan and zoom much like using a microscope.

In Africa, static telepathology was the earliest form implemented because of its low cost and minimal infrastructure requirements...

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PATHOLOGIST AND PARTNER FEATURES

Features

Remembering Prof. Farzana Rana

Over the course of her long and illustrious career, the late Prof. Farzana Rana touched the lives of countless pathologists and doctors. Twelve years after her passing, her former students and colleagues came together to share their memories of her. **Read full tribute.**

Cottolengo Mission Hospital

Cottolengo Mission Hospital is a level four facility, which was initially founded by Cottolengo missionaries in 1993 as a dispensary for patients with disabilities. Located in Chaaria, in the foothills of Mount Kenya, the hospital has passionately served Kenya's most vulnerable populations. **Read full feature.**

TPN NEWS & STORIES

TPN News

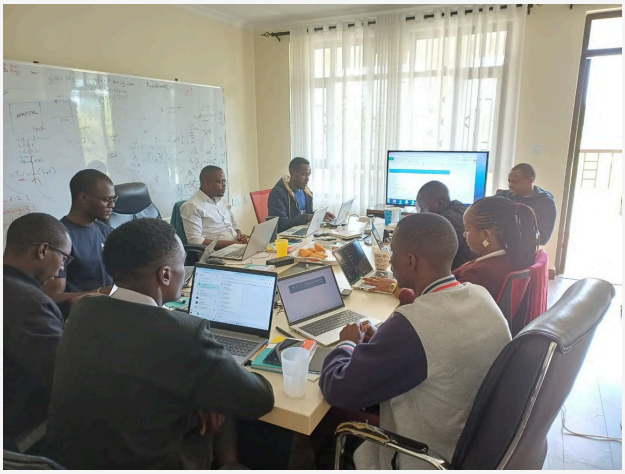
7 Years of ALIS: A reflective episode on the origins of ALIS

What did it take to start building a digital diagnostic platform for an entire continent? Our new **7 Years of ALIS series** unpacks the technical, operational, medical, governance, and business lessons we've learnt over the past 7 years.

Listen to the first podcast episode here

Exciting tech update for doctors

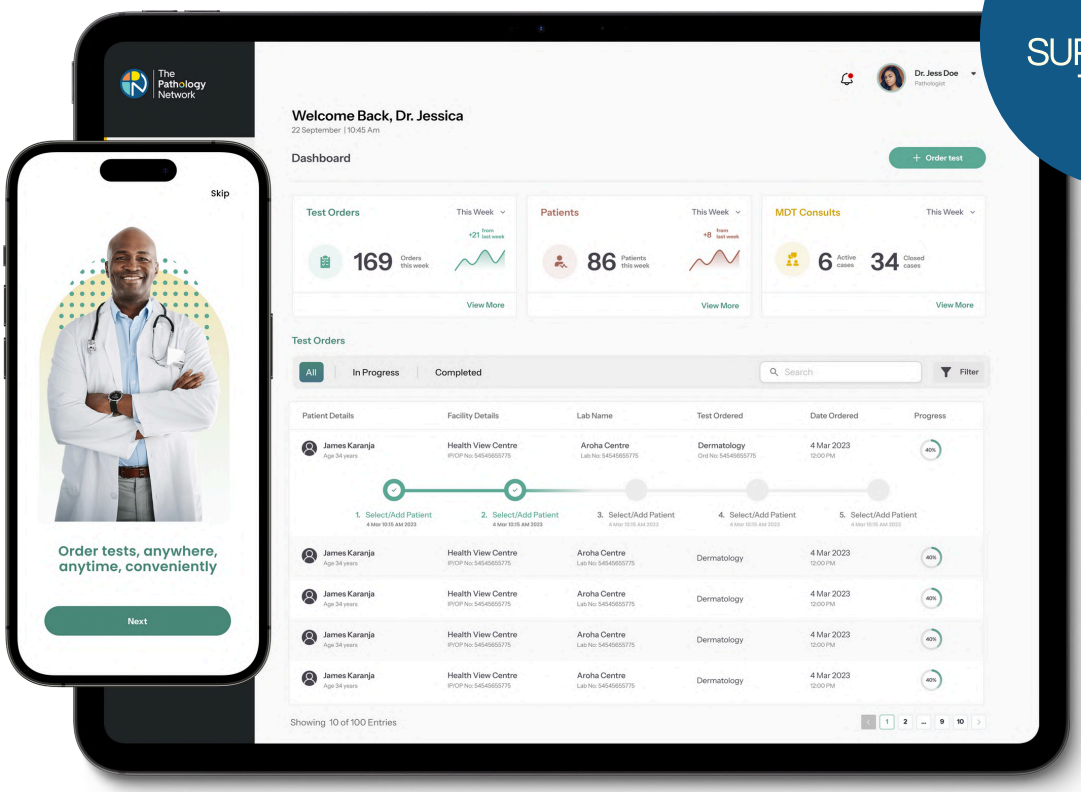
We are pleased to announce that the Spes360 Doctor's App is ready and testing has begun. The process, which started in August is meant to ensure the platform is reliable, secure and functional before it is fully released. SpesMD will simplify test ordering and user experience. **Here's how.**



The Pathology Network

Join East Africa's Fastest Growing Medical Community

160 SUPPORTED TESTS



A Reliable and Trusted Diagnostic System

Working with the region's best hospitals and doctors

>40,000

More than 40,000 patients from over 60 hospitals and clinics have been supported with life-saving tissue diagnoses

Visit spes360.com and sign up today.

The Pathology Network is a ground-breaking healthtech company building foundational software infrastructure, developing and managing diagnostic workflows. We are empowering communities across Africa, helping them access efficient and safe diagnostic tests

Why let bottlenecks hold back your hospital when we connect clinicians, labs, and pathologists into one seamless system?

Faster results, fewer headaches, better care.

The Pathology Network

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