



Abbott Healthcare Excellence Forum

June 2018, Wiesbaden, Germany

**"CLEAR CALL TO ACTION BASED
AROUND THE VALUE OF PATHOLOGY
TO THE WIDER ECONOMY"**





Emilie Neukom

*Director of Marketing for
EMEA, Abbott Diagnostics*

Foreword

The global healthcare sector has been undergoing constant upheaval for over a decade. Aging populations, budget restrictions and a lack of skilled staff are making it harder than ever before to deliver high quality healthcare, and laboratory diagnostic services have suffered disproportionately in this environment. Budget cuts, recruitment freezes and shrinking reimbursements have made it increasingly difficult to maintain the quality of services and meet ambitious turnaround time targets across the disciplines. **Despite the significant advances that have been made in both diagnostic and prognostic testing, senior healthcare professionals, including the laboratory management, still see the laboratory as a vending machine – a sample goes in and a result comes out.** We need to change this attitude and demonstrate how closer integration of pathology with other services can drive up standards of care and improve population health, while offering significant operational savings. By moving from a reactive and adaptive approach to offering proactive and predictive services,

we can show the true benefits of pathology in promoting wellness instead of simply treating illness. ■

"SHARED GLOBAL CHALLENGES AND VISION FOR THE FUTURE"

About the Healthcare Excellence Forum

Abbott's Healthcare Excellence Forum brings together leading players from across the laboratory diagnostics sector to discuss the current challenges faced by clinical pathology services. Combining a diverse program of presentations with Q&A sessions, a panel discussion and plenty of networking opportunities, the forum provides the opportunity to explore how medical advances, diagnostic innovations and disruptive technologies can be harnessed to reinvent the laboratory's role in health.

Changing the status quo – big data and disruptive technologies

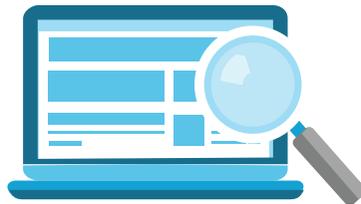


Jan-Philipp Beck

CEO, European Institute of Technology (EIT) Health

93%

OF HOSPITAL EXECUTIVES BELIEVE THE LABORATORY CAN IMPACT HEALTHCARE IT AND ANALYTICS



Utilizing big data for better care

'Big data' is currently THE buzzword in healthcare, and there is growing recognition that the vast amounts of digitized data available could be harnessed to improve the delivery of healthcare services and address major public health challenges. Unfortunately, the sector has struggled to manage the myriad stakeholders, regulations and privacy concerns that must be addressed to create a fully integrated healthcare

IT system. Overcoming this through increased automation and integration – with the eventual goal of full digitization – is vital to maximize the potential impact of this data, as well as to demonstrate the role pathology plays in improving population health. **Collaboration between the different stakeholders will be essential**, as will robust technologies to collate and analyze the varying types and quality of data available. Ultimately, **this data can be used to deliver more efficient, patient-centered healthcare** and increase oversight of public health – as well as aiding cure discovery and workforce planning – but only if we engage fully with the process and work together to make it happen. **Jan-Philipp Beck**

Best practices in operational and clinical integration

The global population is growing rapidly, as is the laboratory services sector, but almost nowhere are budgets doing the same. Diagnostic labs have been optimizing processes and lowering costs for a number of years, and in many cases there is little more that can be done. **Unfortunately, laboratory services are still seen by many as a commodity**, rather than a problem solver that can drive better outcomes for patients, healthcare providers and financial stakeholders alike. To overcome this perception, we need to move diagnostics from a reactive model – identifying what happened, when and why – to a more proactive and predictive approach, providing clinically-relevant, actionable insights into what is likely to happen and what course of action should be taken. **Better integration of the laboratory with other healthcare services is essential**, allowing the use of advanced data capture, handling and analysis to offer valuable insights into individual and population health. We already have the tools – AI, machine learning and big data analytics – to achieve this and, in many cases, the only thing missing is the will to make it happen. **Ramiro Roman** ■



Ramiro Roman

DVP Professional Services, Abbott Diagnostics

Elevating the clinical laboratory's role in healthcare delivery



David Humphreys

Global Head of Health Policy, The Economist Intelligence Unit (EIU)

Abbott recently commissioned a study by the Economist Intelligence Unit – supported by research partners IPSOS and Acuity – to examine the laboratory's current influence and perception, as well as to explore initiatives that could increase the impact of laboratory services in value-based healthcare.

The research clearly indicates a subordinate role for laboratories, with pathology services generally treated as a low value commodity by other key stakeholders, as evidenced by dwindling investment levels. In part, this perception is due to a rift between the key performance indicators (KPIs) for laboratory success and improving patient outcomes. Despite this, **labs have the opportunity to take a more prominent role in delivering value-driven healthcare**, and it is now widely recognized that timely, high quality diagnostic information can support better clinical decision-making. The unstoppable trend towards data-driven diagnostics, combined with an ever-growing stream of patient data, puts the laboratory at the center of this approach.

Even more striking is the potential for the lab to act as a bridge between different stakeholders in the healthcare ecosystem, resulting in more informed and engaged patients and healthcare professionals and earlier, more preventative interventions to satisfy payers and governments. While this requires better integration of the lab with both hospital KPIs and clinical care decisions – as well as evidence that links lab activities with outcomes – the lab's role is pivotal, and the environment seems prime for this radical change. It is clear that, without shifting the paradigm in which labs operate today, the progress of

value-based healthcare will be severely limited. However, if all stakeholders are able to match their willingness for change with action, then the resulting improvements in diagnosis and optimization of resource use will give healthcare the opportunity to catch up with advances in science and technology.

A 'revolution' is coming to healthcare, and mirroring the recent seismic shifts in other industries – such as retail, travel and media. Technology and data are set to take center stage, and the transformation of the telecoms sector should serve as a warning for healthcare. In just two decades, there has been a dramatic swing in communication media – from fixed to mobile to video to social – with nimble, technology-centric new entrants to the market rendering previously strong incumbents to



71%

OF PATIENTS ARE NOT VERY CERTAIN THEIR DOCTORS ARE USING THE MOST RECENT DIAGNOSTIC STANDARDS OF CARE



secondary or insignificant positions. The lesson for labs is simple: **disruption in healthcare will impose change**, and those that do not evolve their business models by constantly adding value (especially as the complexity of care increases) will eventually experience a similar marginalization. ■

The lab as the 'Uber' of medicine



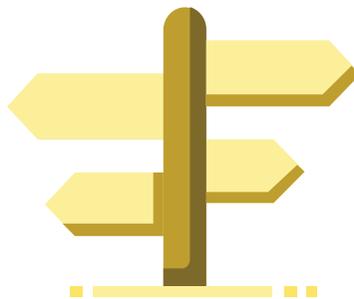
Khosrow Shotorbani

CEO and founder of the Lab 2.0 Strategic Services

Healthcare systems globally are undergoing a paradigm shift from 'sick care' to 'well care'. With budgets becoming ever more stretched, cost avoidance through disease prevention and early intervention are the only viable option – **we can no longer afford to simply care for the sick.** Disease prevention is the holy grail of laboratory medicine – analyzing patient data to identify those at high risk of a specific condition or disease, then facilitating early interventions to prevent it. The problem for the pathology sector is: how do you get paid for stopping somebody getting ill?

62%

OF CLINICAL DECISION MAKING RELIES ON LAB TEST RESULTS/RECOMMENDATIONS



'Lab 2.0' is designed to answer this question. Unlike the traditional 'Lab 1.0' – which will always be essential for acute care – Lab 2.0 is focused on post-diagnostic computation to provide new solutions to improve pre-care, chronic care and population health. Laboratory medicine can play an integral role in value-based healthcare, by combining longitudinal patient results with population data and the latest medical understanding to 'connect the clinical dots'. By **remodeling this information into real-time diagnostic insights**, Lab 2.0 can guide clinical decision-making and ensure more targeted interventions over the course of a disease or condition, from screening and diagnosis to monitoring, surveillance and prediction.

To achieve Lab 2.0, **we need to move beyond the 'order in, results out' approach**, developing new business and economics models, and aligning incentives across the entire care continuum. Pathology services interact with virtually every other aspect of the healthcare system, and closer collaboration will allow detection of the onset of a condition or potential comorbidity at the earliest opportunity. Combining this with improved communication and patient education should help to improve adherence with disease management and proactively engage patients (consumers) in maintaining their own health. If we can do this, we have a promising future, and the lab will remain the biggest bargain in managing health!

Lab 2.0 – a potential roadmap

For too long, laboratories have been concentrating on improving the analytical workflow, while ignoring the pre- and post-analytical areas of diagnostics. We need to diversify the way pathology laboratory services are funded, moving away from a simple '**cost per test**' model.

This won't happen overnight, but **there are steps that can be taken now** to start down this road.

Enhanced data analytics is central to increasing the value of diagnostics, helping us move from looking at what has happened to what is going to happen. Some of the tools we need to achieve this already exist, collating data from various sources, recognizing patterns and predicting likely outcomes. These technologies are laying the foundations of '**cost per diagnosis**' services, identifying trends and enabling effective population surveillance.

The next step is to proactively identify changes to patient conditions based on longitudinal testing data. **This will put the laboratory at the heart of the clinical decision-making process**, enabling a more targeted, personalized approach to diagnosis and intervention. The potential downstream savings associated with faster, more accurate diagnoses and earlier, better treatment decisions are enormous, and pathology services need to demonstrate how greater upfront investment in laboratory services and data analytics can be used to reduce the overall '**cost per outcome**'.

Finally, fully integrated electronic records and the development of powerful analytical tools will allow the development of a predictive pathology service which aims to promote wellness, rather than simply treat illness. This holistic approach will enable laboratory services to take more responsibility for the costs of population health, driving the development of a healthcare system that is centered on the total '**cost per life**'. ■

European diagnostics under the microscope



Saghar Missaghian-Cully

Managing Director,
Northwest London
Pathology, London, UK

Leadership challenges for NHS consolidation

Like many markets, **the demand for healthcare services in the UK is constantly increasing, without an equivalent growth in government spending to pay for it.** Consolidation of pathology services is considered an essential element of reducing overheads, and an ambitious project to reorganize laboratory services into 29 pathology networks recently began. Using a 'hub and spoke' model – with shared administrative and management services – will reduce overheads and allow better use of staff resources, as well as improving

access to specialist testing. The resulting increase in collaboration and cooperation will also help to ensure that advances in medical understanding and clinical practices are spread more rapidly, leading to improved outcomes, better demand management and reduced turnaround times. To realize these aims, **it is important to engage all stakeholders at an early stage** of the consolidation process, agreeing 'pragmatic' principles and goals and that can realistically be achieved, then working together to update processes to optimize results. Monitoring and measuring ongoing performance is crucial, helping to create a sustainable business model that reduces operational risks and helps to deliver better overall care. **Saghar Missaghian-Cully**



added' service, which involves investing in the right staff and training, and working with trusted and reliable partners. In an environment of ever-shrinking margins, we must constantly adapt, improve and innovate to move ahead, and staying focused on quality is essential to long-term success. **Dimitris Chatzidimitriou**



Dimitris Chatzidimitriou

Founder & Lab Director,
Labnet, Greece

Opportunities and collaborations across the Greek diagnostics network

The biopathology sector in Greece is highly fragmented, with hospital labs only serving their own patients, and many small labs only offering localized testing for a limited range of assays. This has created a 'gap' in the market for private patients and advanced diagnostics, which is currently served by a few core commercial reference labs. **There is no doubt that good quality pathology services – in terms of both testing and guidance on results – can result in earlier diagnosis**, better treatment and more targeted therapies, but it is becoming increasingly difficult for labs to maintain this quality without becoming uncompetitive in an open market. To achieve this, **labs need to focus on innovation and offering a 'value**

A role for clinical decision support in Germany

Rapid developments in medical understanding lead to constant changes in clinical best practice, making it virtually impossible for doctors to keep up-to-date on the latest guidelines and recommendations. Clinical decision support (CDS) systems – such as AlinIQ CDS – help to guide treatment decisions and improve overall patient care by allowing the collective medical expertise within an institution to be captured, digitized and combined with information from other sources to create treatment pathways that can be

77%

OF DOCTORS WOULD VALUE THE LAB PROVIDING ADDITIONAL INTERPRETATION TO SUPPORT DIAGNOSIS





applied in a standardized, scalable and safe way. This supports improved clinical decision-making and more effective care, helping to ensure better outcomes and improving operational efficiency. **Implementation of a CDS system can provide benefits across the entire healthcare continuum**, but requires close partnership

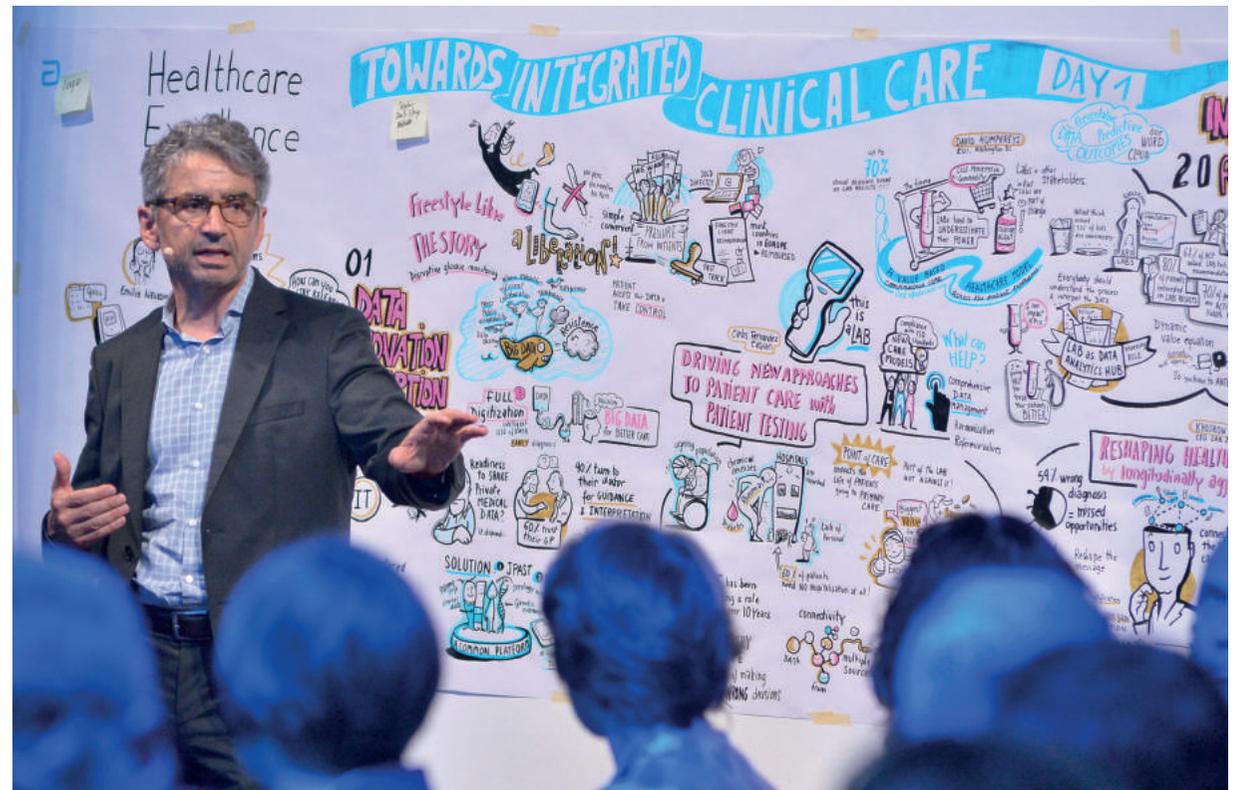
between the lab, the CDS provider and clinical staff to develop a system that improves patient care and helps healthcare providers to achieve their strategic and management goals. Setting clear and measurable targets for CDS implementation will provide strong evidence to demonstrate the potential for both

downstream savings and improved patient care, helping to further demonstrate the central role the laboratory plays in patient management. **Alexander Hoffmann** ■

Alexander Hoffmann
 (Abbott Diagnostics)
 on behalf of Peter
 Thorasch Head of
 Laboratory, Limbach
 Group, Cottbus, Germany

53%

OF DOCTORS WOULD LIKE TO LEARN ABOUT NEW DIAGNOSTIC TESTS VIA LAB PROFESSIONALS



Abbott – a trusted partner



Paul Jülicher
 Director International
 Health Economics &
 Outcomes Research,
 Abbott Diagnostics

Unleashing the value of IVD testing

The value of in vitro diagnostic services is like beauty – it's very much in the eye of the beholder. From a community perspective, **we want to pay for better health, not better healthcare**, but accomplishing this goal requires investment in the right tools and services. With IVD results guiding at least 60-70 percent of clinical decisions, there is clearly a role for the laboratory in improving population health, but a poor understanding of what and when to test leads to both over and under testing, undermining this value. Laboratories need to be proactive in addressing this, working with clinical staff to ensure that test requests are both appropriate and clinically indicated, and that

the resulting information is meaningful and actionable. This two-way communication is essential to both the continuous improvement of patient management and the reduction of healthcare costs, but it is also vital that we measure the effects of testing on patient outcomes. Unfortunately, **if we can't demonstrate and quantify how IVD contributes to overall healthcare goals, we may not get a seat at the table**, meaning budgets will be set without the perspectives or insights the laboratory can offer. **Paul Jülicher**

Partnering for better patient care

Changing the way pathology services operate is vital to meet current health and economic challenges, but

people, and therefore healthcare organizations, are inherently resistant to change. This can make it difficult to restructure services to meet evolving needs or, in many cases, even recognize and agree what changes are required. To deal with the growing demand for diagnostic testing, pathology needs to be better integrated with other healthcare services, helping to improve test ordering behaviors, manage demand on services and ensure the results of testing lead to better patient care. **Understanding how laboratory services are currently perceived, and assessing current performance according to measurable goals, are the first steps** in this process, and working with a trusted partner outside of your organization can be invaluable to ensure an unbiased assessment, as well as offering insights into improving laboratory practices based on knowledge of other healthcare organizations or industries. Abbott has a wealth of experience across the global healthcare markets, and is committed to helping its customers achieve measurably better healthcare performance. **Matt Sawtell** ■



Matt Sawtell
 General Manager Nordics,
 Abbott Diagnostics



"REALLY A LOT TO THINK ABOUT - TAKING OUR LABS TO THE FUTURE"

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