



UnBLOCK the Chain

EDITORIAL, *C. LOVIS*

IS BLOCKCHAIN THE RIGHT TECHNOLOGY FOR HEALTHCARE? *K. LARDI ET AL.*

HOW BLOCKCHAIN WILL TRANSFORM HEALTHCARE, *A. CAHANA*

WHO STANDS TO BENEFIT FROM HEALTHCARE BLOCKCHAIN? *A. NORMAND*

BLOCKCHAIN SOLVES HEALTHCARE DATA OBSTACLES, *E. SCHEUER*

IS BLOCKCHAIN IMPACTING THE HEALTHCARE ARENA? *J. GRAAFF*

CAN BLOCKCHAIN SUPPORT ADVANCES IN RADIOLOGY? *M. MARENCO*

CAN BLOCKCHAIN CHANGE THE HEALTHCARE ECOSYSTEM? *K. KURIHARA*

BLOCKCHAIN FOR RADIOLOGY, *B. RAMAN & K. CHANDRASEKARAN*

BLOCKCHAIN AND GDPR COMPLIANCE FOR THE HEALTHCARE INDUSTRY, *D. MANSET ET AL.*

HEALTHCARE 2019: THE YEAR OF THE BIG DATA BLOCKCHAIN, *F. RICOTTA & R. LAIDLAW*

HOW TO ANALYSE PAST PROFESSIONAL EXPERIENCE FOR FUTURE SUCCESS, *M. VIRARDI*

HOW CAN AUTOMATION IMPROVE OUTPATIENT CARE WHILE REDUCING COSTS? *F. MACVEAN & G. FITZGERALD*

PATIENT RESPONSIBILITY FOR FOLLOWING UP ON TEST RESULTS, *ECRI INSTITUTE*

ENCOURAGING HEALTH APP USE WITH SENIORS, *E. GATTNAR*

A PATIENT'S JOURNEY IS LIKELY TO INCLUDE SURFING THE WEB: HOW CAN WE HELP? *C. ATHANASOPOULOU ET AL.*

PATIENT SAFETY CULTURE, *L. RIBEIRO ET AL.*

A MULTIMODAL SYSTEM FOR THE DIAGNOSIS OF BREAST CANCER: THE

SOLUS PROJECT, *P. TARONI ET AL.*

THE EVOLUTION OF LEFT VENTRICULAR ASSIST DEVICES, *M. PAPATHANASIOU & P. LUEDIKE*

TRANSFORMING LIVES A DRONE DELIVERY AT A TIME, *C. IRERE & A. KABBATENDE*

HEAT WAVES: A CLIMATE CHANGE CHALLENGE TO HOSPITALS' RESILIENCE, *S. GANASSI*



Integrating labs into clinical care pathways

Based on an Abbott-sponsored symposium “Diagnostics, Data and Integrated Clinical Care – From Insight to Action” presented at European Association of Hospital Managers (EAHM) congress, Cascais, Portugal, 27th September 2018.



David C. Humphreys

Practice Head, Health Policy & Clinical Evidence, Economist Intelligence Unit, Washington, USA

Introduction

Pressure on healthcare systems continues to rise as the world’s population grows and lives longer; factors such as lifestyle and obesity also play a part, with the cost of diabetes, as an example, set to double by 2030 to \$2.5 trillion at current rates of increasing incidence. Providing value-based healthcare in this scenario can be challenging and unfortunately cost, not outcome, is often the overriding factor in the development of healthcare pathways. The obvious answer to reducing the economic burden of disease, while still increasing the standard of care, is to improve population health as a whole. Better diet, regular exercise and maintaining wellbeing all contribute to this, and predictive healthcare and screening programmes – rather than simply treating illness – are also key. Closer integration of laboratories into these kinds of initiatives, as well as care pathways in general, is essential in order to make significant improvements and ultimately achieve better healthcare.

The role of the lab

The laboratory plays a vital function in today’s healthcare systems, with over 70% of medical decisions based on test results. However, the role of the lab is still undervalued, with many senior healthcare managers seeing it as just a service provider – reducing it to either a profit or cost centre – especially where there is more pressure on health budgets. In reality, labs offer so much more; 77% of healthcare professionals would welcome more support from the lab for results interpretation that has a direct bearing on clinical decision making. The laboratory is also one of the most important departments when it comes to hospital key performance indicators (KPIs), from A&E turnaround times and numbers of bed days to complication rates and patient satisfaction. Despite this, lab managers have relatively little involvement in hospital management

issues or in setting these performance targets, and there appears to be little connection between the labs themselves and patients. The good news is that healthcare is changing rapidly, creating an opportunity for labs to play a larger role in the care continuum by bridging the gap between various stakeholders.

Managing appropriate testing

As the number of tests requested and performed each year continues to grow rapidly, it is vital that unnecessary testing is minimised to conserve resources. With over \$200 billion a year wasted in diagnosis and treatment monitoring in the US alone, reducing this excess would increase clinical efficiency and release valuable funds that could be redirected to other care areas. Increasing the daily interaction between lab and clinical staff all along the care pathway can help this by ensuring more timely and appropriate testing. On the other hand, under-testing is also an immense problem globally.

“HEALTHCARE IS CHANGING RAPIDLY, CREATING AN OPPORTUNITY FOR LABS TO PLAY A LARGER ROLE IN THE CARE CONTINUUM”

For example, over 50% of diabetes cases go undiagnosed in Sub-Saharan Africa, opening up the potential for complications and the development of advanced disease in untreated individuals, and ultimately leading to even higher treatment and management costs in the long run. Picking up these missed cases is vital to reduce the future economic burden of disease.

Lab data is critical for identifying current or emerging health issues and predicting future trends, especially for chronic conditions associated with multiple risk factors, such as diabetes or heart disease. Powerful bioinformatics tools

©For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.

and advanced analytical systems, as well as much closer collaborations with other departments, will help labs to use this data to drive operational excellence and develop a more integrated approach to healthcare. As previously stated, healthcare professionals are keen for laboratories to provide more diagnostic guidance, and there is clearly a desire within the system to follow this approach. However, closer examination of the current recognition of the lab's role highlights distinct differences in perception between stakeholders. More than 75% of health executives believe the lab is already well integrated, and outwardly acknowledge the fact that it directly impacts on a number of critical KPIs. But, on the whole, lab directors do not agree, and lab staff themselves often fail to understand how their metrics influence outside outcomes. The misconception over perceived roles, values and expectations can also lead to missed opportunities. For instance, around 60% of healthcare professionals say they want to learn about the latest standards within the lab, but less than 30% of labs communicate this kind of information. Getting all stakeholders on the same page, involving labs in setting organisational goals, and investing in advanced data processing and analytics, are essential steps leading to a shared vision that will direct healthcare towards both operational excellence and integrated care.

Conclusion

No other discipline within a healthcare organisation has a base of scientific knowledge similar to that of the lab. It is an integral part of value-based healthcare and, by investing in data processing and analytics, there is an immense opportunity to bring stakeholders together and ensure timely, evidence-based decisions.

While patients remain the focus for healthcare, organisational support is key to improving care. This begins with understanding an organisation's current status and, from there, you can identify what steps must be taken, and in what order, to make the most positive impact. All of these actions are underpinned by health value and the outcomes of healthcare, which not only affect individuals' wellbeing, but also have wider socio-economic implications. The ultimate aim must be to move towards a more integrated healthcare continuum, better diagnoses and predictive medicine, that together will lead to improvements in both outcomes and patient experience. ■

60%
OF HEALTHCARE
PROFESSIONALS SAY
THEY WANT TO LEARN
ABOUT THE LATEST
STANDARDS WITHIN
THE LAB, BUT LESS
THAN 30% OF LABS
COMMUNICATE THIS KIND
OF INFORMATION

77%
OF HEALTHCARE
PROFESSIONALS
WOULD WELCOME
MORE SUPPORT FROM
THE LAB FOR RESULTS
INTERPRETATION THAT
HAS A DIRECT BEARING
ON CLINICAL DECISION
MAKING

- Against the background of challenges facing healthcare today, labs offer so much more for both outcomes and patient experience.
- No other discipline has a base of knowledge to match it for better diagnoses and predictive medicine.



Download your copy of the white paper "An Urgency for the Clinical Laboratory to Move to the Forefront of Patient Care"