MAKING THE DIFFERENCE

UNIVANTS' contribution to the outcomes' quest

EHMA
European Health Management Association

UNIVANTS™
OF HEALTHCARE EXCELLENCE

OUTCOMES THAT MATTER

Value-Based Healthcare (VBHC) is the paradigm re-shaping healthcare today and promotes the much-needed shift in focus from services to outcomes. The vision of value-based healthcare is based on the following key ideas: put the healthcare needs of people at the center, provide diagnosis in a multidisciplinary perspective, create networks, improve digital medicine, collect and analyze data. Adequate measurement of diagnostic and treatment outcomes provides the most important information required to improve delivery processes from the patients' perspective. Value-based healthcare thus involves redesigning delivery processes and measuring key value indicators to drive systems and health organization toward better practices, and ultimately better outcomes and patient experiences.

THEN, HOW CAN WE IMPROVE OUTCOMES? MEASURE, MEASURE AND MEASURE...

The answer is as simple as it is complex to implement: measure the data and all the information we have. Measuring allows for a better understanding of the performance of the healthcare system and the quality of the services provided. Measuring makes it possible to plan actions to correct any critical issues, but also to identify some areas of excellence through benchmarking with other realities. It is thus necessary to create information systems, analysis and measurement dashboards that allow the assessment of outcomes and the learning from current practices. Data that can truly represent the baseline conditions are essential for subsequent comparisons of the clinical practice.

It is then important to develop analysis frameworks that illustrate clinical outcomes and the associated delivery practices. This will enable scalability, reproducibility and feasibility across organizations and systems. Sharing best practices is key for health systems and organizations that are looking to implement value-based healthcare. Several countries are also beginning to adopt benchmarking schemes and develop national outcomes programs. These programs seek to monitor the effectiveness, appropriateness, equity of access and safety of care delivered by providers.

However, healthcare is a complex ecosystem in which care outcomes are influenced by several factors. Lessons learned from best performers in outcomes' generation will thus become usable and shareable only once information is analysed and processed in a uniform way. Therefore, the next step consists in enhancing the usefulness of data collected at overarching levels. This can be done by facilitating a common language between systems that normalize data, by promoting consistency of the information recorded to facilitate comparison, and by enhancing the interconnection between structures and institutions. This approach could lead to the creation of a best practice repository, which can then be used by health organizations and systems in search of value-based reconfiguration.

Yet, measurement alone is not enough. It gives directions, but not 'instructions'. Measures need to be accompanied by an in-depth analysis of the practices that generated the recorded results. Otherwise, we have metrics, but not insights and lessons.

...AND SHARE LESSONS. THE VALUE OF UNIFYING FOR SOMETHING GREATER

Measuring without making sense of how results were generated is good, but not enough. That is where the UNIVANTS Award can make the difference.

In order to support the necessary transformation process and facilitate the dissemination of best practices, UNIVANTS collaborates with leading professional societies, institutions, and associations across healthcare disciplines. The mission of UNIVANTS is to foster scalability, replication and understanding of practices with proven effectiveness in transforming and consolidating delivery according to value-based principles.

Over the past three years, UNIVANTS has recognized almost 50 best practices that focus on generating better outcomes and thus lead to more effective healthcare.

INSPIRATION AND PERSPIRATION IN UNIVANTS OUTCOME-FOCUSED PROJECTS

Among the many best practices nominated for the award, the following stood out for their ability to innovate and benefit from outcome measurement techniques:

a) Reducing post-operative complications in cardiac surgery patients

Hospital Virgen Macarena, Sevilla, Spain

Perioperative coagulopathy and postoperative haemorrhage are the most common complications in patients receiving cardiac surgery, especially when cardiovascular surgery is associated with cardiopulmonary bypass. An integrated clinical care team at Virgen Macarena Hospital recognized an opportunity to improve patient outcomes, increase patient safety, and reduce healthcare costs by implementing a strategic coagulation management algorithm using point-of-care viscoelastic testing (POCT), such as rotational thromboelastometry, in patients undergoing cardiac surgery with cardiopulmonary bypass. This method has drastically reduced the incidence of allergenic blood transfusion (from 41.4% to 31.9%), decreased hematologic postoperative complications and shortened Intensive Care Unit length of stay from 6.0 days to 5.3 days for patients undergoing cardiac surgery.

The information about coagulation status for post-operative patients provided through this best practice can then be used to determine the need to transfuse. This leads to easier decision-making, reinforced clinical judgment and reduction of uncertainties. Ultimately, unnecessary activities that damage the patient's health – such as unnecessary transfusions - will be avoided.

b) Intelligent liver function testing (iLFT): a cost-effective way to increase early diagnosis of liver disease

University of Dundee, Dundee, Scotland

Liver disease is a significant cause of morbidity and mortality. Liver function tests (LFTs) are frequently requested blood tests which may indicate liver disease, but LFTs are commonly abnormal, leading to different responses from healthcare professionals. To increase early diagnosis and thus improve prognosis and treatment options, the integrated team of the University of Dundee developed an intelligent Liver Function Test (iLFT). This iLFT further investigates abnormal LFTs on initial samples received from Primary Care. iLFTs enhanced patient safety by increasing the appropriate investigation of patients with abnormal LFTs from 41% to 100%. It also led to a 43% increase in diagnosis of liver disease, compared to standard practices. The predictive algorithm contained in the iLFT enables the rapid assessment and treatment of patients and the creation of a real-time management plan. ILFT also proved to be a cost-effective tool.

c) Improved diagnostic pathway and treatment for hospitalized patients with acute kidney injury

Diaverum Kidney Care Centre Potsdam affiliated with Otto-von-Guericke University Magdeburg; Dialysis Centre Potsdam & Ernst-von-Bergmann Hospital Potsdam Potsdam, Germany

Acute Kidney Injury (AKI) is developed by one out of ten patients treated in the hospital and is a major determinant of chronic kidney disease and cardiovascular mortality. Cardiovascular complications can be avoided if AKI is detected early and treated for a long time. The integrated team associated with this best practice implemented a hospital-wide electronic AKI alert based on an increase of serum creatinine. Physicians and nephrologists are then informed about detected patients via an Accelerated Detection and Treatment Pathway and can then give optimised treatment recommendations.

This screening tool has led to improved identification of patients with previously undiagnosed AKI, with the AKI-eAlert identifying 4.5% of all hospital patients with previously undetected AKI. AKI complications were also reduced by approximately 50%.

d) Improving the safety of mothers and babies using angiogenic biomarkers for pre-eclampsia

Oxford University Hospitals NHS Foundation Trust, Oxford, United Kingdom

Pre-eclampsia (PE) is a hypertensive disorder of pregnancy and affects 4-8% of women globally. It causes major maternal and fetal morbidity and mortality. Currently PE in mothers is identified by measuring blood pressure and proteinuria. These clinical signs have poor diagnostic accuracy, and clinicians must thus rely on their clinical instinct. To improve the diagnosis and management of women presenting with suspicion of PE, the integrated team associated with this best practice initiated and expanded the use of the angiogenic biomarkers (sFlt1 & PlGF). A low sFLt1/PlGF ratio has a 99.3% negative predictive value for 7 days. The percentage of patients admitted as indicated using the test was 85%, compared to 46% without the test. Using the test also prevented home discharges of women with this life-threatening condition. Lastly, initial analysis of hospital admissions showed a reduction of 20% in PE-related admissions.

LOOKING FORWARD

There is a multitude of data made available by current information systems that could change the life of people through the transformation of delivery processes of healthcare organizations. Yet, only a detailed analysis of the specific cases that generate better results and outcomes can really inspire other health organizations to emulate and scale-up their processes. UNIVANTS provides this analysis, framed through the lenses of value-based healthcare, and makes good practices available to the public to bring health services delivery to the next level. UNIVANTS thus contributes to generate and connect a community of practice among innovators and health professionals wanting to transition to value-based healthcare.