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UNIVANTS OF HEALTHCARE EXCELLENCE

Integrated clinical care team at The Royal Wolverhampton NHS Trust recognized for healthcare excellence

Distinction awarded to team members at The Royal Wolverhampton NHS Trust, United Kingdom

The UNIVANTS of Healthcare Excellence award is a global, prestigious honor for teams who have worked across disciplines to achieve measurably better outcomes for patients, clinicians, payors and entire health systems.

The program, whose name is derived from the combination of unity and avant-garde (meaning new or unusual), was initiated in 2018 with the intended goal of inspiring healthcare teams to unify for improved outcomes.

Four founding teams with measurable examples of healthcare excellence were awarded the honorary title of Principle Winners.

L-R: Clare Ford, PhD, Consultant Clinical Biochemist and Head of Clinical Chemistry; Katherine Willmer, MD, Consultant Acute Physician; Simon Whitehead, PhD, Principle Clinical Scientist; Andy Morgan, MD, Clinical Director of Emergency Services

Those winning care initiatives spanned multiple continents and set the foundation for many future best practices in clinical practice or guidelines today.

The four teams with the honorary titles of principal winner include projects from The Royal Wolverhampton National Health Service (NHS) Trust, Wolverhampton, United Kingdom; Swedish Covenant Hospital, Chicago, Illinois, United States; Canterbury and the New Zealand Healthcare System, Canterbury, New Zealand; and University Hospital Tübingen, Tübingen, Germany.

One of the most notable best practices involved improved emergency patient flow at the Royal Wolverhampton NHS Trust. Their team comprised of stakeholders from cardiology, emergency medicine, acute medicine and pathology, which highlights the powerful connection across disciplines.

Key stakeholders who led the project with excellence included Clare Ford, PhD, Consultant Clinical Biochemist and Head of Clinical Chemistry, Katherine Willmer, MD, Consultant Acute Physician, Simon Whitehead, PhD, Principle Clinical Scientist, and Andy Morgan, MD, Consultant Emergency Physician.

This cross-functional team collaborated to implement a novel chest pain clinical pathway for patients with suspected acute coronary syndromes (ACS) for fast rule-out or rule-in of AMI.

Their new clinical pathway included an innovative triage strategy using a newly formed clinical decision unit (CDU) and a new clinical algorithm with results from Highly Sensitive Cardiac Troponin I (hsTnI) testing and clinical assessment. The clinical pathway allows patients to be triaged into three categories based on their clinical assessment and hsTnI results using the new clinical algorithm.

The first category is patients who have a low-risk of AMI according to clinical assessment but have an initial hsTnI level above the limit of detection (LoD). These patients are transferred to the newly formed CDU and receive additional testing including a serial hsTnI at three hours, to determine if there is a rise (delta) in the TnI level.

The second category is for patients who were able to be safely ruled-out of AMI based on the determination of a low clinical risk assessment coupled with a hsTnI result below LoD.

The final category is patients who are ruled-in for AMI based on a higher clinical risk assessment, elevated hsTnI results (>99th percentile of a normal reference population), and a delta in serial (three hour) hsTnI measurements. Their process enables accelerated decision making compared to their previous clinical pathway which required serial measurements of cardiac troponin levels with an initial and a twelve-hour measurement using contemporary troponin.

Implementation of their clinical pathway enabled impressive results. One such example is the reduction in total length of stay for patients from arrival to discharge from 23 hours to 9.6 hours.

Another was reduced healthcare costs due to unnecessary admissions from the ED to hospital wards being reduced from 60.9% to 38.4%.

With the adoption of the new clinical care pathway, rule-out times for some low-risk patients were reduced from 12 to 2 hours, and rule-in times for highrisk patients were reduced by an average of 8 hours.

The new ACS patient clinical pathway safely enhanced the patient flow through the Emergency Department with reduced admissions and fast high-quality care.

The measurable improvement to healthcare enabled by this care initiative at the Royal Wolverhampton NHS Trust led to their team being recognized as a principle winner of the UNIVANTS of Healthcare Excellence award.

THREE KEY TAKEAWAYS:

1. High sensitivity cardiac troponin is the preferred biomarker for the diagnosis of myocardial injury.

2. Rapid rule-out strategies for low-risk patients with suspected ACS can be safe, timely and highly effective.

3. Key performance outcomes from their care initiative include improved patient experience, improved clinician confidence, high degree of patient safety, reduced length of stay and admission, and reduced healthcare costs.