ESICM 2013: Patient Data Management Systems Enhance Standards of Care

Patient data management systems do enhance standards of care, said Professor Gernot Marx (Germany) at ESICM 2013. At his own hospital in Aachen, there were excellent results after the introduction of a patient data management system. Mortality in patients ventilated for more than 24 hours reduced to 24% as against the German target of 35%.

There is a clear need for ICT in the ICU, he said, due to increasing life expectancy, increasing ICU bed capacity, the ICU-staff resource imbalance and a shortage of doctors in structurally weak areas.

The advantages of electronic charting include accurate and realtime vital signs and ventilator parameters, accurate inputs-outputs, automated balances, reduced medication errors, access to laboratory data, imaging studies and legibility. Using computerised physician order entry provides improved legibility, drug-drug interaction checks and can lead to a reduction in medication errors by 55%. PDMS have the advantages of timely information, multiparametric alarms, implementation of standards, decision support and adherence to guidelines.

PDMS are not without disadvantages. These include dependence on the operator as well as vulnerability of IT generally.

At his hospital, Marx used the PDMS to improve sepsis treatment. The system has a sepsis bundle check, with automatic compliance and reminders built into the software.

What does soccer have to do with medicine, asked Professor Craig Lilly (USA). ICU teams don't have the advantage of being able to field the same 'players every time, and oftentimes the team will include raw recruits. However, IT enables the team to perform well every time. Lilly outlined his ABCs of health information technology for high acuity patients:

- **Availability:** Clinical information needs to be where it is needed when it is needed
- **Best Practice**: The safest way must be the easiest way
- **Communication:** Amont care provider team members must be supported
- **Detection:** Systems that detect physiological instability and audit clinical action are best

Lilly urged ICU leaders to insist on health information technology that makes clinicians more efficient by making information more available. He noted that effective HIT for high acuity patients detects physiological instability earliers, lets the team achieve near perfect best practice adherence and provides intensivist management when and where it is needed.

Published on : Tue, 8 Oct 2013