



**PHILIPS**

IntelliVue MP5SC

# Transforming patient monitoring in North Wales

Philips IntelliVue Guardian Solution and IntelliVue MP5SC aid dramatic improvement

Healthcare staff on wards at Ysbyty Gwynedd, the General Hospital in Bangor, face the same huge pressures felt by NHS hospitals across the UK. But since the installation of new-generation Philips monitoring and notification systems in their general wards, they have been pleased to see significant changes<sup>1</sup>.

“The IntelliVue MP5SC is designed to bring all these parameters together, and suddenly the information is out.”

## Dramatic reductions

Dr Chris Subbe, has been a Consultant in Acute, Respiratory and Intensive Care Medicine at the hospital since 2011. He has been very impressed with results that he believes are a direct effect of automated early warning scoring (EWS), using Philips Guardian Solution.

“We have seen dramatic changes in what’s happened to patients,” claims Dr Subbe. “There has been a reduction in serious events by more than a quarter, a reduction in intensive care mortality of patients who were transferred out of these areas by 40%, and a cardiac arrest reduction of more than 80%.” results shown in a clinical study published in Critical Care<sup>2</sup>.

Wales became the first country to adopt the National Early Warning (NEW) Score protocol, which standardises an approach to deteriorating patients. And the Philips Guardian Solution and IntelliVue MP5SC patient monitor with automated Early Warning Score triggers, offering capabilities that enhance the practice of staff working in many different areas of healthcare.

## Advanced evaluation

“The system uses a standard of care with the Early Warning Score that is already familiar to people,” Dr Subbe explains, “and the workflow is modeled on what we would normally do.”

The suite of support tools integrated into the IntelliVue MP5SC monitor enables nurses and doctors to instantly evaluate, using pictorial clues, as well as measure and document patients’ vital signs. The system is specifically designed for spot-check environments, and communicates with wired or wireless hospital LAN infrastructure. “The system is very visual,” adds Dr Subbe, “so when you come

Betsi Cadwaladr University Health Board is the largest health organisation in Wales, providing primary, community, mental health and acute hospital services for a population of around 678,000 people across the six counties of North Wales.

Ysbyty Gwynedd, the General Hospital in Bangor, has 471 beds and delivers a full range of services.

### Challenge

Improve the quality of spot-check monitoring on wards at Ysbyty Gwynedd, the General Hospital in Bangor, and reduce the incidence of serious events.

### Solution

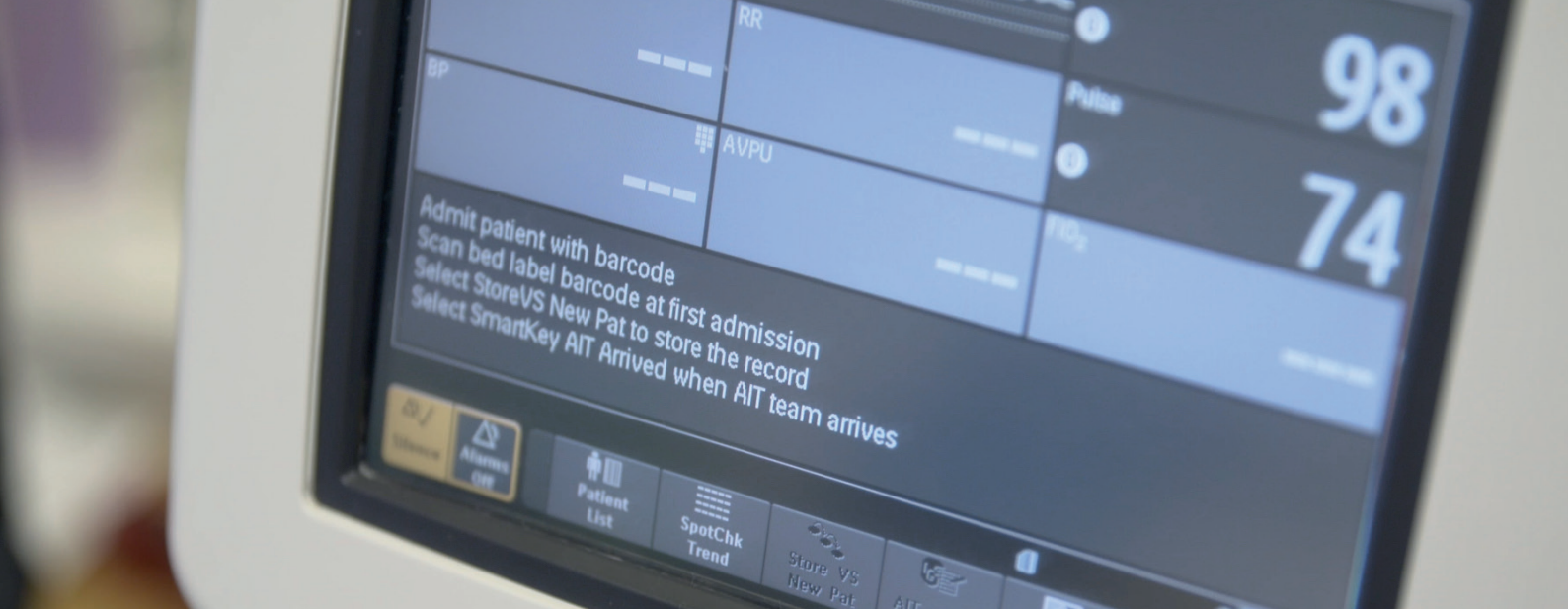
Philips IntelliVue Guardian Solution with IntelliVue MP5SC spot-check patient monitors.

onto the ward at the start of your shift, within a fraction of a minute you would know who’s sick. You can then focus your attention on those people you don’t expect to be sick. Before, this information was hidden in the various records – even if you use electronic patient records it’s usually hidden. But the IntelliVue MP5SC is designed to bring all these parameters together, and suddenly the information is out.”

“The EWS summarises risk and gives a bit of advice. If the EWS is raised then it prompts you talk to someone and at the same time the signal goes out to our rapid response team, so other doctors in the hospital know there is something happening on a particular ward.”



Dr Chris Subbe  
Consultant in Acute, Respiratory and Intensive Care Medicine  
Ysbyty Gwynedd, the General Hospital in Bangor



“We have seen dramatic changes in what’s happened to patients”

## Early intervention

The IntelliVue MP5SC’s multiple layers of risk-alerts are supported by Philips industry-leading IntelliVue platform. The tailored technology centralises workflow and notification through the hospital’s own infrastructure to enhance reaction times.

“From taking a patient’s vital signs to somebody else knowing about them is a fraction of a second,” explains Dr Subbe. “There is no copying from one device to another, writing into the electronic patient record or having to write on a piece of paper and tell someone about it. The information is travelling in real time.”

Ward Sister on Tryfan Ward, Joanne Roach, agrees that the speed of the new system has been crucial to its success. She says: “Because of the early intervention by the team on seeing the decline in patients’ National Early Warning Scores we’ve definitely had fewer admissions to ITU and worsening conditions of patients because things are addressed sooner.”

## Supporting compliance

The IntelliVue Guardian Solution with EWS is fully configurable and can support staff in understanding and complying with a certain escalation protocol. The system can be deployed to one ward or to all general wards in a hospital, each with their own unique configuration.

Providing instant access to accurate data and reports also supports an enhanced level of auditing. In Bangor, it gives Mandy Jones, Assistant Director of Nursing, added confidence when conducting investigations and analysing care data.

She says: “We needed something that would give us some sort of auditable trail, so that when patients were deteriorating we were providing the care in as timely a way as we possibly could. What we’ve got now is a system that can provide this. So when we do have a patient that alerts a NEW score, we escalate – generally a bleep to the on-call team. We now get a timely response that’s audited and I can provide that assurance back to the board.”

The team at Bangor have been very satisfied with the working relationship they have had with Philips from the very beginning of the project. Assistant Director of Informatics, Dylan Williams, says: “Philips had a clear objective and a clear scope of works. They knew exactly what they wanted from us but they also listened to what we required, and what we needed to get our infrastructure working well. It just worked very, very effectively.”



## Intuitive functionality

The IntelliVue MP5SC has been designed as an intuitive, easy to use monitor for use on the general ward and during patient transport. Following an alert, once the rapid response team (RRT) has arrived, the system can provide full ECG monitoring. The optional RRT Escalation Package uses a patient-worn device for instant ECG measurements, including full arrhythmia and visual mapping of data, to save valuable time during a serious event.

“The beauty of it,” describes Dr Subbe, “is that when I go to see a patient I can just scan the patient’s armband and then anything I do goes straight into the electronic patient record or the central monitoring system, instantaneously.”



<sup>1</sup>Disclaimer: Results from case studies are not predictive of results in other cases. Results in other cases may vary.

<sup>2</sup>Reference: Subbe, C.P., Duller, B. & Bellomo, R. Crit Care (2017) 21: 52. doi:10.1186/s13054-017-1635-z