

Key Takeaways

How technology can change services

Webinar hosted by Royal College of Psychiatrists QNPICU

featuring Dr Faith Ndebele from Coventry & Warwickshire Partnership NHS Trust

At the Caludon Centre, where the acute services for Coventry & Warwickshire Partnership NHS Trust are located, we are undertaking a research project on the impact of a novel non-contact monitoring technology (from Oxehealth) on safety and quality.

The research is REC & HRA approved, and the technology has been running in the wards (2 Acute, 1 PICU) since January 2019.

Dr Faith Ndebele is a consultant psychiatrist, working in the psychiatric intensive care unit of the Caludon Centre. Dr Ndebele is also the medical lead for the acute service and the principal investigator for the Oxehealth research project.

Results show a positive impact on safety and quality since introduction of the technology^{1,2,3}:

PICU

- **26% reduction in bedroom assaults**
- **40% reduction in rapid tranquillisation related to assaults**
- **Improved, physical health monitoring**

Acute

- **Overall, 22% reduction in bedroom self-harm**
- **In Female, 66% reduction in bathroom and 15% reduction in bedroom ligatures**
- **Overall, 15% reduction in bedroom assaults**

For clinical teams

- **Engage** first then harness energy
- **Balance** freedom to operate with a safety net
- **Give** a sense of ownership to the ward teams
- **Share** positive examples so staff see the value early on

For patients

- **Be explicit** about what it is and what it is here to do
- **Spend time** in the conversation on admission and make sure staff feel comfortable and confident in doing this
- **Notice** how patient agency changes and its impact on treatment

Case examples⁴

Reducing ligatures and severity of harm

"We were concerned about a patient that was known to be at **high risk of ligating**. We had just done their observations, but we felt uneasy about her safety.

In the past when we have concerns and go to their room, patients hear our footsteps and **hide what they're doing** so it's very important that we **catch this behaviour early**.

In this case, we used the Oxehealth system to take a spot check vital sign measurement and ensure she was ok in her bedroom. When doing so we could see that **she was trying to tie something**.

We went to her room and **removed the item** before she could come to any harm. We've caught a few potential ligatures early in this way."

- Nurse

Positive risk-taking with peace of mind

"Often we will have a patient that we're worried about, but **want to take positive risk taking in reducing observations** and not go in and check on them all the time.

When we agree to reduce observations, it can be a bit worrying, but Oxehealth offers us **reassurance**. We use the system to do **spot checks** which enables us to **better manage patient risk**.

It's **uncomfortable**, but you have to take that positive risk to **move the patient forward** in their **recovery** and in **coping** on their own. The patient can think "I've gone for ten minutes and they've not done the checks on me" and **feel like they've achieved something**.

It allows **patients to take ownership** because you're not going into their room. They are aware that you are monitoring them but you don't have to hover outside their door, so it allows them to take **responsibility**."

- Ward Manager

Invest in the relationship of clinicians and patients with novel technology by how it fits into clinical ways of working and care delivery.

¹ Before and after and partial cohort study: incidents data was collected over a 12-month period between January 2019 (go-live) and December 2019. This data was compared to a like-for-like 12-month baseline between January 2018 to December 2018 to account for any seasonal variation. All figures are adjusted to 100% occupancy to account for occupancy variation during the study period. There were no operational confounders identified in the study.

² Bedroom incidents include incidents in the en-suite bathroom.

³ Rapid tranquilisation events as a result of an assault (i.e. aggressive behaviour that led to RT)

⁴ Source: surveys, interviews, reflection time and monthly operational meetings with staff