

Staff experience with oxevision®

NHS mental health trusts across England have been working in partnership with Oxehealth to evaluate the impact of Oxevision on staff experience in inpatient wards.

The following report uses data compiled from NHS-led staff surveys, focus groups and interviews across eight NHS England mental health trusts to evaluate the impact on staff experience. It incorporates the perspectives of more than 250 clinicians working in over 20 inpatient mental health wards that use Oxevision as part of their daily clinical practice.

Staff agreed that Oxevision helps them to:¹



What is Oxevision?

Oxevision is a non-contact vision-based patient monitoring platform. It gives clinical teams location and activity based alerts that indicate early warning signs and risk factors to help them plan patient care and to intervene proactively. Our partners have reported that this can result in fewer incidents and injuries, improved quality of care and operational savings (including releasing time to care).

Oxevision uses a secure contact-free optical sensor (camera and infrared illumination) which staff can use to monitor a patient's pulse rate, breathing rate and activity/behaviour in a bedroom — providing warnings, alerts, reports and observations to clinicians at the right time.

¹ Percentages refer to the proportion of respondents who agreed or strongly agreed with the statement. Of those who disagreed with the statement, there is no indication that they felt Oxevision had an adverse (rather than neutral) impact.

^{2,3} Data compiled from 7 NHS Mental Health Trusts

⁴ Data compiled from 5 NHS Mental Health Trusts

⁵⁻⁷ Data compiled from 6 NHS Mental Health Trusts

Sample size: ²N=255; ³N=255; ⁴N=215; ⁵N=138; ⁶N=211; ⁷(at night) N=141

Clinicians can improve patient safety

When Oxevision was used as part of clinical practice, clinicians reported that they were able to improve patient safety. By using the platform's location and activity based alerts, staff could identify early warning signs and potential incidents and intervene proactively.

Clinicians reported they were able to reduce the number and severity of incidents, as well as the degree of harm including self-harm, falls, assaults and physical health deterioration. Overall, staff felt confident that they had improved patient safety on the wards.

“

The **falls frequency has reduced**. For example, wheeled tables. They are great because you can easily move them around, but patients with mobility problems are using them as frames, and we've noticed this trend thanks to Oxevision.

Now that we know this is a problem, we monitor who we are giving these tables to and can **prevent falls in the future**. This way patients work on their mobility properly, we ensure they are safe and use their frames, and not the table as a form of support.

”

Ward Manager

“

There was an incident on the ward where a patient made a **significant suicide attempt**. A staff member used Oxevision to check on a patient between observation rounds and saw that there was cause for concern. The staff member attended the patient's bedroom and began emergency medical procedures.

Although it was the nursing interventions that saved the life, it was felt by the whole nursing team that **it was Oxevision that gave the nurses a head start in saving this patient's life** by alerting us to the concern.

”

Ward Manager

“

We have one lady where, before we had Oxevision installed, we would check on her over 10 times to make sure she was alright.

She would be very confused and would want to walk but her mobility is severely impaired. Now with the system, we are more reassured that she's safe because **Oxevision alerts us when she's on the edge of the bed, and we can go check on her**.

”

Healthcare Assistant

“

In my experience, **the Oxehealth system gives us more time to spend with patients while also knowing patients are safe**. For example, at night-time, we'll know that one patient is fine, so we'll have time to attend to another patient who needs something. Our patients tend to go to bed late, so once we are able to check their vitals and make sure they're okay, we've got extra time to attend to other patients who need assistance.

”

Ward Manager

“

We had a patient that was **violent and aggressive**. He was a danger to himself and others, and we couldn't calm him down after an initial intervention. We had to **administer rapid tranquillisation**.

We follow strict procedures of taking physical observations of a patient multiple times for the first hour to ensure they are safe. However, **he refused to have his physical observations taken and continued to be aggressive**.

We used Oxevision to measure his breathing rate and pulse rate remotely and monitor his behaviour to **make sure he wasn't a threat to himself** while avoiding further agitation. Having Oxevision has been fantastic for this purpose because we can make sure we are caring for the patient's physical health and keeping the risk of assault low.

”

Ward Manager

“

I have used Oxevision a lot when it's notified me of **patients spending too much time in the bathroom**. It's been very helpful with that type of situation.

For example, we have one lady that repeatedly self-harms in the bathroom, so when she would go into the bathroom for an extended time, Oxevision would alert us.

We went straight to her room and checked on her, and the only thing she had managed to do was **superficial scratches on her arm**. Oxevision is very helpful in that sense, **we act more effectively and get there quicker**.

”

Staff Nurse

Dawn's Story

Tina was alerted by Oxevision to an elderly patient getting out of bed late at night. By responding to Dawn, Tina prevented a potential fall.

[Read story](#) ›

Maggie's Story

Mark noticed a patient at high risk of self-harm had tied a ligature around her neck. Mark was able to intervene in time to prevent harm to the patient.

[Read story](#) ›

Sierra's Story

Ann was able to support Sierra, helping to break a cycle of self-harming behaviour and to support Sierra to move forward her recovery.

[Read story](#) ›

Rodney's Story

Rodney had fashioned a weapon from items in his room. Faith used Oxevision to remotely monitor Rodney's health and make sure he was safe while de-escalating the situation.

[Read story](#) ›

Edward's Story

Faith tracked the vital signs of a patient using Oxevision and transferred him to hospital quickly after noticing his physical health was deteriorating.

[Read story](#) ›

Anwar's Story

Hamja noticed a very high breathing rate for a patient in seclusion, and was able to proactively escalate before a medical emergency happened.

[Read story](#) ›

Clinicians can provide better care in daily practice

Clinicians reported that they were able to provide better quality care and felt reassured when using Oxevision as a supportive tool in daily clinical practice.

Staff reported having more objective information to make clinical and care decisions, including continuous data on patient activity. This facilitated a better understanding of patient needs and care requirements by providing insights into sleep opportunity, night needs, isolation time, medication decisions and discharge planning.

As a result, staff reported improved clinical decision making, the ability to provide less restrictive care, better management of specific care needs, and stronger staff-patient relationships.

“Now you can take time to have that **meaningful interaction** and say “how are you”, not just being reactive to an incident.

Ward Manager

“During my observations, **I have noticed more interaction in the lounge from staff to patients than previously.** The staffing levels have not changed, so this seems to be due to the system.

Healthcare Support Worker

“Our medical team often **tracks patient night-time activity** as it's an indicator we used to **see if our patients are getting better.**

With the activity reports you can really see a timeline of when a patient first comes in and is sleeping 20 minutes a night, to after a few days where they are sleeping a lot more.

Oxevision's activity reports have been very useful for our consultants who have been **checking to monitor and track patient night-time activity.**

Staff Nurse

“It helps with **unwitnessed falls** where you don't know if they've hit their head. For example, we had a patient a couple weeks ago that slipped and hit his bottom.

To confirm his fall **we replayed the incident** and showed the duty doctor so that he could make a decision.

Usually, if it's an unwitnessed fall then they'd have to go on to neuro obs or be sent to the A&E, so providing video footage on what happened **helps us and the doctors make more informed decisions.**

Service Manager

“We wanted to **involve the patients** throughout because ultimately, it's for them. They liked that we were open and honest with them, which **improved the staff and patient relationship.**

Ward Sister

“

The exercise and therapy team, identified a woman who had been **spending 17 hours a day in bed** by using Oxevision's activity report.

As a result, we were able to work with the patient and her carers to **re-engage and get her more active during the day.**

”

Associate Nurse Director

“

One feature we have found useful is viewing the **activity reports to gain insight into patients' sleeping patterns.**

This is particularly helpful for patients who may be presenting as manic with a poor sleep pattern – we can see whether our medication regime is working to a therapeutic level.

”

Ward Manager

Yasir's Story

Faith is able to better understand Yasir's behaviour to better manage risk and help inform observation levels.

[Read story](#) ›

Gareth's Story

Claire monitors Gareth's physical health remotely to keep him safe whilst giving him time to reflect and calm down.

[Read story](#) ›

Tara's Story

Mark improves therapeutic engagement with Tara to help them build better coping strategies and reduce self-harming behaviour.

[Read story](#) ›

Martin's Story

Helen is able to witness an unwitnessed fall of Martin, an elderly patient, and provide the right care at the right time.

[Read story](#) ›

Clinicians can improve how they manage risk on the ward

Clinicians reported being able to proactively manage patient risk using Oxevision as a supportive tool.

With Oxevision's location and activity based alerts, staff had greater awareness of patient locations, movements and potential high-risk activity which enabled them to proactively manage risk on the ward and respond more quickly to patients in need.

Clinicians were able to take positive risks in managing patient safety, such as stepping down observations, and felt reassured that they had Oxevision to support them.

Clinicians were also able to more accurately communicate behaviours and decisions across shifts to better manage patient risk over time.

During COVID-19, staff reported that Oxevision helped with infection control and reducing the risk of viral transmission on the wards, whilst supporting them to keep patients safe.

“

It also provides **objective data when you handover to other shifts**. Pat (the other nurse in charge on night shifts) and I work opposite shifts to each other. We don't communicate with each other very much. Subjectively, we will see things differently as we have different tolerance levels and experiences, but if you can say this patient was really restless last night between 3-4 am and look back and see that's happened for a few nights then we can see that in the report and address that. So, **the activity report is quite good when looking at patterns**.

”

Staff Nurse

“

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 Oxevision **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.

”

Ward Manager

“

When we have had a particularly aggressive or violent patient, Oxevision has been able to tell us where they are. We have been using this to avoid situations of assault or aggressive behaviour.

So **if I see that a patient I'm concerned about has left their room** to go to the communal area, and they have previously been violent or aggressive, then **I can make sure that either I or another staff member can go into the communal area to make sure that all other patients and the patient in question are safe**.

”

Healthcare Assistant and Activity Coordinator

“

We had a couple of patients; **one had assaulted the other** and [Oxevision's multiple occupant alert] picked up when **one was going into the other patient's room.**

This was especially helpful at night. The staff were alerted by Oxevision and could **de-escalate the situation before someone got hurt.**

”

Clinical Manager

“

When we have a **patient that we suspect has COVID-19**, we have to take physical observations at least 4 times a day for all patients in isolation.

This includes taking their temperature, blood pressure, breathing rate and heart rate. With Oxevision, we can be less intrusive and take their heart rate and breathing rate remotely.

It's helped to **lower the transmission** risk to patients and our staff too, by reducing the time spent with patients, but they are still getting their in-person care.

”

Matron

“

For me, it's being able to see those patients that are at the other end of the ward. Sometimes we have patients who won't go to the dining room when most of the other patients are there.

”

Ward Manager

Frank's Story

Natasha manages Frank's risk of seizure by supporting Frank in a less intrusive and stressful way.

[Read story](#) ›

Tasmin's Story

Susie manages Tasmin's risk of self-harm and aggression toward staff by conducting remote observations which Tasmin finds less stressful and provoking.

[Read story](#) ›

Paula's Story

Zoe cares for Paula remotely, who was restless and isolating due to COVID-19. By doing so, Zoe prevents the risk of infection transmission on the ward while maintaining Paula's safety.

[Read story](#) ›

Staff feel more reassured of their own safety

Staff felt their sense of safety had improved on wards, as they could support patients when it is therapeutically beneficial to do so, and support remotely with more information on patients' physical and physiological health in between hands-on care.

This was particularly helpful for staff when caring for patients with a high risk of physical aggression, as clinicians were able to use Oxevision as a tool to support safe de-escalation in bedroom areas.

“

As staff, Oxevision **improves our safety on the ward**. There is always so much going on in the ward and you can't always keep track. At least with the system...we're able to know what's going on or **shout for help straight away, so we can intervene quickly and safely**.

We had one **patient who was attacking a staff member in their bedroom** and our ward alarms weren't functioning. Oxevision alerted us [to multiple occupants] and made us realise what was going on. We then **immediately went to support and make sure that both the staff member and the patient were safe**.

”

Staff Nurse

“

We have used Oxevision where there has been an incident with a patient being violent and aggressive just to **check their location in the bedroom before we entered**. This patient had already seriously assaulted a member of staff prior to that. The Oxehealth system **helped me plan our response better to avoid it happening again**.

It was used to see where she was in the bedroom because you can't actually see that through the window, so it was helpful to know how many people should enter the room and where she was so **we could be more prepared**.

”

Staff Nurse

“

We had one incident where we were using Oxevision to check on patients in between rounds and found that **three patients were in the same room and one of them seemed to be very sexually disinhibited**.

Before Oxevision, if you were one staff member checking the rooms during rounds you wouldn't want to approach three patients at one time because they could easily become aggressive.

Oxevision was very useful here in helping us understand the situation and prepare our approach to enter the room and resolve the incident. Fortunately, things didn't escalate.

”

Staff Nurse

“

Oxevision has helped us **better prepare our response when addressing incidents**. Before, it was common for me to hear of an incident from the hallway, without seeing anything, and I would enter the room, **potentially putting myself at risk**.

Now, if I check with Oxevision and see that a patient has odd vital signs or is smashing the room up and self-harming, I can make sure I've got a team of people supporting me. If a patient is expressing aggressive behaviour or trying to make a weapon, **we can go in with a team to make sure that the patient and the staff are safe**.

”

Healthcare Assistant and Activity Coordinator

“

There are certain patients that are coming off drugs, and they can get quite aggressive especially when going through withdrawal.

The system has been useful for **avoiding aggressive situations** with them where it's been safer for staff to check in on the patient through the system, instead of going in and risk setting a patient off when they're aggressive.

”

Staff Nurse

“

The system really helps when **monitoring an aggressive patient** and preparing to go into the bedroom. So, if we see a patient acting bizarrely or throwing things around and we have to go in, we're at least not going in blindly and putting ourselves at risk. It just means **we're better prepared** and helps us assess how many staff members we need to address the situation.

”

Staff Nurse

Rodney's Story

Faith is able to keep herself and Rodney safe when a situation arises where Rodney fashions a weapon from items in his room.

[Read story](#) ›

Robert's Story

Rosie is able to plan an intervention into Robert's bedroom safely to make sure her team and Robert are safe and uninjured.

[Read story](#) ›

Sean's Story

Matthew is able to care for Sean remotely until it is safe to enter his bedroom and provide hands-on care to support his de-escalation.

[Read story](#) ›

Staff can care for patients with more privacy and dignity

Staff experienced being able to care for patients with more privacy and dignity using Oxevision. Clinicians reported that they were able to monitor patients at night remotely, only entering their bedrooms when it was clinically needed.

Staff reported that patients were more likely to have a good night's sleep due to a reduction in light, noise disturbance and physical intrusion (previously necessary for conventional checks to verify patient safety).

As a result, patients felt like their privacy and dignity had improved, and they had greater independence and sense of control in moving forward in their recovery.

“

When we were doing normal observations we used to have to **shout into the bathroom or shower** but now we can use Oxevision to see how long they have been in there, if they have only been gone a minute we don't get worried, and we can check again in a few minutes.

It's **improved their privacy** in the sense of not interrupting their bathroom or shower time unnecessarily.

”

Staff Nurse

“

I think it's the little things that make the big differences for our patients. Something like checking on our patients at night, we might have to **move their duvet to check they are safe which wakes them up. It impacts their relationship with us.**

Being able to do remote safety checks at night makes a big difference to their wellbeing and to our relationship with them.

”

Service Manager

“

In general, we've never had much time to interact with patients. Now, with Oxevision, it's nice because **before we used to check their rooms all the time**, sometimes every second, **now you can check on the system** for patients who are in their rooms **and then use that free time to engage with other patients** in the lounge or communal areas. In these cases, the interaction level is more.

”

Healthcare Assistant

“

I had one patient that was on 15-minute observation rounds. I was concerned, and a bit suspicious and paranoid myself about keeping her safe since I didn't have eyes on the room. For my peace of mind, **I checked on her more frequently. She ended up irritated with me and it damaged the staff-patient relationship.**

We now use Oxevision to check on them more frequently between observations. Using this system **allows the patient to feel a little bit more independent, but** we've got the confidence and peace of mind of knowing that they're safe.

”

Clinical lead

“

There's no disturbance to patient sleep when we conduct our observations at night using Oxevision. You are not making noise by opening the hatch or the door or switching on the light in the patient's room. It is a very efficient system and I feel like it is **improving recovery for our patients.**

”

Staff Nurse

“

We had a lady who was quite unwell and **would take her clothes off in a communal area.** We had male staff on observations, and so we were able to check her intermittently using Oxevision remotely to **uphold her privacy and dignity.** Usually we would have the door open to do face to face observations. This way we maintained her dignity whilst closely monitoring her safety.

”

Staff Nurse

Andrea's Story

Joseph is able to reduce disturbance at night for Andrea, helping to reduce her agitation the next day.

[Read story](#) ›

Ben's Story

Ben feels a greater sense of privacy at night as Natasha is able to remotely check he is safe and well.

[Read story](#) ›

Habiba's Story

Habiba feels more in control of her recovery as Rachel is able to feel reassured she is safe whilst giving her space and independence.

[Read story](#) ›

Lina's Story

Andrew gives Lina space and privacy from constant observations at night, helping to aid her recovery during her stay.

[Read story](#) ›

Methodology

Data presented in this report was compiled from early insight reports from eight mental health trusts across NHS England. Data was collected from 22 wards, including the following inpatient services: female working age acute, male working age acute, mixed working age acute, older adult (including dementia), psychiatric intensive care, seclusion and health-based places of safety.

Staff surveys, focus groups and one-to-one interviews were conducted on the ward between 2019 and 2021 after 3-6 months of use in order to evaluate staff perceptions.

A variety of topics were covered including surveys, focus groups and interviews covered a variety of topics including: patient safety, patient care, risk management, staff safety, staff experience and patient privacy and dignity.

Patient information, including names, have all been changed or removed to protect patient data and anonymity. Two questionnaires were used to collect staff feedback. Staff were required to answer questions on a scale of 1 to 6. In both surveys 1 reflected staff strongly disagreed with the question or statement and 6 reflected staff strongly agreed. The two surveys were merged for the purpose of this report.