vCreate®

Transforming Autism Assessments: How NHS Lothian is Revolutionising Diagnosis with Secure Video Technology

A Case Study of vCreate's Secure Clinical Video Technology for Healthcare

The longstanding challenges for NHS clinicians are many, including long waiting lists, procedural inefficiencies, staffing challenges, and bottlenecks in diagnostic processes. For parents of children and young people with suspected autism, obtaining a diagnosis can be a difficult experience, with families facing increasingly long waiting lists for autism assessments.

As the health service evolves, healthcare technology plays a crucial role in modernisation.

Aware of the critical need for more efficient and effective assessment strategies, NHS Lothian investigated options to reduce unnecessary clinical visits for families during the assessment stages of suspected autism.

THE CHALLENGE
Streamlining Autism Diagnosis

Autism is a developmental disability that affects individuals in different ways, but ultimately impacts how a person interacts and communicates with the world around them.

The assessment process for autism can be particularly challenging due to long waiting lists and overwhelmed clinicians, which are often significant barriers for those seeking diagnosis and support. The autism assessment team at NHS Lothian faces many challenges within the assessment process. These include the need to collect data from various sources and address bottlenecks in service delivery, as well as the more logistical issue that the multiple teams required to make a diagnosis are based in different geographical areas. This combination of factors highlighted the critical demand for more efficient and effective assessment strategies, that would ultimately result in expediting the assessment process and reducing unnecessary clinical visits for families.

Before vCreate, there were some significant hurdles within the service, including:

1. High demand and long waiting lists.
2. Overwhelmed clinical teams including multidisciplinary clinicians, community paediatricians and speech and language therapists (SLTs), stretched thin and swamped with heavy caseloads.
3. Geographical barriers with collaboration often required from teams based in different locations.
4. Inconsistent observations due to clinical settings creating potential barriers to observing a more accurate presentation of a child's natural behaviour.
5. Time-consuming administration with the diagnostic process requiring extensive documentation and adherence to standardised criteria.

AN INTRODUCTION TO SECURE VIDEO TECHNOLOGY

NHS Lothian's community paediatricians and speech and language therapy (SLT) teams have introduced flexible, modern approaches to autism assessments by introducing vCreate, a secure clinical video management platform.

Video technology has reduced the number of clinical appointments for some families, has shortened the duration of assessment for families who participate and has increased satisfaction for those who have provided feedback.

Using vCreate means clinical appointments are shorter, which is preferable for families with children and workflow has been streamlined through:

⊕ **Contextual video evidence:** Parents record specific activities, guided by clinicians, to demonstrate typical social interactions and play at home in a natural, familiar environment.

⊕ **Diagnostic integration:** Videos are classified based on observations and mapped to the DSM-5 criteria for autism diagnosis.

⊕ **Multi-language support:** Families can access guidance and submit videos in their preferred language, reducing reliance on translators.

⊕ **Web-based convenience:** Accessible on any device, the platform ensures equity of access for all families.

Imogen Wright, Specialist Speech and Language Therapist at NHS Lothian, said:

❝ **vCreate allows us to gather contextual information from a young person within their more comfortable environment, often resulting in a more authentic presentation. That information is then used to populate the DSM-5, where appropriate, therefore progressing and speeding up the assessment process.** ❞

"The immediacy of the vCreate translation tool is both cost-efficient and timesaving compared to the use of translators."

....

OUTCOMES:

Quicker access to clinicians, improved efficiency, and a more streamlined experience.

vCreate has been transformative to NHS Lothian's autism assessment process in the following ways:

⊕ **Fewer clinical appointments:** To date, we have been able to reduce face-to-face appointments by two hundred. Clinicians can review multiple videos in the time it takes to conduct a single in-person assessment.

⊕ **More valuable information:** Clinicians are able to gain contextual observations of children and young people who feel more comfortable within their home environment.

⊕ **Improved observation skills:** Clinicians have reported that vCreate has enhanced their confidence in observation skills.

⊕ **Faster diagnoses:** Clinicians report significant reductions in the time required to confirm or rule out a diagnosis, allowing families to focus on available support.

⊕ **Cost savings:** Reducing home visits and clinical appointments saves vital resources for the NHS and reduces travel expenses for families. A consultant paediatrician and a speech and language therapist would have been present at in-person appointments.

⊕ **Accessibility:** The multi-language feature enables families to access the service and all communications in their preferred language, whilst also allowing clinical teams and families to access vCreate on any device at any time.

⊕ **Reduced stress:** Appointments in the clinic environment can be stressful, with many neurodivergent children and families finding attending an unfamiliar environment challenging. By offering greater flexibility in appointment types, NHS Lothian has had success with engaging with families who may in the past have struggled to attend appointments. vCreate has significantly reduced this stress by gathering much of the high-quality contextual information through home-recorded video.
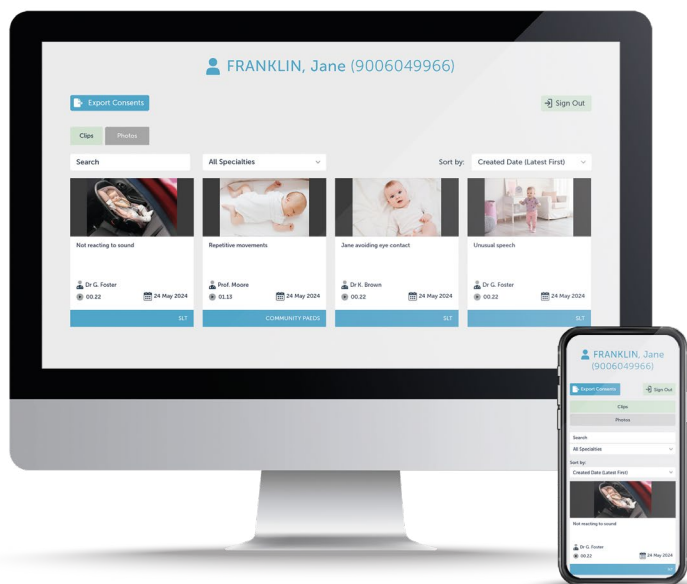
⊕ **Security:** vCreate is hosted on Microsoft Azure, offering advanced security features, including encryption-at-rest, Web Application Firewall, and advanced threat protection. These advanced security features safeguard patient data, videos, and photos.

Morag Burns, Clinical Lead SLT at NHS Lothian, highlighted how the platform had addressed a critical need:

> **By gathering contextual observations at home, where children don't feel the need to mask, clinicians gain much more valuable information. This allows us to reach a diagnosis more quickly, ultimately reducing waiting times.**

Additionally, she explained that clinicians appreciate the platform's user-friendly classification tools, which enhance their confidence in making complex diagnostic decisions.

TRANSFORMING THE FUTURE OF AUTISM ASSESSMENTS

The use of vCreate has been overwhelmingly positive within NHS Lothian's paediatric SLT team, and plans are underway to expand its use to other speech and language therapists and community paediatricians within the trust.

As NHS Lothian continues to lead in its innovative approach, the use of vCreate demonstrates how digital tools can transform healthcare delivery, creating more efficient, equitable, and patient-centred services, offering convenience and accessibility, and providing advanced security features that safeguard sensitive patient data.

ABOUT VCREATE

vCreate's secure clinical video management software is used by more than 200 hospital services, helping to facilitate the secure sharing of videos, photos, data and messages between patients, carers and clinical teams.

vCreate empowers healthcare teams to deliver remote care, create clinical efficiencies and improve patient outcomes. This empowerment is a key factor in its success, enabling teams to take control of their processes and deliver better care. The software increases capacity and reduces costs with clinical videos, photos and data for rapid, precision diagnostics, and supports family engagement. To date, more than 115,000 patients and families have used vCreate.

To find out how vCreate could benefit your clinical teams and patients, contact **theteam@vcreate.tv** or visit **www.vcreate.tv/health**