

Great Ormond Street 
Hospital for Children
NHS Trust

Great Ormond Street Hospital (GOSH) Overview
Organisation: 29 wards, 335 beds,
315 doctors, 900 registered nurses

Admissions: More than 22,000
inpatients and 77,000 outpatients
annually

Business Problem

Healthcare professionals have to access multiple clinical applications to retrieve all of the information they needed for any particular patient. This led to time being wasted on logging in and repeated searches for the same patient's record in different systems. This in turn led to weakened governance and increased clinical risk.

Solution

Vergence with Single SignOn and Single Patient Selection

Results

Streamlined application authentication and patient information access. Vergence slashed the amount of time clinicians spent authenticating and conducting patient lookups and increased GOSH's level of security and information governance.

Applications

- iSoft iPM - EPR
- Quadramed - Pathology
- JAC - Electronic Prescribing, Dispensing and Drugs administration
- Novell GroupWise

Great Ormond Street Hospital improves clinical access

Using Sentillion's Vergence solution, Great Ormond Street Hospital for Children (GOSH) has simplified the way clinicians access critical applications and patient information.

Information technology is embedded in the heart of healthcare. Every aspect of the patient's journey is now recorded by IT systems, a trend which is set to continue.

This has been the experience for Great Ormond Street Hospital for Children NHS Trust. The London-based national centre of excellence provides the widest range of paediatric specialist care of any children's hospital in the UK. GOSH is the only Biomedical Academic Centre for paediatrics, as well as the major provider in the UK for children with heart or brain problems and the largest centre in Europe for children with cancer.

The challenges associated with application access and finding patient information soar

In the past few years GOSH has increasingly deployed systems used in the clinical front line, rather than the back office and "after-the-event" record systems that were preponderant up until then.

The evolution didn't come without its own challenges, explains David Bowen, EPR Programme Manager at GOSH. For a variety of reasons, mainly connected with its specialist nature, GOSH was committed to a best-of-breed multi-vendor applications architecture. However, the sheer number of usernames and passwords that healthcare professionals needed to recall each time they required access to information grew unwieldy. On top of that, they constantly needed to re-synchronise multiple systems to the record of the patient of interest. "As we deployed more applications, access to electronic patient records grew more cumbersome," says Bowen. "That's not good when you're working with clinically critical systems."

The problem was not simply one of time and efficiency. "It was becoming a major patient safety issue," says Bowen. "We clearly outgrew the way we were managing access to individual applications. We knew that we had to bring a new level of rigour to how we managed access for our staff," he says. It also encouraged the use of systems in ways that violated GOSH's internal security policies and information governance.

GOSH required a system which would provide users with a simplified way to sign on to multiple applications and manage patient context consistency across them. GOSH identified the HL7 Clinical Context Object Workgroup (CCOW) standard as the key to finding a solution. CCOW is based on a model of clinical applications communicating and responding to context changes real time, which matched the GOSH vision perfectly. Unfortunately not one of GOSH's applications supported the CCOW standard, a seemingly insurmountable hurdle. "The problem in the UK is that virtually no locally-developed clinical applications are CCOW compliant. We thought we had hit a dead end on context management," says Bowen.

A unified, open and flexible standards-based solution

The question of a viable solution was resolved when Bowen and his team learned about

“If you’re a doctor or nurse the last thing you want is endless hassles with technology, which is what they always had. Now it’s smooth. It’s all of the things you’d want the systems to do. They’re all working in concert,”

— David Bowen, GOSH EPR
Programme manager

Sentillion’s Vergence Solutions, designed specifically for healthcare organisations. Vergence provides single sign-on and context management capability to an unlimited number of clinical and business applications. Clinicians gain secure access to the applications relevant to their role, even those that require different credentials. This dramatically reduces the burden and complexity of access management. Worldwide, more than 275,000 professionals use Vergence every day at hundreds of healthcare organisations.

Vergence enables GOSH to integrate disparate applications at the presentation layer. So each time a clinician selects a new patient, in any application, all other applications that he or she is using automatically synchronise to the new patient. Patient information can then be reviewed and updated using each application’s native interface capabilities, providing users with comprehensive and flexible access to the applications they need during the provision of care.

“The fact that Sentillion could enable context sharing across applications that were not natively CCOW compliant was crucial for us,” says Bowen. “That Vergence combines single sign-on with patient context management solved two of our fundamental needs within one solution,” he says.

Fully integrated Single Sign-on and Single Patient Selection

GOSH’s initial Vergence implementation was completed within 90 days. It included five applications, presented in a desktop environment that is delivered to clinicians using thin-client technology – the GOSH Virtual Desktop or GVD (“a working title that just stuck”). Importantly, GOSH decided on a pilot approach within a single specialty, realising that, for a successful implementation, they first needed to understand the users and their roles and fine tune the workflow between each of the applications. It also gave them chance to ensure that their infrastructure was ready and configured.

“The implementation went pretty smoothly, and we’ve now rolled out the GVD to all clinical units. There certainly has been a significant “Wow” factor throughout our organisation and now the pressure is on to bring more applications into the context-managed domain,” says Bowen. “It’s really an incredible success story.” GOSH is now moving on to user provisioning and smartcard-based authentication.

“Vergence has demonstrated itself to be extremely reliable since the implementation”, says Bowen. Sentillion’s appliance-based fault tolerant architecture consistently demonstrates 99.999 percent up time, and includes support for more than 500 clinical applications worldwide. This meant flawless operations when GOSH flipped the switch to provide unified single sign-on and context management. “We were able to accomplish both in a single hit,” he says.

“In this new environment, the hassles clinicians previously had with multiple passwords and time consuming redundant patient lookups are gone. When they sign on, they’re in. And when they find a patient, that patient is found in every application,” he says. “Before we came to Sentillion, we didn’t even think this was possible.”