



Digital Progress Notes: Addressing a fundamental gap in the Irish acute system

A man goes to his doctor to complain that graffiti had been daubed on the side of his house. Confused, the doctor asks: "Why are you telling me?" The man replies: "Well, I can't read a word of it and so wondered if it was you."

Many of us (doctors included) like to joke about our doctors' illegible handwriting. But the gags conceal a serious issue.

The problem

Illegible, uncategoryed, and disconnected – the typical process of documenting patient progress and plans of care is a significant inefficiency in the system, resulting in clinician frustration and a poor patient experience.

The demand to provide high quality patient-centered care while maintaining medical records which are legible, complete and accurate is placing enormous pressure on doctors nationally – especially given the number of patients and the increasing complexity of notation required.

Not only are handwritten clinical notes notoriously difficult to read, it is nigh impossible to extract meaningful data from paper charts – even if they are scanned into an electronic health record (EHR). In a digital format, data can be mapped out to internationally recognised clinical coding languages which can, in turn, populate the country's Hospital In-Patient Enquiry (HIPE) database, used by the Health Service Executive's (HSE's) Health Pricing Office for Activity-Based Funding.

Finally, written paper notes mean that busy non-consultant hospital doctors (NCHDs) and doctors cannot easily collate information to interpret the patient's story or use existing documentation to populate discharge summaries efficiently. The result is that it can take up to two weeks for a general practitioner (GP) to receive a hospital consultant's written discharge and treatment instructions.

The approach in Ireland – a solution yet to be realised

In Ireland, the push towards EHR began in earnest five years ago when the HSE met with more than 150 e-health companies at Dublin's Croke Park.

As **Dr Áine Carroll**, then National Director Clinical Strategy and Programmes at the HSE, noted in the foreword to the HSE's National EHR Strategic Business Case: "An electronic healthcare record is one tool that can assist us in making it easier for clinicians to do the right thing, by facilitating patient safety and quality improvement through the use of tools thus reducing errors and waste, while allowing remote access to information."

"Faster, more accurate communication and streamlined processes can lead to improved patient flow across the continuum of care with less duplication of investigations, while making us more responsive to patient inquiries," she added.

The push towards an EHR was recently fuelled by yet another vendor consultation at the Hilton Dublin Kilmainham on August 18 and the announcement in October that the European Investment Bank will be providing a €225 million loan to the Irish Government to roll-out eHealth Ireland's transformational eHealth programme.

During the vendor consultation, it was communicated to vendors that the first deployment of the EHR will need to coincide with the planned opening of the new National Children's Hospital in 2022. After this implementation, the EHR will be rolled out to other Hospital Groups one by one, over the next 10 years.

In other words, struggling to understand a colleague's handwriting could be a thing of the past for clinicians – but not for another 10 years. Rolling out these solutions may be fraught with bureaucracy, complexity, and frequent delays. These complex systems are partial solutions that take significant investment to deploy. So while change is coming, most hospitals will not see it for another decade.

Progress Notes: An answer for the here and now

Unwilling to wait, and in need of an expedited solution, the Acute Medical Unit (AMU) at University Hospital Galway (UHG), which is part of the Saolta University Health Care Group, is blazing a bright trail towards that future state. When staff identified the need to streamline operations and improve care delivery reporting, they asked Think Research – a leading digital healthcare company from Toronto, Canada – to design and deliver a novel solution to meet their immediate needs.

Think Research's solution was to deploy its clinical documentation solution, Progress Notes. This sophisticated clinical documentation system is designed to improve the workflow of clinicians in their day-to-day practice. Progress Notes allow entire care teams to collaborate on a shared patient profile that

captures critical patient information. Progress Notes cuts out the redundancy of double entry and re-synthesising information, while capturing powerful patient data that supports better decision-making. Progress Notes is hosted on Think Research's General Data Protection Regulation-compliant Entrypoint platform and allows for integration across any number of future EHR systems.

The AMU was in need of an 'EHR-light' system which would enable timely clinical decision-making and digitise its paper-based clinical noting operations, and Think Research delivered.

Chris Collenette, Director of Think Research EU, explained: "Progress Notes were specifically configured to complement the AMU's clinical workflow and made available at the point of care, through computers and tablets. Like all of our cloud-based digital health tools, Progress Notes are fast and easy to deploy, and are flexibly designed to fit seamlessly within an organisation's clinical workflow."

He continued: "Indication-specific clinical decision support pathways were developed in order to standardise care for the most common presentations. This ensures consistent management and improved patient experience."

For clinicians at Galway's AMU, the new system saves staff time by reducing the burden of documentation. This direct benefit, and the speed of implementation, made Progress Notes a well-received solution.

The project was originally funded by eHealth Ireland's Quality Innovation Corridor Programme (QIC) and was later nominated for two IMSTA (Irish Medical and Surgical Trade Association) awards. It was also a finalist at the HSE Excellence Awards in 2017 and has become a celebrated case study on eHealth Ireland's website.

Making progress with Progress Notes

With the Progress Notes solution in place now for almost two years, and a national EHR deployment still years away, the immediacy of Think Research's approach was an obvious benefit. But digging deeper, a recent evaluation at UHG's AMU revealed that doctors were saving a remarkable 15 to 25 minutes per patient using Progress Notes, with more than 16,500 Progress Notes submitted since the project's inception in April 2017. Reflecting on the impact this new system has had in Galway, the HSE's **Dr Yvonne Smyth**, Consultant Cardiologist, Acute Physician and National Co-Lead for the Acute Medicine Programme, said: "Adding Think Research's clinical documentation solution led directly to improvements

in the quality of care we are able to provide patients."

Issues with legibility, incomplete documentation, and variability in management of common problems are now a thing of the past. In addition, coding staff are reporting both efficiencies in time and quality of coding procedure as a result of access to structured digital content. "We are working more efficiently without sacrificing patient safety – in fact, assessments are now more comprehensive, accurate and communication with all those involved in a patient's care is better", Dr Smyth continued.

Through the use of cutting-edge cloud technologies and leveraging the existing ICT footprint, agile digital tools can be provided to clinicians at a fraction of the price of legacy systems. Certainly, Think Research and UHG are showing that Ireland does not have to wait 10 years for a nationwide roll-out of an EHR to realise the benefits of healthcare innovation.

Think Research's CEO Sachin Aggarwal, who visited Ireland this past October, commented: "The UHG project is a great example of clinicians and hospital administrators gaining rapid value. Together, we are changing healthcare now, while also preparing users for the EHR future-state."

Through this project, Saolta's administrative leadership has demonstrated incredible leadership in finding solutions that remain true to both clinical best practice requirements and the demand for operational efficiency.

Digital tools such as Progress Notes are addressing lingering challenges in the healthcare system and providing meaningful benefits to both practice and patient outcomes – both now and in the future.

Next steps for Progress Notes

Following on from UHG's success, the Acute Medical Assessment Unit (AMAU) in Wexford General Hospital, a member of the Ireland East Hospital Group, took a similar leap, going live with Progress Notes on January 29 this year. In addition to clinical noting, the local team has digitised their discharge planning, prescriptions, GP letters and referral letters. In its launch week, more than 250 notes were created for more than 130 patients.

The demand is clear and the appetite for change exists; the future is bright for Progress Notes in Ireland. **IMT**



L to r: Sachin Aggarwal, CEO; Dr Chris O'Connor, founder, Think Research; Dr Yvonne Smyth, Consultant Cardiologist and National Co-Lead, Acute Medicine, HSE; and Liam Woods, Director Acute Hospitals, HSE