



About Health Innovation Hub Ireland

Health Innovation Hub Ireland (HIHI) was established by the Department of Business, Enterprise and Innovation and the Department of Health, supported by Enterprise Ireland (EI) and the Health Service Executive (HSE) to drive collaboration between the health service and enterprise. We offer companies the opportunity for pilot and clinical validation studies and the health service access to innovative products, services and devices that they may not otherwise be exposed to. HIHI is built on the recognition that collaboration with enterprise can benefit patient care, patient pathways and outcomes. We assess all concepts

for healthcare innovation from those on the frontline - from clinician to porter. We encourage healthcare professionals to get in touch with HIHI if they have an idea or solution to how something in your job might work better.



MedDeus is an innovative Irish start-up that has developed ClearScribe® a user-friendly digital application to eliminate the illegibility associated with prescribing of medications in hospitals. Their roadmap contains other user-friendly solutions to issues in healthcare that can often be road blocked by complexity.

Registered as a company in 2017 it now has a tried and tested product addressing the problem of prescription illegibility. The commitment and belief in the product as a solution to illegibility has brought it to a successful implementation in an Irish Hospital. MedDeus commitment to refining product functionality from user feedback, towards improving safety and efficiencies, is continuous.

MedDeus leverages its IT, hospital, and marketing expertise and experience to the develop its products.

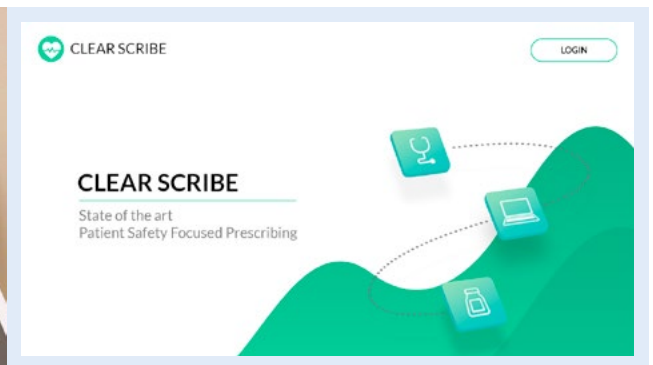
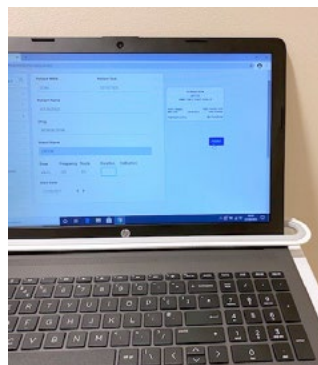
www.meddeus.com
www.clearscribe.com

The Healthcare Challenge

Prescription illegibility can be any factor contributing to ambiguity in what is prescribed e.g., incomplete drug name, strength, frequency, route and even prescriber identity. Poor handwriting leads to potential misinterpretation of intended treatment. The wide practice of handwriting in the healthcare system leads to safety concerns if misinterpretation occurs. MedDeus team's first-hand experience of these safety concerns arising from written instructions drove the need for a solution. Misinterpretation of a written instruction can be catastrophic and challenging prescribers remains a cultural barrier.

Data from the UK, reported in the British Medical Journal (BMJ), calculated that "definitely avoidable" medication errors cost the NHS nearly £98.5 million every year and 1708 lives. In the worst-case scenario, which assumes a hospital stay of 14 days for each incident and the need for a broad range of NHS services, the estimates come in at £1.6 billion and 22,303 lives, respectively, each year (**link**).

Yet the current gold standard of E Prescribing and a total Electronic Patient Record has remained on the shelf for many decades due to affordability and cultural challenges. In the absence of E Prescribing, the current solution continues to be the pen, which is subjective and is difficult or impossible to standardise.



The Healthcare Solution

ClearScribe® is a quick and intuitive system that enables the printing of clear/legible prescription labels delivered instantly at the point of care using Cloud Technology. It aids the prescriber and nurse in several ways including:

- clearly legible printed labels, population of medication names of both brand name and generic name and other known aliases to enable appropriate medication selection.
- expansion of dosage options to exclude short codes.
- prompted entry of all elements of a complete prescription including indication.

Accessibility is via Microsoft Cloud ensuring availability, fast speeds, a server-less system, and is secure, as patient data does not leave the hospital network.

Prescribers use this product to enhance the clarity of their intended drug treatment for their patient, and thus improves the process, safety and efficiency of medication dispensing and administration.

Further functionality introduces best practice patient safety features unachievable with the current processes e.g., patient identifiers and time of prescription.

HIHI Role

When the solution was in early phase development MedDeus required feedback from various clinical personnel familiar with the prescribing process to help validate their assumptions about the need and the proposed solution. HIHI recruited a multidisciplinary group of healthcare professionals to attend a focus group. The interaction, hosted and managed by HIHI, provided the company an opportunity to engage with the people best placed to validate their solution. A presentation followed by a survey and a Q&A session allowed those present to explore and constructively challenge the solution to provide critical feedback from a clinical perspective. The feedback was collated, analysed, and compiled in an independent report from HIHI showing the need in this area.



Outcome Report

MedDeus's ClearScribe® product is a good solution to the problem of illegibility of prescriptions. In addition, it is easy to use, increases accountability, and could improve safety for the patient by reducing errors in prescribing. Excitingly, MedDeus received their first contract with a private hospital recently. This is an important milestone for the development of the efficiencies within healthcare while focusing on patient safety.

Apart from HIHI; the product was accepted onto the New Frontier Programme from Enterprise Ireland, Phase 1 of which was recently completed; and has been awarded an EI Innovation Voucher. In 2020, Blackrock Clinic partnered with Meddeus to trial ClearScribe® in an effort to help address errors in the medication prescribing process. Blackrock Clinic will be proceeding with a wider rollout of ClearScribe® in 2021 and will work with Meddeus to enhance the product and its features.

An independent study by the National College of Ireland states, "the ClearScribe® system could deliver a significant reduction in errors provided that ClearScribe prescriptions make up 70% or more of the total prescriptions issued." This pre product analysis of medication concerns around illegibility compared to the impact of ClearScribe® on this issue confirmed the elimination of illegibility in the prescribing process.

Testimonial

Our engagement with HIHI has been an invaluable part of our journey. Through them, we had access to clinical personnel involved in all aspects of the dispensing, prescribing and administration processes for inpatient medication. The feedback received confirmed our working assumption that there is a need for ClearScribe® and there will be value in the clinical setting in mitigating against current risks in this process.

Collaboration with HIHI led us to the validation of our own belief that we had a solution to prescribing risks. This in turn provided the impetus to move the product forward. A successful pilot in a live prescribing situation followed, the success of which was a milestone for us. Following this, the product will be rolled out in a private hospital in 2021. We can trace our journey to this successful milestone back to our initial engagement with HIHI, and the support they continue to give has been integral to this success.

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