

AB193. 169. The design and development of the Irish National Hernia Database (INHD), an online hernia registry

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Background: Currently, Ireland relies on randomized controlled trials and the Hospital In-Patient Enquiry (HIPE) system for the analysis of hernia repair. The HIPE system while functional is limited in the data collected. Multiple countries and organizations throughout the world have developed online platforms, which gather more detailed analysis of hernia type and repair allowing for enhanced analysis and overall improvements in patient care. Under the supervision of Prof Dermot Hehir, Midlands Regional Hospital, Tullamore, and following previous publications by the European Hernia Society (EuraHS) hernia classifications, the Irish National Hernia Database (INHD) version 1 was designed and developed over a 6-week period.

Methods: Over a 6-week period, through analysis and review of previous online platforms and registries, INHD variables were chosen. Databases searched included PubMed, Medline, Cochrane and Web of Science. Search criteria included but was not limited to, [hernia registry] or

[hernia online platform] or [hernia database].

Results: The database schema was scaffolded inherently based on the modelled data variables. Following the MySQL database creation, the user experience (UX) design process occurred. The user interface (UI) design mimicked a real-world pen and paper procedural design and focused on clinical data entry, it was later split up into several steps for clarity and ease of use. When the design process was signed off, the integration between front-end and back-end technologies occurred. Concluding; UX was complete and attached to a database point of entry whereby data could be stored and retrieved.

Conclusions: An online registry which accumulates pre-defined data regarding hernia repair has been proven to enhance patient care across the boards (Kyle-Leinhase *et al.*, 2018). Whilst this database has yet to be rolled out fully in a public setting it is reasonable to assume it too would follow a similar path in patient care. As seen by the CORE project, the simple act of collecting the data independent of method greater enhances the quality of hernia surgery (Kyle-Leinhase *et al.*, 2018). With greater funding to allow this database to be held online with a multi-user approach and IT admin would be most desirable moving forward. It would allow for the comparison amongst Irish surgeons for the first time, increasing the overall national quality of hernia surgery.

Keywords: Abdominal hernia; online platform; online registry

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