

Scotland makes an **IMPACT** on global clinical audit

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The 'International Multicentre Project Auditing COVID-19 in Trauma and Orthopaedics' has set a precedent for global collaborative networks for data-driven improvement in orthopaedics.

Information in uncertainty

We learnt the true value of clinical audit when, at the outset of the COVID-19 pandemic in early 2020, the Scottish Hip Fracture Audit faced a dilemma: how to support high-quality hip fracture services while audit resources were stretched in a nationwide response to an international health crisis.

Pictures from China, Italy, and other European countries showed hospitals and large venues dedicated solely to the treatment of patients with COVID-19 and it was feared that the same would be experienced in Scotland. What is more, little was known about how the vulnerable patients that suffer hip fracture would be affected by the SARS-CoV-2 infection.

One thing was clear: when faced with uncertainty, data and intelligence are vital components to any emergency response.

A Scottish audit response

An audit was established in three units in South East Scotland and, with the support of Public Health Scotland and the Scottish Committee for Orthopaedics & Trauma, was rapidly expanded into a nationwide emergency clinical audit. Using simple observational methods and a collaborative approach the surveillance data informed briefings to senior-level governance bodies and formed the basis of three multicentre observational studies that investigated clinical risk factors, patient outcomes, and patterns of spread of the disease relating specifically to hip fracture patients.^{1–3}

The IMPACT Global Collaborative

Recognising the need for an international response to a global crisis, the International Multicentre Project Auditing COVID-19 in Trauma & Orthopaedics (IMPACT) Collaborative Group was established with the support of colleagues from the UK, Ireland, Spain, Australia and New Zealand, and many others. A bi-weekly series of meetings between clinicians and representatives from national hip fracture audit programmes facilitated rapid communication, information-sharing, and data-gathering services.

Over a matter of weeks, the IMPACT Group grew to a network of over 200 centres from 20 nations (Fig. 1) and, by adopting a low-cost, clinician-led, collaborative model, enabled an international survey of the COVID-19 response in 185 centres,⁴ and a global cohort study of over 7000 hip fracture patients in 112 hospitals – a larger number of study centres than any previous study in orthopaedics.

The future of collaborative audit

There is now a precedent for conducting clinical audit in hip fracture on an international scale. Audits that span a greater breadth of clinical, demographic, and health economic contexts should be the standard in the 21st Century, and by improving the compatibility of existing audit programmes we can not only increase the size of available datasets, but also their diversity, generalisability, and relevance.

The establishment of mechanisms for global continuous clinical audit could facilitate even more rapid and agile responses to future international emergencies, and the greater incorporation of routinely-collected health data could provide the framework to support investigations into other pressing clinical questions.

The COVID-19 pandemic and the subsequent IMPACT collaboration has catalysed the spirit of cooperative information-gathering, data-sharing, and discovery hip fracture. Colleagues from around the world have shown great generosity and enthusiasm to share their experiences and their resources, and these relationships that have been forged in adversity are likely to endure.

The importance of continued clinical audit to improve the experience and outcomes of patients with hip fracture has been clearly demonstrated. All efforts must be made to protect these vital resources in future.

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Figure 1. International Multicentre Project Auditing COVID-19 in Trauma & Orthopaedics (IMPACT) Collaborative Network.



Source: <https://twitter.com/IMPACTAudits>

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