

Developing a Virtual Fracture Clinic for Hand and Wrist Injuries*Raymond E. Anakwe, MBBS; Douglas Evans; John Hardman, MBBS¹;**Scott David Middleton, MBBS**¹Imperial College NHS Trust, St Mary's Hospital, Paddington, London, UNITED KINGDOM*

Purpose: The treatment of hand and wrist trauma is time-critical. With increasing patient numbers, demand for resources, devolving of emergency department care to junior staff and non-medical practitioners, as well as pressures on trauma clinics, it has become more difficult to provide high-quality trauma care for these common injuries. New methods of working are required. The use of "virtual clinics" has been trialed in other areas. We piloted the use of a virtual fracture clinic for hand and wrist trauma referrals in a major trauma center. We hypothesized that this model would offer demonstrable benefits, would be safe, and it would allow the patient to receive the right treatment from the right person at the right time.

Methods: We established a twice-weekly virtual clinic for hand and wrist fractures. Over a 20-week period every referral was scrutinized and the associated imaging was reviewed by a specialist attending hand and wrist surgeon. The patient was contacted directly by telephone or letter to communicate the outcome of this virtual clinic. We reviewed all relevant complaints, compliments, significant incidents, and adverse events over this period using the department governance structure and hospital complaints reporting and tracking system.

Results: We reviewed 291 patients in the hand and wrist virtual fracture clinic over 20 weeks. 104 patients were referred directly for hand therapy without requiring a formal fracture clinic appointment. A further 26 patients were selected for direct referral to hand therapy but declined to be referred in this way without seeing a doctor. 54 patients were discharged directly following the virtual fracture clinic with advice. 98 patients were formally reviewed in the fracture clinic. 26 of these patients went on to have surgery.

Conclusion: Hand and wrist fractures make up the bulk of the trauma load but a large proportion of these injuries do not require operative intervention. Our study shows that moving the senior decision-making point forward to the patient in a virtual environment can streamline patient pathways, reduce delays, and offer safe treatment. Our initial experience has suggested that patient education can have a profound effect on the acceptability of this model to patients. The one adverse outcome in this pilot was related to an administrative error and underlines the importance of adequate resource and support, but we feel that this is comparable with traditional models of care.