

THE DEVELOPMENT OF AN OUTPATIENT VIRTUAL (VIDEO) SPECIALIST SPINE CLINIC BETWEEN THE NATIONAL ORTHOPAEDIC SPINE CENTRE AND A SECONDARY ORTHOPAEDIC CENTRE IN THE REPUBLIC OF IRELAND.

Authors: SE. Murphy ¹, M Timlin ², C Cullinane ¹, L Fletcher ¹, K Goulding ¹, M Cleary ¹

Institution: ¹ Department of Orthopaedics, University Hospital Waterford, Waterford, Ireland

² National Orthopaedic Spine Centre, Mater Misericordiae University Hospital, Dublin, Ireland

1. INTRODUCTION

The Orthopaedic Service at University Hospital Waterford (UHW) serves a population of 500,000 people. Currently UHW has no dedicated Orthopaedic spine service. Approximately 10 % of spinal patients require specialist surgical spine opinion (Bardin et al 2017)). Currently potential Orthopaedic spinal surgical patients at UHW experience lengthy and convoluted routes to access the appropriate care in other dedicated Spinal Orthopaedic centres nationally. There is currently no structured pathway for surgical spine patients at UHW to access the appropriate care.

2 MATERIALS AND METHODS

In collaboration with the National Orthopaedic Spine Centre at the Mater Misericordiae University Hospital (MMUH) Dublin, a novel Virtual (video) Orthopaedic spine clinic has been developed for potential spinal Orthopaedic surgical candidates from UHW. This is a new service which commenced in September 2021. Patients are screened in advance at in-person Orthopaedic/Pain clinics in UHW and if their clinical presentation and investigations are indicative of serious pathology that may warrant surgical intervention, they are listed for the Virtual(video) Spine clinic.

To enable the new virtual pathway to function to greatest efficiency, a Rapid Access Spinal pathway was developed. Traditionally all spine referrals were managed the same and patients no matter how acute could linger on UHW Orthopaedic waiting lists for up to two to three years. With the new rapid access pathway, clinically appropriate patients are identified at time of referral and fast tracked to in-person Orthopaedic clinics. Appropriate patients are reviewed at these in-person Orthopaedic clinics within two months of referral. If surgical intervention is a considered management option at this consultation, the patient is listed for the next Virtual UHW/MMUH Spine clinic

The Virtual (video) Spine Clinic is scheduled the first Friday of every month. Six patients are listed for review at each virtual clinic. The duration of the clinic is approx. 90 mins. The platform used for the meeting is Webex. A spinal surgeon and clinical specialist physiotherapist from MMUH link in virtually (video) with the Orthopaedic team at UHW including Orthopaedic consultants and Clinical Specialist physiotherapists. The Pain team at UHW also link to the meeting. Potential surgical candidates are listed for the clinic and all relevant radiology is uploaded on the system and shared with the involved centres. Relevant clinical documentation is forwarded to the MMUH team in advance of the meeting. Patients are presented by the UHW team and an opinion given by the MMUH Spine team. The three main outcomes from the Virtual Spine clinic are 1) Surgery 2) Pain Intervention 3) Continue conservative management i.e.physiotherapy etc

3. RESULTS AND DISCUSSION

To date two clinics have taken place. Conversion rate to surgery is 60%. Patients who require surgery are managed at the National Orthopaedic Spine Centre MMUH, Dublin and receive their surgery within

6 weeks. If pain intervention is indicated, protected slots have been secured for patients from the Virtual spine clinic and patients receive their Pain intervention within 4 weeks (routine wait time is 2 years). Patients who require ongoing conservative management are referred directly to primary care services.

The development of the Rapid Access Spinal pathway and virtual (video) Spine clinic ensures that a vulnerable client group can access appropriate care in a timely manner. This is a significant quality improvement initiative and is in line with Irish Government '*Slaintecare*' policy of managing the patient at the right time, in the right place, by the right person. Patient waiting times have been significantly reduced and patients are now offered appointments based on clinical need rather than on a chronological basis of when they were referred. The virtual clinic is a very cost effective medium of service delivery as no additional resources with respect to staffing or infra-structure are required in either centre. In addition, this improved service is less onerous for the patient as they do not have to travel for a specialist surgical opinion. In addition, the wait time to obtain this surgical opinion is significantly reduced leading to a faster resolution of symptoms and improved quality of life.

There are several other Orthopaedic centres in Ireland, who similar to UHW, do not have a dedicated Orthopaedic spine service. The virtual model of care which has been developed between UHW and the National Orthopaedic Centre/MMUH can easily be replicated across other Orthopaedic centres in Ireland with minimal cost implications. Therefore the transferability of this service to other locations across Ireland is high and also adapting this model of care for other clinical specialities is also a viable option.

This virtual Orthopaedic Spine service is in it's infancy. Constant evaluation of this service is fundamental to it's sustainability. Patient satisfaction questionnaires have been developed to gain feedback from patients on their experience. Local GP's will also be polled to gain their feedback on the service and how their needs are being met.

3.2 Conclusion

A Virtual (video) Orthopaedic spine clinic between a National Orthopaedic Spine Centre and a regional non spinal surgical Orthopaedic centre seems to provide an efficient, cost effective and viable option of service delivery for patients with significant spinal Orthopaedic dysfunction. Ongoing evaluation of this service is required to ensure it's sustainability.

Reference

1. Bardin L, King P, Maher C (2017) Diagnostic triage for low back pain : a practical approach for primary care. Medical Journal of Australia 206 (6) 268-272

Contact address : susane.murph@gmail.com

Susan Murphy, PhD is a Clinical Specialist Physiotherapist, Orthopaedic Department, University Hospital Waterford, Ireland.