

Developing a Standardized e-Referral Form Can Improve Patient Care

Jesse Slade-Shantz, BSc, MD, FRCSC, MBA, Stephen Gallay, BSc, MD, FRCSC, Joel Lobo, MD, FRCSC, Amelia McCutcheon, BSc, MSc, PhD, *Farah Nabi, BSc, CPA

Division of Orthopaedic Surgery, Rouge Valley Health System, Ajax, Ontario, Canada
Email: fnabi@rougevalley.ca; stephengallay@gmail.com; joellobomd@rogers.com;
amccutcheon@rougevalley.ca; jesse@mdcommons.com

Introduction

The Shoulder Centre (TSC) at Rouge Valley Health System (RVHS) is transforming shoulder care through the implementation of an innovative and comprehensive model of care that builds on novel partnerships between community providers and the Centre's clinical team and leverages technology solutions to deliver evidence based treatments.

Recognizing the high demand for shoulder care within the CELHIN, The Shoulder Centre is structured to increase the capacity to assess and treat shoulder problems more accurately and with markedly reduced wait times. The model of care leverages intelligent e-tools for referral, triage and communication with the primary care providers and promotes collaboration with community champions, radiologists, and physiotherapists permitting shoulder problems to be treated at a reduced system cost with improved access to care.

In adult shoulder care long waits increase the cost of care through unnecessary imaging and treatments not informed by an accurate diagnosis. Many urgent shoulder diagnoses are not identified at the primary care level increasing the likelihood that information sent to specialists will not allow appropriate triage to occur.

Questions

In a community shoulder practice can a consensus-based referral form, in paper and EMR-adapted format, allow more appropriate diagnosis and triage of patients? Will the structured, standardized information allow the identification of system waste in planned diagnostic imaging and avoidance of unnecessary tests?

Methodology:

Using a consensus-based approach five surgeons created a referral form encompassing the information thought to be necessary to triage patients awaiting shoulder treatment. The resultant form was created initially as a fillable electronic form and paper form and distributed in

the immediate community. The form was also converted into a pre-filled Practice Solutions Suite (Telus Health) form and released to primary care practices in the community.

All referrals received, were then screened by three surgeons. During the screening process a standardized referral assessment form (Google Form, Google Inc., Mountainview, CA) was used to determine the imaging and treatment that accompanied the referral. Surgeons also determined the appropriateness of the imaging available in the form. Summary statistics were performed in Office Excel (Microsoft, Redmond, WA) and presented as proportions.

Results

Our data suggest that there are several key areas of waste in shoulder treatment. Adhesive capsulitis is an area where advanced imaging is not required to make the diagnosis and treat the condition. Our findings suggest that many patients with adhesive capsulitis are referred with advanced imaging due to the lack of standardized information exchanged between primary care and specialists. In addition, recurrent glenohumeral instability often requires surgical management, however, specialized magnetic resonance imaging arthrograms aid in surgical planning and are commonly ordered for this diagnosis. Many patients have already received a conventional MRI when presenting with recurrent instability, a waste of the diagnostic test.

Conclusions

Employing a standardized form can improve the ability to appropriately triage and treat shoulder patients from a community practice. In addition, it is possible to determine key diagnoses where there is a high risk of waste (adhesive capsulitis, shoulder instability) and prioritize access for these patients with non-surgeon assessors to decrease the overall cost of care.