

One Stop Shoulder Clinic: Collaborative working to provide gold standard cost effective patient care

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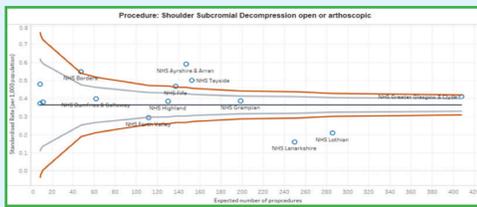
Background

Shoulder surgeon usage of ultrasound in clinic significantly reduces the time to treatment for patients with rotator cuff tears.¹ Ultrasonography in one-stop clinics is a cost-effective and accurate method of diagnosing patients with shoulder pathology.²

An innovative one-stop shoulder clinic was introduced within Ayrshire and Arran in 2017 demonstrating collaborative working between the Shoulder Surgeon and Allied Physiotherapy Practitioner (APP). During this consultation the patient receives a specialist assessment, diagnostic imaging, guided intervention and physiotherapy rehabilitation. This innovation aligns with the Scottish Government 'Modern Outpatient' legislation as it maximises the role of Consultants and AHPs.³

When the diagnosis is confirmed or excluded at the first visit to the shoulder clinic, the need for further imaging and follow-up clinics is usually negated. It also means that a firm diagnosis and management plan could be formulated and discussed with the patient and any queries answered at the time of the initial consultation.

Key Drivers



Note: Ayrshire and Arran includes Crosshouse and Ayr hospital

- Ayrshire & Arran an outlying health board for Subacromial Decompression surgery 2014-2015
- Desire to reduce 'review' clinic appointments and replace them with 'new patient' clinic appointments.
- Inconsistent shoulder pathways from ED to Orthopaedics with suspected rotator cuff injury
- Lengthy radiology waiting times for MRI and diagnostic ultrasound scanning

Aims

Introduce new "One Stop" appointments to improve the management of shoulder impingement

Improve the management of acute rotator cuff tears including early identification, surgical planning and rehabilitation

Integrate diagnostic ultrasound imaging and guided procedures within an Orthopaedic clinic setting

Increase "New" patient capacity and reduction of "Reviews" with the introduction of "One Stop" appointments and telephone reviews.

Methodology

- Orthopaedic Shoulder Consultant and 1 Advanced Physiotherapy Practitioner (APP) in Crosshouse Hospital + 2 APPs in Ayr Hospital trained in diagnostic ultrasound (US) imaging and US guided injections.
- 2 ultrasound machines purchased with non-recurring funding from Scottish Government (£50,000 x2).
- Image transfer available onto PACS, APP has reporting rights.
- One-stop shoulder clinic appointments introduced by Shoulder Surgeon in Crosshouse hospital (AT) in 2017, with capacity for additional appointments. Service has expanded to Ayr hospital.
- Patients appointed directly by Shoulder Consultant via Orthopaedic triage or by Emergency Department APP.
- Direct access to discuss complex cases with Consultant Radiologist (SU) in Crosshouse hospital.



Results

Mapping the patient journey

Pre one-stop clinic



One-stop clinic

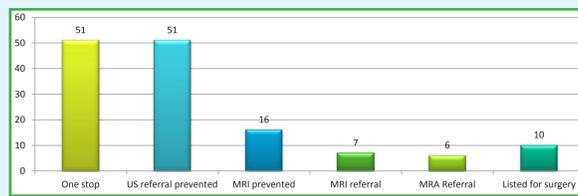


Results

Data collected from September 2018-March 2019. The service was only operational at one site (Crosshouse Hospital) until January 2019 and therefore total savings would be expected to rise by approximately £5,600. Further savings are estimated as the service expands further at Ayr Hospital.

At Crosshouse Hospital the Orthopaedic Shoulder Consultant and APP have increased the capacity of seeing 'New' patients and reducing 'Returns' through the one-stop clinic appointments and Telephone Reviews.

Chart 1: Outcome of One Stop Shoulder Clinic



Virtual Review

Telephone reviews were introduced at Crosshouse in February 2019 to save further consultant review appointments.

Chart 2: Telephone Review Outcome



Table 1: Cost Savings

	Total No.	Savings
Consultant review *	20	£2000
Radiologist US scan/procedure *	38	£3800
MRI*	16	£5600
Total savings		£11,400
Annual estimated savings		£34,200

Note: These costs are estimates from Business Intelligence in Ayrshire and Arran
*MRI: £350 per scan Consultant Review: £100 Radiologist US Scan: £100

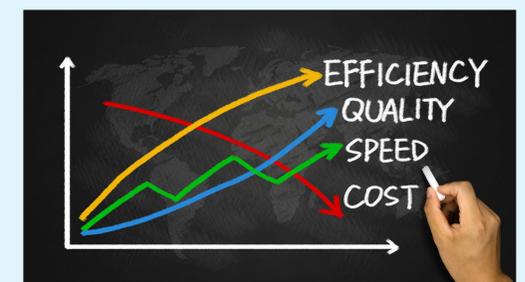
I visited Crosshouse Hospital today with my dad, who has been suffering hugely with bad shoulders recently.....it was a huge comfort to be able to visit Crosshouse today to get; a physio consultation, X-ray, shoulder specialist consultation, scan, and cortisone injection, all within 3 hours.

Premium Service, why can't all facets and departments of the NHS come together and work so slickly?

Absolutely Brilliant service, great to have everything provided on the same day. Very impressed overall.

Conclusion

The one-stop shoulder clinic is an innovative cost effective service improvement, maintaining high standards of patient care with significant multi-departmental benefits. In addition to the cost savings, the patient's journey has significantly improved which is highlighted by the positive feedback received. The availability of a skilled APP to scan and treat alongside the expertise of an Orthopaedic Consultant with direct access to discuss complex cases with a Consultant Radiologist is a multidisciplinary collaborative transformation of the shoulder service.



References

1. Cowling P, Gamble A, Rangan A. The use of shoulder ultrasound in a one-stop clinic: diagnostic accuracy for rotator cuff tear and biceps tendon pathology. *Shoulder and Elbow*. 2011; 3: 13-6.
2. Seagger, R., Bunker, T. & Hmaer, P. Surgeon-operated ultrasonography in a one-stop shoulder clinic. *Orthopaedic Surgery*. 2011; 93: 528-531.
3. Scottish Government, The Modern Out-Patient: A Collaborative Approach 2017-2020, 201.

