**NHS Lothian Integrated Musculoskeletal Services and Pathways Programme**

**Collaborative, Transformational Change in Musculoskeletal, Elective Orthopaedics and Neurosurgical Services - Shifting the Balance of Care**

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**Background**

**NHS Lothian Integrated Back Pain Service**

The care for people with lumbar spine-related symptoms in NHS Lothian was fragmented, inefficient and inconsistent. Secondary care neurosurgery and spinal orthopaedic services were challenged with long waits, low conversion rates to surgery and large volumes of referrals at the lowest end of the complexity spectrum. A collaborative, multi-disciplinary, transformational service change based on the principles of right care, right time, right place, right person was undertaken. The NHS Lothian Integrated Back Pain Service. This work formed part of the NHS Scotland Musculoskeletal (MSK) and Orthopaedic Quality Drive programme.

**NHS Lothian Integrated Shoulder and Elbow Service and NHS Lothian Integrated Foot and Ankle Service**

Elective Orthopaedic shoulder and elbow and foot and ankle service faced similar challenges of long waits, low conversion rates to surgery, and large volumes of low complex cases. Based on successes achieved within the Lothian Integrated Back Pain Service, similar collaborative, multi-disciplinary, transformational change was undertaken, supported by the NHS Scotland Musculoskeletal (MSK) and Orthopaedic Quality Drive and now supported substantively by NHS Lothian.

**Aim**

 Deliver high quality, timely, safe and effective care for people with lumbar spine, shoulder and elbow, and foot and ankle conditions. This is underpinned by multidisciplinary pathways and the integration of primary and secondary care services based on right care, right person, right time, right place. Deliver new and enhanced level of primary care based MSK services.

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**NHS Lothian Integrated Back Pain Service**

**Methods**

- Strong multidisciplinary consultation, collaboration and co-creation of pathways of care for people with lumbar spine complaints.
- Referrals to any level of service triaged based on standardised new and agreed criteria, and passed to the appropriate level.
- Enhanced level of primary care service with new Spinal Advanced Physiotherapy Practitioner (APP) clinics and new virtual spinal clinics providing access to diagnostics, Neurosurgical Consultant opinion and multidisciplinary decision-making.
- High volume, low complex conditions routed to primary care (includes re-routing appropriate neurosurgical referrals to primary care APP clinics).
- Underpinned by programme of education, service evaluation, audit and continual improvement incorporating Quality Improvement (QI) methodology.

**Outcomes**

- >170,000 people aged >18 have back pain in any one year period in Lothian1.
- ~36,000 people within Lothian consult their GP each year with back pain-related complaint1.
- October 2017 - September 2018
  - 11,913 people were referred to NHS Lothian integrated back pain service
  - 96.5% managed in primary care
  - 84% managed in adult MSK Physiotherapy services
  - 14% managed in the Spinal Advanced Physiotherapy Practitioner clinics
  - 2% referred to Neurosurgery
  - 1426 neurosurgical appointments were saved
  - Since October 2015
  - 31% reduction in number of GP lumbar spine MRI requests

**Conclusion**

Collaborative working between primary and secondary care has delivered transformational change in service delivery for people with lumbar spine-related complaints in Lothian. Care is timely, and in the vast majority of cases provided close to home in the primary care setting. This has reduced demand on specialist secondary care Neurosurgical services, facilitating more timely care for high complex and surgical cases. The balance of care has shifted consistent with the principles of right care, right person, right time, right place.

**References**

Ackerman, P., Johnson, W (2019) NHS Lothian integrated back pain service- annual report

NHS Scotland (2011) Spinal Services Review Group


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**NHS Lothian Integrated Foot & Ankle Service**

**Methods**

- Proposal for service transformation based on principles of the Integrated back pain service supported by NHS Scotland MSK and Orthopaedic quality drive pump prime resource.
- Multidisciplinary steering groups, consultation, collaboration and co-creation of pathways of care for people with shoulder and elbow and foot and ankle conditions.
- Orthopaedic referrals re-routed to new enhanced level of primary care service with new Advanced Physiotherapy Practitioner (APP) and Advanced Podiatry Practitioner, based on agreed criteria. Scope of practice includes x-ray, steroid injection and interventional radiology requests.
- Underpinned by programme of service evaluation, audit and continual improvement, incorporating Quality Improvement (QI) methodology.

**Outcomes**

- Nelder orthopaedic referrals (high volume, low complex conditions) were re-routed at triage by the orthopaedic team to primary care advanced physiotherapy practitioner clinics under agreed criteria/processes
- 96% were managed in primary care APP clinics, with 49 referrals onwards to orthopaedics
- 1592 orthopaedic referrals were added vs 2811 which would have been added prior to this transformative service redesign
- 1219 orthopaedic referrals saved – orthopaedic returned to demand/capacity balance

**Conclusion**

Collaborative working between orthopaedics and primary care AHP MSK services has delivered transformational change in service delivery. Enhanced level of primary care MSK services managing the high volume, lower complex cases reduces demand on orthopaedics, facilitating more timely care for more complex and surgical cases. The balance of care has shifted consistent with the principles of right care, right person, right time, right place.

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