

Spine Hub and Spoke Model: A Questionnaire-based study

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Introduction:

Specialist Spinal Services provide operative and non-operative management strategies for a variety of conditions ranging from simple pathologies to complex disabling conditions. The existing spinal hub and spoke model was implemented nationally across the NHS in 2015.

We aim to assess the effectiveness and pitfalls of the Spinal hub and spoke model in this questionnaire-based study.

Methods:

We conducted a prospective questionnaire-based study in the Northwest of England and with attendees of the British Orthopaedic Annual conference in Aberdeen, 2021. Questionnaires from hospitals with no local spinal services were included, while those with on-site services were excluded. Questions were specific to initial assessment, referrals process, MRI availability and awareness of the Spine Hub and Spoke model.

Results:

Data was gathered from 254 Orthopaedic surgeons. 90% of initial assessments performed in the emergency department were by doctors with little or no spinal experience. Following the spinal referral, on-call middle grades at the spinal hub provided an initial opinion, which on average took between 4 – 12 hours.

86% of hospitals do not have the provision to perform spinal MRI scans out of hours. 90% of Orthopaedic surgeons were not confident in conveying spinal referral outcomes to patients and providing them with follow-up appointments. Only 46% of surgeons were satisfied with the current model. 78% of Middle-grade Drs were unaware of the Hub and spoke model.

Conclusions:

Our survey identified that Orthopaedic surgeons in the NHS expressed the need for local spinal services for non-urgent cases. Based on the results of this survey, we recommend a restructuring of the hub and spoke model across hospitals in the NHS.

References:

1. Society of British Neurological Surgeons. Commissioning Spinal Services – Getting the Service Back on Track. London: SBNS; 2013.
2. Hutton M. Spinal Services. London: GIRFT; 2019.

