A Descriptive Study of Physiotherapist use of Publicly Funded Diagnostic Imaging Modalities in Alberta, Canada

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Diagnostic Imaging Authorization of Alberta Physiotherapists

Background

In 2011 Alberta Physiotherapists, who meet specific qualifications, were authorized to refer for X-ray, MRI and Ultrasound Imaging

162 physiotherapists were authorized to refer for DI between 2011-2016

- ~75% were authorized in 2012-2013
- ~72% practice in Calgary or Edmonton
- ~80% practice in private (primary care) settings

Physiotherapy Alberta 2017

The DI referral patterns of PT’s within Alberta’s public health system have not been described → We undertook a descriptive study of Historical Data
Data Sources and Data Elements

Methods

Gathered all PT-referred, publically funded DI studies btw Jan 2012 & Dec 2016

Physiotherapist Data
- List of authorized PT’s*
  - Geographic region
  - Practice setting
*Publically available

Hospital & Public Health Clinics
- DI Data (Jan 2012-May 2016)
  - DI modality
  - Geographical region
  - # of studies/PT/month

Community DI Clinics
- DI Data (Jan 2012-Dec 2016)
  - DI modality
  - Geographical region
  - Body part
  - # of studies/PT/month

PT’s had a unique & anonymous ID across AHS & AH datasets so that the data could be combined while the individual identity of the PT was protected
DI Studies by Modality & Geographical Region

Results

20,280 publically funded PT-referred DI studies occurred btw 2012-2016

- Physiotherapists referred for X-ray > USI > MRI (does not include private MRI studies)
- Considerable geographical variation was observed (77% of DI studies took place in Calgary)
- The majority (99.6%) of DI studies were within scope (exceptions; arthrograms, interventional radiography, CT)
- 35% of X-rays were of the spine, sacro-iliac joints or pelvis

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Monthly or Yearly Referrals by PT (2012-2016)

Results

- Referrals varied over time & between PT, modality & geographical region
- 4 therapists accounted for ~ 31% of all PT-referred publically funded DI studies
- No information available to judge the appropriateness of referral (no clinical presentation, condition or diagnosis)
- Findings have implications for professional associations, regulators and educators

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