Trends in Patient Encounters with Rheumatologists in a Publicly-Funded Single Payer Healthcare System

Jessica Widdifield1,2,3, Sasha Bernatsky4, Janet Pope4, Vandana Ahluwalia1, J Michael Paterson2-3, Vicki Ling1, Lihi Edery, Claire Barber4, Bindee Kuriya1, Catherine Hofstetter, Anne Lyddiatt, Carter Thorne4

1Sunnybrook Research Institute; 2Institute for Clinical Evaluative Sciences; 3Institute of Health Policy, Management & Evaluation, University of Toronto; 4McGill University; 5Western University; 6William Osler Health Centre; 7Women’s College Hospital; 8University of Calgary; 9Southlake Regional Health Centre

BACKGROUND

- Rheumatology workforces are challenged by too few physicians, increasing incidence and prevalence of MSK diseases (and complexity of co-morbid conditions) in aging populations, and expanding therapeutic options that increase demand for service.
- Understanding trends in rates of rheumatology encounters with new and existing patients will help identify if patients have delays to rheumatology care and mobilize efforts to help meet patients’ needs.

OBJECTIVES

- To describe trends in patient encounters with rheumatologists over time in Ontario, Canada.

METHODS

STUDY DESIGN & SETTING:

- We conducted a population-based study analyzing administrative health data from 2000 to 2015 in Ontario, Canada, where all 13 million residents are covered by a publicly funded healthcare system and access to rheumatologists is dependent upon referrals.
- During this time, Ontario had a stable rheumatology supply of 1 rheumatologist per 75,000 population (0.8 FTEs per 75,000).

DATA SOURCES:

- Adult rheumatologists were identified using a validated physician registry → ICES Physician Database (POB)
- Patients with rheumatology encounters were identified from the Ontario Health Insurance Plan (OHIP) Claims Database
- Adults 18 years and older (for annual population denominators) were identified from the Registered Persons Database (RPDB)

ANALYSIS:

- We determined annual patient encounters (total & new patients) seen by rheumatologists.
- Using fee-for-service billing claims, we assessed rheumatologist patient encounters according to type:
  1. Any interaction (including non-face-to-face services e.g. lab review)
  2. Inpatient assessment (using patients who have been hospitalized)
  3. Outpatient assessments (face-to-face consultations with a clinic)
- To identify new patients, we applied a 3-year washout period ensuring patients had no prior rheumatology contacts.
- Rates were calculated using the total population of Ontario residents 18 and older, each year, as the denominator.
- We assessed characteristics of patients (demographics & clinical diagnoses) under rheumatology care.
- Diagnostic codes assigned at each encounter were used to assess changes in the case-mix of patients under rheumatology care over time.

RESULTS

- The majority of rheumatology encounters occurred in outpatient settings and the volume of inpatient encounters declined over time.
- The percentage of new patients who saw rheumatologists increased over time with the growing supply-demand mismatch in rheumatology care.
- The number of new patients seen annually declined over time.

CONCLUSIONS

- There was a 23% increase in the number of patients seen by rheumatologists from 245,486 patients in 2000 to 302,336 patients in 2015.
- The percentage of Ontario residents under rheumatology care remained unchanged over time (2.7%).
- The majority of rheumatology encounters occurred in outpatient settings and the volume of inpatient encounters declined over time.
- The significant decline in new patient consultation rates over time helps illustrate the growing supply-demand mismatch in rheumatology care.
- An increasing fraction of rheumatology encounters were with established patients, which may be limiting access for new consultations and increasing wait times.
- We also observed a shift in the patient case-mix over time with rheumatologists seeing more systemic inflammatory conditions.

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