Changes in Rheumatology Provision and Practice in Ontario, Canada

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BACKGROUND

• The global shortage of rheumatologists is an increasing concern.
• Statistics from physician surveys have projected changes in rheumatology workforce composition (ageing, feminization, and generational trends), which have implications for the workforce clinical activity.
• In order to adequately document the issues and potential solutions, more detailed information is needed regarding clinical activity, demographic changes and the implications of these in a population-based sample.

OBJECTIVES

• To describe changes in the number, demographics and clinical activity of Ontario rheumatologists over the past decade.

METHODS

SETTING:
• Ontario, Canada, where all 13 million residents are covered by a publicly funded, single-payer, universal healthcare system.

STUDY DESIGN:
• We conducted a population-based study using administrative health data from 2000 to 2013.

DATA SOURCES:
• Rheumatologists and their characteristics, were identified using a validated physician registry (ICES Physician Database (IPDB))
• 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) derived dataset

INCLUSION CRITERIA:
• Active rheumatologists with fee-for-service billing claims/year

EXCLUSION CRITERIA:
• Pediatric rheumatologists
• Patients <18 years of age

ANALYSIS:
• We used rheumatology billing claims to quantify annual clinical activity levels expressed as full-time equivalents (FTE).
• Physicians below the 40th percentile of total billings were classified as providing less clinical activity (<1 FTE); 40-60th percentile were classified as 1 FTE; >60th percentile classified as >1 FTE.
• As an alternate FTE measure (AMA definition), we determined the proportion of rheumatologist with patient encounters on >200 days of the year.
• Descriptive statistics were used to characterize the workforce demographics, clinical activity, practice sizes and practice volumes, stratified by FTE classification.
• Analyses were performed at ICES in Toronto, Ontario.

RESULTS

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CONCLUSIONS

• The Ontario rheumatology workforce is ageing. As of 2015, 1/3 of all Ontario rheumatologists will be retiring in the near future.
• Despite the increase in the total number of rheumatologists, the # of new rheumatologists entering the workforce is not sufficient to meet the loss of 51 rheumatologists (2016) leaving retirement.

• Within each gender group, a higher % of males were classified as >1 clinical FTE vs. >1 FTE.

• Practice volumes varied by clinical FTE status (as expected). In 2015, the average rheumatologist practicing as >1 FTE (blue) had ~5500 total patient encounters per year, 460 encounters per month and 19-30 encounters per day.

• Although there has been an increase in the number of rheumatologists, the per capita supply and access to rheumatologists have remained unchanged.
• The Ontario rheumatology supply is insufficient to meet the present and future needs for patients with rheumatic disease in Canada.

• We observed changing workforce demographics (aging and greater feminization) and declining clinical activity over time. IMPLICATIONS: To the extent that similar trends are occurring in the USA & Europe, the implications of our study for the availability of rheumatology services beyond Canada are significant. Factors affecting clinical activity (including an aging and greater feminization of the workforce, clinic saturation, increasing care complexity, models of care, greater demands for continuing medical education and research activity) warrants further study.

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