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# Linking Clinical and Administrative Data to Inform Performance Measures Regarding Access to Specialist Care for Patients with Rheumatoid Arthritis

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#### Introduction

Rheumatoid arthritis (RA) is the most prevalent type of chronic adult inflammatory arthritis and requires timely diagnosis and subsequent access to specialist care and treatment from a rheumatologist. We developed a set of key performance indicators (KPIs) to evaluate access, effectiveness, acceptability, appropriateness and efficiency of care.

## **Objectives and Approach**

The overall objective was to measure performance of a central intake system for referral to rheumatology against the KPIs. We report on one accessibility KPIs: the percentage of patients with new onset RA with at least one visit to a rheumatologist in the first 365 days since diagnosis. We identified a cohort of RA patients using a validated case definition: >16 years, at least 1 RA related hospitalization (ICD-10-CA:M05.x-M06.x) or two RA related physician visits  $\geq$  eight weeks apart within two years (ICD-9: 714.x). The incident case date was date of hospitalization or second physician visit (whichever came first).

#### Results

This KPI assessed the proportion of patients seen by a rheumatologist within one year of first RA visit by patients in the RA cohort. 13,914 cases of RA were diagnosed between April 1 2010 and March 31 2016. The percentage of patients with new onset RA with at least one visit to a rheumatologist in the first 365 days since diagnosis increased between fiscal years 2011 and 2015. Of the 2851 incident RA cases in fiscal year 2011, 1490 (53%) met the performance measure compared to 1710 of 2710 (63%) who met the definition in fiscal year 2015. Other KPIs, including wait times, are being evaluated using both clinical and administrative data.

### Conclusion/Implications

By linking multiple administrative datasets, we are able to measure system performance against a defined KPI and identify opportunities for system improvement. This is the first initiative in Alberta for patients with RA where data from different multi-custodial data repositories have been extracted, linked and analyzed for this purpose.



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