

# Challenges in measuring wait times for rheumatology care in Canada: A demonstration using four models of care

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## Background

- The Arthritis Alliance of Canada (AAC)<sup>1</sup> recently developed 6 system-level performance measures for inflammatory arthritis.
- The measures capture timely access to rheumatology care and treatment.
- This project is part of a larger study to test the feasibility of reporting on the measures in different data sources.

## Objectives

- To test the feasibility of reporting on the waiting time (WT) performance measure for rheumatoid arthritis (RA) in four different models of care across Canada

## Methods

- Four models of care in 5 practice locations were evaluated between 2014 and/or 2015 (depending on start date of the program).
- Data used was from triage databases or cohort databases supplemented with minimal chart reviews directed at confirming diagnosis and/or one or more dates. Detailed information about the patients or care was not abstracted.

### Inclusion & exclusion criteria

- Sequential RA cases were included (except TAP where only patients enrolled in a national early arthritis cohort were included to confirm RA diagnosis).
- Cases seen in the ER, self-referrals & transfers of care were excluded.

### Measure calculation

- Median and 90<sup>th</sup> percentile waiting times in days (d) for rheumatologist care calculated by measuring time between referral receipt and the first visit for patients with a rheumatologist confirmed diagnosis of RA.
- Percentage of cases meeting a benchmark of <4 weeks was calculated based on Wait Time Alliance threshold<sup>2</sup>

## Results

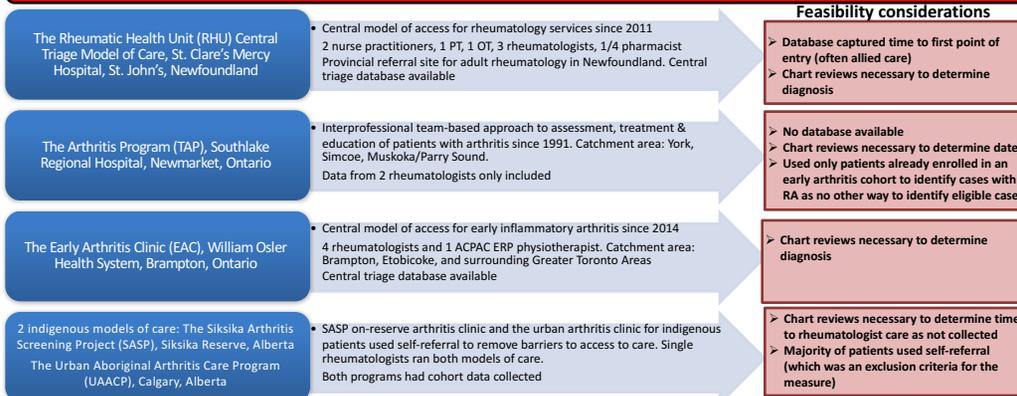


Figure 1. Description of models of care & feasibility of measuring waiting times

Table 1. Waiting times for RA consultation with a rheumatologist in models of care evaluated

Model of care	N 2014	Median wait time (days) 2014	90 <sup>th</sup> percentile wait time in days 2014	% meeting benchmark of <4 weeks 2014	N 2015	Median wait time (days) 2015	90 <sup>th</sup> percentile wait time in days 2015	% meeting benchmark of <4 weeks 2015
RHU (St. John's)	60	142	200	8%	72	74	137	11%
TAP (Newmarket)	29	34	85	31%	25	21	57	64%
EAC (Brampton)	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>	80	45	83	25%
Indigenous models (Alberta)	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>

<sup>1</sup>EAC had complete data for 2015 (only 1/2 year available for 2014)

<sup>2</sup>The indigenous models of care had high rates of self-referral, leading to too many excluded cases to report overall waiting times

## Conclusions

- Substantial barriers to reporting on waiting times for rheumatologist consultation for patients with RA were encountered including:
  - Missing final diagnosis in triage databases
  - Measuring time to first contact (e.g. often allied health) and not to rheumatologist
  - Not measuring waiting times at all (but capturing outcomes)
  - Lack of resources for data collection outside of cohorts/studies for some novel models of care
- When waiting times were measured there was substantial variation between centres with 11-64% meeting benchmarks.
- When instituting or evaluating models of care, a mechanism for collecting & reporting waiting times is suggested.

## Limitations

- Additional variables were not collected to explain differences in waiting times (e.g., sociodemographic factors, referral accuracy etc.) as this was not the focus of the study.
- Sample sizes were small and potentially biased in some centers where inclusion depended upon inclusion in an early arthritis cohort.

## References

- Barber CE et al. J Rheumatol 2016;43:530-40.
- Wait Time Alliance (WTA). Available from: <http://www.waittimealliance.ca/>

## Funding

