

# Rheum4U

By Dianne Mosher, MD, FRCPC

**R**heum4U is a bespoke on-line data capture system designed by a research team in the Division of Rheumatology at the University of Calgary, in consultation with clinicians and patients, and developed by the Epidemiology Coordinating and Research (EPI-CORE) Centre. It was implemented in August 2016 and is now used by patients and clinicians in two Calgary Rheumatology Clinics. Rheum4U tracks and enables measurement of patient, clinic, and system outcomes over time.

Participating patients use Rheum4U to complete online questionnaires regarding health history, functional assessment, quality of life, and work productivity up to one week prior to each clinic visit. Clinicians use Rheum4U to record patient information including diagnosis, vitals, blood test results (erythrocyte sedimentation rate [ESR] or C-reactive protein [CRP]), physician global, swollen/tender joint counts, and medications. After the visit, patients use Rheum4U to complete a questionnaire regarding their patient experience.

From August 2016 to April 2017, 131 patients with rheumatoid arthritis (RA) contributed data to Rheum4U as part of a successful pilot study.<sup>1</sup> Recruitment and data collection through Rheum4U now continues in support of an ongoing quality improvement research project (> 900 participants). Additionally, Rheum4U has, to date, supported recruitment or data collection for five other studies led by researchers from rheumatology, community health sciences, radiology, and gastroenterology. In Q1 2019, Rheum4U will expand to actively support data collection for the Precision Health Registry for Inflammatory Arthritis.

Critical to the ongoing success of Rheum4U is the recruitment and data collection support provided by dedicated research coordinator staff and its integration within pre-established clinic processes.

#### Reference

1. Barber CEH, Sandhu N, Rankin JA, MacMullan P, Marshall DA, Barnabe C, Hazlewood GS, Emrick A, Stevenson M, Then KL, Benseler S, Twilt M, Mosher D. Rheum4U: Development and testing of a web-based tool for improving the quality of care for patients with rheumatoid arthritis. *Clin Exp Rheumatol* 2018; [Epub ahead of print].

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# The Drug Safety and Effectiveness Network (DSEN)

By Sasha Bernatsky, MD, PhD

**T**he Canadian Network for Advanced Interdisciplinary Methods for comparative effectiveness research (CAN-AIM) is a pan-Canadian, highly interdisciplinary network of researchers working together to provide real-world information about drug safety and effectiveness for policy-makers. Funding is provided by the Canadian Institute of Health Research (CIHR) through the Drug Safety and Effectiveness Network, which works with Health Canada and other decision-makers to respond to key knowledge gaps regarding comparative drug safety and effectiveness. The CAN-AIM team (PIs S. Bernatsky, M. Abrahamowicz, L. Pilote) responds to queries which arise from Health Canada and other regulatory parties. These focus on drug safety and effectiveness, drug use patterns, as well as patient preferences, prescription patterns and social media.

CAN-AIM was recently funded to build a biologic registry with the intent of providing real-world information compar-

ing the safety and effectiveness of biosimilar drugs versus their originator biologic drugs. Our five-year study includes adults (aged 18 years and older) with inflammatory rheumatic disease or inflammatory bowel disease (primarily rheumatoid arthritis [RA] and ankylosing spondylitis [AS]) who are initiating therapy with a biosimilar or the originator biologic drug. The primary outcome measure is simply maintenance of treatment, but we will also collect information on start/stop/changes in systemic steroids and immunosuppressive drugs, disease control, and adverse effects, particularly infection. Multiple investigators are involved, including D. Choquette, W. Maksymowych, G. Boire, V. Bykerk, R. Inman, C. Bombardier, C. Hitchon and C. Thorne. For more information on our team or the biosimilars registry, please contact Autumn Neville at [autumn.neville@rimuhc.ca](mailto:autumn.neville@rimuhc.ca) or visit [canaim.ca](http://canaim.ca).

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