



Ontario  
Rheumatology  
Association

## Request For Proposal

# Development & Implementation of the Ontario Rheumatic Diseases Evaluation Registry (ORDER) Informatics Project

ISSUED: AUGUST 20, 2018

PREPARED BY THE ONTARIO RHEUMATOLOGY ASSOCIATION  
INFORMATICS COMMITTEE

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# PART 1: Overview Information

## ORDER: The Ontario Rheumatic Diseases Evaluation Registry

Participating Organization	Ontario Rheumatology Association (ORA)
Request for Proposal	Identify technology solutions providers to support the development, implementation and maintenance of the ORA's Ontario Rheumatic Diseases Evaluation Registry (ORDER) Informatics Platform.
Description	The ORA invites applications from service providers capable of providing technological solutions to support the development (build), implementation and maintenance of the ORDER Informatics platform. ORDER is a comprehensive project that requires PHIPA-compliant, secure technological solutions for the extraction, storage, aggregation, analysis, and feedback of aggregated real-world rheumatology EMR data to ORA member rheumatologists in the Province of Ontario. ORDER is designed to provide ORA members with a user-friendly, real-time mechanism which will be used to quickly assess their own practices and participate in self-directed practice improvement activities. ORDER also provides similar capability at a province-wide level to allow ORA members to assess quality of care indicators as a field and identify priorities for system-level practice improvement initiatives.

## Important Dates

Issue Date	August 20, 2018
Application Deadline Date*	September 20, 2018
Vendor Queries Deadline	August 31, 2018
Notification Date**	October 20, 2018
Project End Date	TBD

\*if this timeline is not feasible, please contact Sandy Kennedy: [admin@ontariorheum.ca](mailto:admin@ontariorheum.ca)

\*\*the ORA will provide a status update to all vendors by this date and may request a secondary round of live in-person RFP presentations to vendors it wishes to engage in the RFP process further.

# PART 2: Full Announcement

## 1. About the Ontario Rheumatology Association

The ORA is a professional organization that represents Ontario rheumatologists and promotes their pursuit of excellence in arthritis care through leadership, advocacy, education, and communication. Today, the ORA's membership includes over 200 rheumatologists practicing in Ontario, and brings together community and academic rheumatologists, adult and pediatric rheumatologists, and Ontario rheumatology residents.

The ORA engages the rheumatology community through membership and education. It is an advocate for its members when collaborating with the government and other private payors to access appropriate treatment options for rheumatic diseases. It has established a networking and communications forum for Ontario rheumatologists.

The ORA collaborates with many professional associations including the Canadian Rheumatology Association (CRA), the Ontario Medical Association (OMA), the Canadian Arthritis Patient Alliance (CAPA), the Arthritis Health Professions Association (AHPA) and the Pharmaceutical Industry.

More information on the Ontario Rheumatology Association may be found on our website: [ontariorheum.ca](http://ontariorheum.ca)

## 2. Project Description: ORDER

The ORA has long been a leader in Ontario in leveraging electronic tools (principally EMR), and developing progressive Models of Care, to help ORA members provide the best care possible for patients with rheumatic diseases. This pioneering work by the ORA has created an opportunity to fulfill a significant gap for ORA members and the patients we serve: assessing and improving quality of care (QoC).

Currently, QoC (e.g. quality and safety indicators, patient outcomes, etc.) are not systematically monitored beyond visit-to-visit interactions at the point of care. Self-monitoring of practice-level QoC metrics is vital to determine where individual practice improvement initiatives are needed, and to assess the impact of implementing practice improvement strategies. The data required for monitoring QoC is being entered into EMRs by Rheumatologists.

The ORA's Ontario Rheumatic Diseases Evaluation Registry (ORDER) Informatics Project aims to make QoC monitoring for ORA members possible. By extracting, analyzing, and feeding back aggregate real-world rheumatology data from EMRs, ORDER will give ORA members a high-level view of their own individual practice AND of province-level performance, relative to published and developing QoC guidelines and metrics.

## WHAT IS ORDER?

ORDER is a comprehensive project that requires a PHIPA-compliant, secure technological solution for the extraction, storage, aggregation, analysis, and feedback of aggregated real-world rheumatology EMR data to ORA member rheumatologists in the Province of Ontario. ORDER is designed to provide ORA members with a user-friendly, real-time mechanism to quickly assess their own practices and participate in self-directed practice improvement activities. ORDER also provides similar capability at a province-wide level to allow ORA members to assess quality of care indicators as a field and identify priorities for system-level practice improvement initiatives.

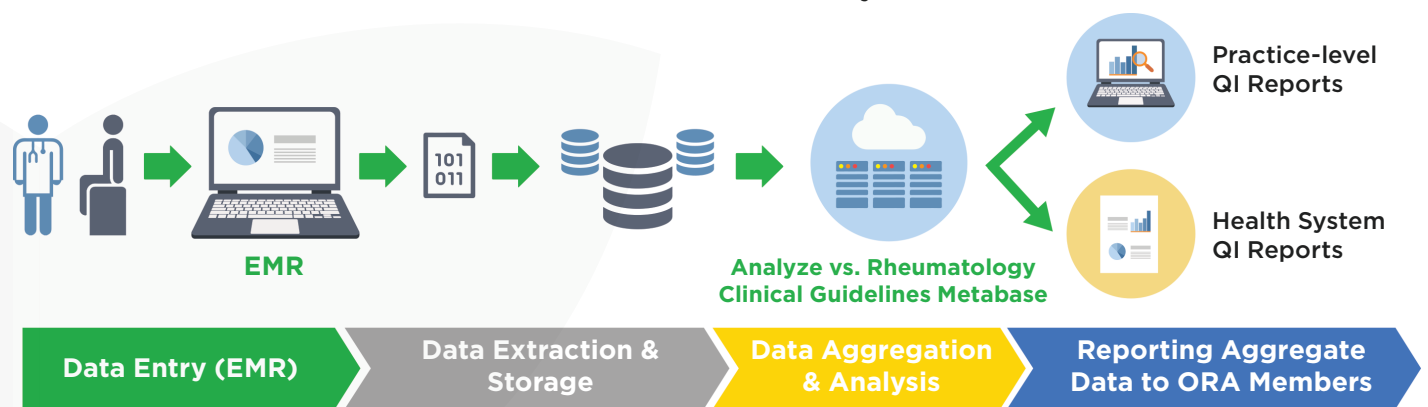
## ORDER MISSION

To develop, implement and maintain a technological solution enabling ORA Members to collect, analyze, and report back aggregate real-world rheumatology data, thereby supporting ORA members to engage in ongoing practice improvement and self-monitoring of health quality metrics in Ontario.

## ORDER DATA SET

A rheumatoid arthritis canadian core dataset has been developed based on the Arthritis Alliance of Canada (AAC) core data set. These will be used in the order project along with several expanded indicators. Please see the appendix at the end of this document and visit the ORA website (<https://ontariorheum.ca/informatics/informatics>) for expanded data set definitions and variables.

### ORDER Data Extraction and Analytics Process



## ORDER DATA EXTRACTION AND ANALYTICS PROCESS

### How is ORDER organized?

ORDER is developed, maintained, owned, and operated exclusively by the ORA membership. Core guiding principles were developed to ensure that ORDER's primary focus is to uphold and serve the needs and interests of patients with rheumatic diseases and ORA members, first and foremost. A Data Governance Framework has been built upon these core guiding principles to guide the development, maintenance, and direction of the ORDER Informatics Project. While third parties must be contracted to provide technical services, directorship and ownership of ORDER will always remain with the ORA.

### Why aggregate data?

Individual data points have limited utility. Data aggregation provides several advantages, the most significant being summarization of many data points across multiple types of data (e.g. disease activity measures) and different patient groups. Aggregate data can then be interpreted across temporal, disease, and/or therapeutic contexts. Aggregating real-world Rheumatology data therefore provides ORA members the opportunity for high-level practice self-assessment and to answer clinically relevant questions in a real-world context. Aggregate data is also de-identified, alleviating many concerns about privacy of personal health information.

### What else can ORDER do?

Beyond supporting ORA member self-assessment of individual practice improvement initiatives, ORDER will also provide ORA members with opportunities to conduct investigator-initiated research using real-world data through an independent application and approvals process. Province-level, real-world, Ontario-specific data will support the ORA in pursuing system-level advocacy initiatives to improve opportunities and resources for ORA members and patients with rheumatic diseases. Self-monitoring initiatives such as ORDER also provide key evidence of self-regulation as a profession, a privilege we as physicians currently enjoy and must always justify and support.

## IN SUMMARY

The ORA Informatics Initiative aims to establish, operationalize, and maintain a robust and reliable mechanism for the electronic collection of large amounts of key real-world clinical data from rheumatology practices across Ontario. This mechanism will provide the ORA a means to store large data sets and to provide ORA members with a real-time conduit to access and assimilate high quality, relevant, aggregate, population-level data in their everyday practice, including at the point of care. In addition to supporting quality improvement strategies through a rapid, on-demand interface, the ORA clinical data sets will also provide essential information for research questions from individual through population levels and will underpin many of the rheumatology and health care-driven projects and initiatives of vital importance to ORA members, patients, and the people of Ontario.



### 3. RFP Requirements & Objectives

The primary objective of this RFP is to find technology solutions providers to assist the ORA with the development and implementation of the technological infrastructure supporting the ORDER initiative.

#### **THE PROPOSAL GOALS**

Provide a technological solution that will:

- a. Allow the collection of standardized data,
- b. Enable ORA members to examine their practice indicators and quality indicators
- c. Allow the ORA to examine province-wide quality indicators

#### **ORDER TARGET AUDIENCE (END USER)**

ORA member Rheumatologists in the Province of Ontario using EMRs

#### **ORDER RFP TARGET AUDIENCE**

Technology solutions providers

#### **SCOPE OF WORK**

Please propose a technological solution for ANY or ALL of the core components listed below.

The ORA has established the core ORDER dataset and this is attached as an appendix.

## CORE COMPONENTS:

### a. Standardized Data Entry

- Please describe proposed information and technology solutions for OntarioMD certified EMR-based data entry. Solutions requirement: interface design and back-end development. Interface design mock-ups welcome.
- Data entry mechanisms should optimize ease-of-use, be intuitive, improve efficiency and not substantially alter the normal workflow of day-to-day Rheumatology practice.
- Ensure data integrity/standardization by establishing EMR-specific data collection mechanisms that will be identical for all Rheumatologists using each specific OntarioMD certified EMRs (Accuro, TELUS PS Suite, OSCAR).
- **Considerations:**
  - Flexibility: participants need to be able to choose whether to enter data into a provided data collection interface (ideally should conform data entry fields depending on the diagnosis), vs using current EMR configuration and then linking to core data set items. How will this will be achieved easily for users and still achieve data standardization?
  - Data standardization: How will this be addressed for core data elements (structured data)? How will the solution prevent distortion of the standardization if EMR users make “customizations” to their site-specific EMR deployment?
  - Provide a business plan for how the proposed technology solution(s) will be able to partner with EMR vendors and how the technology solution will be integrated.

### b. Data Extraction & Storage (Clinical Data Repository)

- Please describe the proposed information and technology solutions for data extraction, processing and safe data storage. Solutions requirement: back-end development
- Data collected by the ORDER project is required to be cleaned, processed, and stored in the Clinical Data Repository (CDR).
- **Considerations:**
  - Address security standards in Ontario and PHIPA compliance
  - Address whether cross-sectional vs longitudinal data (including real time data collection), frequency of data contributions
  - Data backup, accessibility, server uptime, server speed
  - How will data transfer between technology solution and EMR platform(s) be executed (briefly describe technical processes)?



### c. Data Aggregation, Analytics & Reporting

- Please describe proposed information and technology solutions for data aggregation, analysis (including Practice level QI and Health System QI aggregate reports). Solutions requirement: interface design and back-end development. Interface design mock-ups (i.e. proposed dashboard view) welcome.
- Aggregate data is defined as combined data points for a specific data element(s), across multiple providers and patients, at one or more points in time.
- Analytics must be framed around the practice indicators which will be provided by the ORA (to be built to ORA specifications)
  - Approximately 6 indicators per domain (practice, quality, provincial) will be requested in the first iteration, to be confirmed at the time of contract negotiations
  - 3 domains will be encompassed by this project, for which quality/practice indicators must be developed: (provided by ORA)
    - › practice indicator
    - › quality indicator
    - › provincial indicators (may require a separate interface)
  - In addition, the ability for members to design custom quality/practice indicators within the analytics interface should be included
- Describe the analytics viewing mechanisms (e.g. dashboard, etc.); schematics or mock-ups encouraged
- Access (by ORA members) will be required through one of two mechanisms.
  - ORA members who are data contributors to the ORDER project will receive access automatically via dashboards in their EMR. This data includes individual patient-level data from their own practice, which is not available to view by any other person, party, or entity.
  - In addition, non-data contributing ORA members may submit a request for information if the aggregate data they require is not available via the ORDER web site. The data available would be limited to a provincial quality indicators data viewer. A mechanism to submit a request for information will need to be made available online.
  - Access to non-ORA members (“third party access”) is not permissible without a defined Data Use Agreement (see Requests for Access).
- **Considerations:**
  - Flexibility to update indicators as required; how long from a technology provider perspective will such changes take to implement?
  - Indicators must be interactive to allow identification of actionable items
  - Indicators should be accompanied by guidance statements or thresholds (i.e. up to date with clinical guidelines) or in some cases be compared with provincial metrics.

## OTHER REQUIREMENTS

- Scalability (for the project): a) currently only for collecting core data set (structured data), but how will next iterations be handled? b) currently for only a small number of indicators, but next iterations will include development of future indicators. How will that be addressed as the ORA has future expansion 'asks'?
- Flexibility (for users): Allow users to participate at the level they wish (analyze my own data only, contribute my data to the provincial data set, contribute my data to the provincial research data set)
- Auditing and logging of user activities (i.e. how often they are accessing, what platform elements they are using most often etc.)
- Metrics for ORDER platform performance (server level e.g. uptime, response time, etc.; project level e.g. number of participants, data set completeness, number of individual encounters, patients, etc.)

## SUSTAINABILITY

- It is vital for the ORA and ORDER users to retain exclusive access rights to the content of the CDR and that it be easily portable to other platforms
- Vendors should identify what guarantees would be made around sustainability. Examples include system updates and maintenance, service agreements, long-term access, sunset clauses, minimum lead time for potential decommissioning of platform etc.

## INTEGRATION

- Technological solutions must integrate with current OntarioMD certified EMR providers (TELUS, Accuro and OSCAR) and thus applicants should describe how this integration would take place
  - Must include proposed business plan on how to accomplish this along with a description of the technological solution to implement (e.g. API etc.)

## CHALLENGES & FEASIBILITY

- Vendors should:
  - Cite examples of current or previous work relevant to the context of this project
    - › Include concrete examples with exhibits or links to functional products that can be viewed, demonstrated and tested
    - › Outline outcomes of previous work, i.e. how did your solutions perform with respect to your client’s project goals and what outcomes resulted
  - Outline proposed timelines to development and launch of proposed solutions, including maintenance turnaround times
  - Provide a description of the service team supporting the tech solution being proposed/developed
  - Identify what strategies they would implement with respect to behavioural change management for ORA member rheumatologists participating in this project (i.e. all committing to a standardized format for data collection)

## OVERALL REQUIREMENTS

- The ORA is open to vendor proposals that include SOME or ALL core project elements listed in the scope of work section.
- Data security and monitoring, commensurate with technology safety and security standards in Ontario, must be ensured throughout all processes.
- Address project building, launch, and maintenance phases with respect to the proposed technology solution in all aspects of the proposal, including the business plan

## 4. Project Budget

- Please outline a breakdown for each proposed project component and associated costs including detailed fee structures and indexing for development and maintenance costs where applicable.

## 5. Milestones & Deadlines

- 4 weeks for preparation and submission
- Submission should be no longer than 15 pages (not including figures or renderings)
- Vendors with successful proposals will be invited to present and further discuss with the ORA ORDER review committee at a near future date

### ELIGIBILITY INFORMATION

Service providers submitting an application must be a legal entity and have the legal capacity to contract in Canada.

Applicants may only submit one application

### GENERAL GUIDELINES

The ORA reserves the right to amend the review process at any time. Any changes that are made to the process will not adversely affect the rigor and equity of the process. Every effort will be made to inform applicants of changes in a timely fashion.

### EVALUATION

An internal review panel will be established to evaluate proposals submitted to this RFP. The review panel will make recommendations as to which proposal should be advanced based on the following criteria:

1. Overall objective and extent of the proposed work plan for core component development and delivery demonstrating a clear understanding of requirements
2. Qualifications and performance history of the applicant
3. Clear identification of approach
4. Justification of the proposed project budget (Costs to be shown only in Canadian funds with the total estimated amount of GST or HST to be shown separately, as applicable)
5. Feasible methodology to complete deliverables within project time frame
6. Proven track record in applicable information and technology solutions

## 6. Submission Information

Your application must be submitted online by 5:00 pm (ET) on September 20, 2018. Applications must be submitted to [admin@ontariorheum.ca](mailto:admin@ontariorheum.ca)

Vendor queries requesting further information are welcome and must be submitted in writing via email to [admin@ontariorheum.ca](mailto:admin@ontariorheum.ca). Queries will only be accepted until end of business day, Friday, August 31st. No verbal requests or responses of any other kind will be permitted. The ORA will subsequently post the collected list of anonymized vendor questions and corresponding ORA answers on its website at <https://ontariorheum.ca/informatics/informatics>.

The proposal must include the following items, submitted in a single PDF document with the headings used here:

1. Executive Summary
2. Description of the relevant qualifications and experience of the applicant organization
3. Description of the proposed approach and work plan
4. Description of the proposed project team structure, key roles and reporting relationships and a brief summary of the relevant qualifications and experience of each candidate proposed for each role
5. Detailed budget with justification including salaries, electronic platform costs, etc.
6. Proposed work plan including detailed timelines
7. Contact information sheet: including name, organization, working address, telephone number and email address for: Project Lead, each candidate proposed for a key role, Senior Signing Officer and Institution Financial Officer;
8. Completed and signed Signature Page – RFP (attached)

The completed proposal should not exceed 15 pages, excluding figures.

## 7. Contact information

Sandy Kennedy, Program Manager admin@ontariorheum.ca

### **SIGNATURE PAGE- RFP**

With these signatures, we, the undersigned:

- Will be responsible for any and all risk and liability related to the funded project and shall take all necessary measures to avoid any losses or damages to the ORA, its successors, assigns, directors, officers and employees.
- Agree that there was no conflict of interest in preparing its application; and there is no foreseeable conflict of interest in performing the contractual obligations of the RFP. Where the ORA discovers an applicant's failure to disclose all actual or potential conflicts of interest, the ORA may disqualify the applicant or terminate any agreement awarded to that service provider as a result of this procurement process. Conflict of interest includes, but is not limited to, any situation or circumstance where:
  - a. in relation to the RFP process, the applicant has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including but not limited to
    - i. having or having access to information in the preparation of its proposal that is confidential to the ORA and not available to other applicants;
    - ii. communicating with any person with a view to influencing preferred treatment in the RFP process; or
    - iii. engaging in conduct that compromises or could be seen to compromise the integrity of the RFP process and render that process non-competitive and unfair; or
  - b. in relation to the performance of its contractual obligations under the agreement, the applicant's other commitments, relationships or financial interests
    - i. could or could be seen to exercise an improper influence over the objective, unbiased and impartial exercise of its independent judgment; or
    - ii. could or could be seen to compromise, impair or be incompatible with the effective performance of its contractual obligations;
- Agree that any information provided in this proposal, even if it is identified as being supplied in confidence, may be disclosed where required by law or if required by order of a court or tribunal. The applicant hereby consents to the disclosure, on a confidential basis, of this proposal by the ORA to its advisers retained for the purpose of evaluating or participating in the evaluation of this proposal.
- Will bear all costs associated with or incurred in the preparation and presentation of its proposal, including, if applicable, costs incurred for travel expenses associated with preparation for, and attending interviews and/or demonstrations.

- Certify that all information provided in the proposal including but not limited to the following:
  - The personnel proposed in the proposal is capable of satisfactorily performing the requirement described in the RFP;
  - Individuals proposed will be available until the completion of the work required, and any individuals proposed will only be replaced with the express approval of the ORA;
  - The work specified can be met in a timely manner, and will be achieved within the time frame and budget allocated;
  - The proposal will remain firm for a period of 90 calendar days after the proposal closing date;
  - The information provided in the résumés and supporting material submitted with the proposal, particularly as this information pertains to educational achievements, experience and work history, has been verified by the applicant to be true and accurate;
  - Should a verification by the ORA disclose untrue statements, the ORA shall have the right to terminate the resulting contract should it occur, for default; and
  - The applicant certifies that, should it be requested to provide services under any contract resulting from this procurement, the persons proposed in its proposal will be available to commence performance of the work as required by the ORA and within the time specified within or agreed upon with the ORA.



## Project Lead

Date	Name & Title	Signature
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**Institution Senior Signing Officer:** I have authority to bind the Institution.

Date	Name & Title	Signature
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Organization/Institution/Legal Entity: \_\_\_\_\_

This organization/institution has the necessary accounting systems and financial controls in place to manage ORA funds. \_\_\_\_\_ (initial here)

**Institutional Financial Officer:**

Date	Name & Title	Signature
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Please note that the submission of an electronic version of the signature page in PDF format is acceptable. Attach the completed signature page to your application by the deadline.

# Appendix

## **National Rheumatoid Arthritis Core Clinical Dataset Developed by the Arthritis Alliance of Canada**

- Date of Referral
- Date of Initial Consultation
- Date of Consultation/Assessment
- Date of Symptom Onset
- Rheum Diagnosis (1/2/3)
- Rheum Diagnosis Date
- Past Medical History
  - Co-Morbidities
  - Smoking Status
- Rheumatology Therapy (RT)
  - Medication
  - RT Start Date
  - RT Dose, Route, Frequency
  - RT Stop Date
  - Reason for Discontinuation
- Labs
  - RF, Anti-CCP, ESR, CRP, ALT, ANA, ENA, Anti-DNA, CBC
  - Others TBD
- PROs
  - Pain, Fatigue, Pt Global, AM Stiffness, HAQ
- SJC 66, TJC 68, Pr Global, SDAI, CDAI, DAS-28
- Screening
  - Hep B (Core Ab), Hep B SAg, Hep B SAb, Anti-HCV, TB Skin Test, Chest X-Ray, HIV Serology
- Radiographic Data
  - Hands, Wrists, Feet

Visit the ORA website (<https://ontariorheum.ca/informatics/informatics>) for expanded data set definitions and variables.