Overview of the American College of Rheumatology’s Electronic Health Record-Enabled Registry: The Rheumatology Informatics System for Effectiveness

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ABSTRACT
The Rheumatology Informatics System for Effectiveness (RISE) Registry was developed by the American College of Rheumatology (ACR) to serve US rheumatologists for the significant challenges of a rapidly changing healthcare environment. More than 400 rheumatologists have sent data from more than 3 million encounters of more than 650,000 patients as of August 11, 2016, through their electronic medical records (EMRs), with no additional work or interference with workflow on the part of the rheumatologists. RISE includes patients with all diagnoses seen by participating rheumatologists, at no cost to the rheumatologist.

Introduction
The Rheumatology Informatics System for Effectiveness (RISE) Registry is a resource developed by the American College of Rheumatology (ACR) to help prepare US rheumatologists for the significant challenges of a rapidly changing healthcare environment, including adapting to new payment and delivery models, meeting evolving certification requirements and using EHR data to assess quality of care. RISE is compliant with the Health Insurance Portability and Accountability Act (HIPAA), and has attracted widespread participation among rheumatologists. As of August 11, 2016, more than 400 participating rheumatologists have sent data from more than 3 million encounters of more than 650,000 patients.

RISE for practices
The RISE Registry is designed to improve patient care within the practice setting. RISE can help rheumatologists to evaluate the quality of care they deliver to patients and to identify opportunities for improvement. Through the RISE dashboard, doctors can track their performance on a variety of clinical quality measures, and recognise how they compare to their peers nationally. They also can learn how to optimise treatments using the ACR’s rapid-cycle Performance Assessment Activity, which was developed for use with RISE. An added benefit is that RISE can be leveraged to meet quality reporting requirements. The RISE Registry simplifies and automates annual reporting required by the Centers for Medicare & Medicaid Services (CMS). Because RISE has been designated a Qualified Clinical Data Registry (QCDR), participating physicians, with minimal effort on their part, can report on a variety of quality measures that were developed specifically for rheumatology professionals. Table I summarises the clinical quality measures developed by the ACR and included in the RISE Registry. Furthermore, because of the high-quality data extraction performed through RISE, each practice’s quality scores are more accurate than EHR reports and may lower the chance of a negative payment adjustment.

An important feature of RISE is that it automatically collects information from integrated EHR systems, which means rheumatologists enter data only once, and RISE will access the necessary data points from the EHR. Also, RISE can be tailored to collect and analyse data from a variety of sources – both structured and unstructured, meaning that rheumatologists do not need to change their work flow in order to access performance rates on key clinical quality measures.

RISE is free for all ACR and AHRP members.

Qualified Clinical Data Registry (QCDR)
The RISE Registry has been designated a Qualified Clinical Data Regis-
Table I. ACR-developed Clinical Quality Measures in the RISE Registry.

<table>
<thead>
<tr>
<th>Measure ID</th>
<th>Measure Title</th>
<th>Measure Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 01</td>
<td>Disease activity measurement for patients with RA</td>
<td>Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis whose disease activity is assessed using a standardised measurement tool at 50% or more encounters for RA with the same clinician during the measurement period.</td>
</tr>
<tr>
<td>ACR 02</td>
<td>Functional status assessment for patients with RA</td>
<td>Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis whose functional status is assessed using a standardised measurement tool at least once during the measurement period.</td>
</tr>
<tr>
<td>ACR 03</td>
<td>Disease-modifying anti-rheumatic drug (DMARD) therapy for active rheumatoid arthritis</td>
<td>Percentage of patients 18 years and older with active rheumatoid arthritis who are treated with a DMARD during the measurement period.</td>
</tr>
<tr>
<td>ACR 04</td>
<td>Tuberculosis (TB) test prior to first course biologic therapy</td>
<td>Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis that are newly prescribed a biologic therapy during the measurement period and whose medical record indicates tuberculosis testing in the 12 months preceding the biologic prescription.</td>
</tr>
<tr>
<td>ACR 05</td>
<td>Glucocorticosteroids and other secondary causes</td>
<td>Percentage of patients 18 years and older with one of the following conditions or therapies: receiving oral glucocorticosteroid therapy for greater than 3 months OR hypogonadism OR fracture history OR transplant history OR obesity surgery OR malabsorption disease OR receiving aromatase therapy for breast cancer who had a central DXA ordered or performed or pharmacologic therapy prescribed within 12 months.</td>
</tr>
<tr>
<td>ACR 06</td>
<td>Gout: serum urate monitoring</td>
<td>Percentage of patients aged 18 and older with a diagnosis of gout who were either started on urate lowering therapy (ULT) or whose dose of ULT was changed in the year prior to the measurement period, and who had their serum urate level measured within 6 months.</td>
</tr>
<tr>
<td>ACR 07</td>
<td>Gout: serum urate target</td>
<td>Percentage of patients aged 18 and older with a diagnosis of gout treated with urate-lowering therapy (ULT) for at least 12 months, whose most recent serum urate result is less than 6.8 mg/dL.</td>
</tr>
<tr>
<td>ACR 08</td>
<td>Gout: ULT therapy</td>
<td>Percentage of patients aged 18 and older with a diagnosis of gout and either tophus/tophi or at least two gout flares (attacks) in the past year who have a serum urate level &gt;6.0 mg/ dL, who are prescribed urate lowering therapy (ULT).</td>
</tr>
</tbody>
</table>

The ACR’s RISE registry / M. Francisco et al.

The ACR’s RISE registry is a valuable source of patient data for rheumatologists. Since RISE was designated as a QCDR by the Centers for Medicare and Medicaid Services (CMS), QCDR is a special designation offered by CMS. According to CMS, QCDRs collect data for the purpose of patient and disease tracking to foster improvement in the quality of care provided to patients. The designation affords registries the capacity to serve as a reporting mechanism for the Physician Quality Reporting System (PQRS). It also allows registry users to report on non-PQRS quality measures that reflect rheumatology practice in the clinical setting.

Because RISE has been designated as a QCDR, it can provide a number of extra benefits to its users. First, RISE provides an easy mechanism through which rheumatologists can participate in PQRS at no additional cost and potentially avoid negative payment adjustments. The ACR is also currently working to position RISE as a vital tool for reporting when the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) is implemented.

Second, RISE offers a variety of non-PQRS quality measures that are specifically tailored to rheumatologists so that individuals can track and report on measures that matter to her/him.

RISE for research

The RISE Registry also can be a valuable source of information for those interested in discovering ways to better care for rheumatology patients. Because RISE automatically extracts data from electronic health records (EHR), research using RISE data can advance our understanding of the natural history, results of treatment, and outcomes of rheumatic diseases. Data from the RISE Registry could enable the development, testing and rapid implementation of novel measures to define “value” in rheumatology. This goal is critically important as payers, particularly Medicare, increasingly tie payments to value assessments.

The RISE Registry offers several benefits as a source of patient data for research:

- **Broad, diverse patient population.** By automatically uploading a rheumatologist’s entire population of patients, including up to a year prior to initial RISE implementation, the registry includes patients with all medical conditions and all types of insurance. RISE patient data include details concerning patient demographics, such as age, insurance status and geography, and on clinical characteristics, such as diagnoses, medications and certain outcomes.
- **Wide range of diseases.** The registry includes all diseases seen by rheumatologists beyond osteoarthritis and rheumatoid arthritis, the most common diagnoses in visits to rheumatologists, including psoriatic arthritis, Sjögren’s syndrome, systemic lupus erythematosus (SLE), dermatomyositis, temporal arteritis, granulomatosis with polyangiitis, microscopic polyangiitis, Behçet’s syndrome, Takayasu’s arteritis, inflammatory myopathies, and many others.
- **Fresh, credible data.** Since RISE pa-
tient data are extracted from EHRs, they provide a robust source of patient information. These data are more up-to-date than data from administrative claims or chart reviews, which often are associated with significant delays in aggregating results.

**Conclusion**

Ultimately, the benefits of RISE include convenience, quality and access to valued data and information. Taken together, this can lead to better, more efficient care and more predictable payments in the future. US rheumatologists may learn more about the RISE Registry by visiting: [http://www.rheumatology.org/I-Am-A/Rheumatologist/Registries](http://www.rheumatology.org/I-Am-A/Rheumatologist/Registries).