

INTRODUCTION

- Integrating mobile health technologies and related apps—at the point of care—can inform real-time clinical decisions and drive the delivery of patient-centered care. Clinicians use mobile technologies to answer clinical questions, simplify access to clinical information, improve adherence to guidelines, and enable better clinical decisions.^{1,2} Mobile apps also foster patient engagement and patient-centered care.³
- The National Quality Partners initiative has called for implementing shared decision making (SDM) as the standard for patient-centered care.⁴ Sharing patient-reported outcomes, such as symptoms, quality of life, and everyday functioning can promote SDM and inform clinical decision making.⁵⁻⁷
- The American College of Rheumatology recommends SDM for rheumatoid arthritis (RA) management.⁸ However, patients and clinicians often have differing perceptions of disease activity and therapeutic goals and frequently do not discuss these issues, leading to persistent symptoms, which negatively impact quality of life.^{9,10} Clearly, strategies that encourage SDM for managing RA are warranted.¹⁰

PURPOSE

- To address this need, Projects In Knowledge, along with its technology partner @Point of Care, has developed a clinician learning and cognitive decision-making platform for RA that serves both the clinician and the patient by driving educational innovation and insights into patient-reported outcomes
- The platform serves as an effective vehicle for disseminating CME that specifically seeks to answer outstanding questions and narrow outstanding gaps in the context of current and future clinical practice
- In this analysis, the benefits to clinicians and patients using the @Point of Care platform have been evaluated, including how the platform can be used for SDM to enhance patient outcomes

METHODS

1. *Rheumatoid Arthritis @Point of Care* with @sk | With Watson discovery engine technology delivers mobile peer-reviewed clinical and practical education + clinical answers at the point of care in order to improve clinician performance and facilitate SDM.

- @sk | With Watson supports clinical decision process
- Independent, peer-reviewed, multimedia, disease-specific content
- Review patient data and share responses through HIPAA-compliant dashboard
- "Voice" navigation throughout platform
- Clinician guidelines, references, and tools

25,130 Total Learners
359% Over Goal

➤ Provides individualized insight and shareable knowledge to help make timely, informed decisions about health-related issues

2. Designed to improve clinician knowledge and competence, the app allows clinicians to quickly and accurately access relevant, curated, evidence-based CME content that addresses clinical questions at the point of care.

- Succinct targeted answers to clinical questions
- Ability to "Learn More" and access comprehensive evidence-based medical content
- Interactive surveys
- Expert audio/video
- Expandable charts, graphs supplement text-based CME content
- Rich content continually updated with latest data and clinical practice information
- Persistent CME/CE credit, information, and disclosures

➤ Supports discovery and practice change at the point of care, enabling better decisions and outcomes

➤ Improves diagnostic, treatment, and management strategies
 ➤ Prepares learners to achieve level 5 outcomes after activity participation

3. Partnered with a HIPAA-compliant companion patient app, *RA Manager*, the platform engages patients to record and share their health-related data with their clinician and access patient education materials, thereby facilitating communication and a more patient-centered approach to care.

- Clinicians can track patient activity and disease management outcomes between visits
- Clinicians "prescribe" or invite patients to share data during visit
- Custom sourced and faculty-vetted patient education available to share with patients
- Clinicians have the opportunity to add their own resources

2,774 Registered Patients

- Female to Male Ratio = 7:1
- 49% Age 41-60 years
- 10% Age ≥61 years
- 41% Age <40 years

➤ Connectivity to physician enhances clinician-patient communication and shared decision making

➤ Patient education contributes to patient empowerment and improved outcomes

RESULTS/FINDINGS

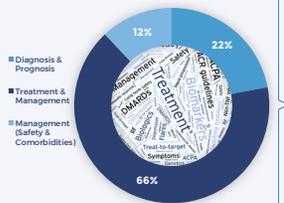


What Clinicians Need to Know

Sample Question Intents and Distribution of Intents

Provides Evidence-Based Information

Learn More



- Clinicians have accessed **19 CME** Activities Designed to Improve Patient Outcomes Across the Continuum of Care

Average learner has engaged with activities **10.7 times**

23% Overall gain in knowledge*

* Gain in knowledge (unmatched learners) was measured based on pre-activity (n=1053) vs post-activity (n=444) test assessments; individual knowledge questions were grouped per overall curricula to create an overall score

- Clinicians have posed hundreds of questions with @sk | With Watson



Level 4 Competence*

71% of learners committed to practicing clinical strategies as presented within *Rheumatoid Arthritis @Point of Care* (n=718)

Sample clinical practice strategies include:

- Use patient-specific disease activity data to make decisions about maintaining or changing therapy
- Utilize a treat-to-target approach
- Incorporate the patient's perspective when developing a treatment plan
- Ask patients about the impact of RA and/or their current therapy on fatigue and physical/emotional functioning

* Measured the changes in clinician's self-reported competence/intent to make changes in practice (pre- vs post-activity) based on activity content, using evaluation forms

Level 5 Performance*

80% of learners are now practicing the RA-related clinical strategies since participating in activities (n=51)

Sample practice changes and patient outcomes as a result of the activities:

- "More discussions with patients."
- "Better quality of life, more adherent to treatment recommendations."
- "New meds approach; improvement when switched earlier to non-TNF."
- "Improving grip strength and articular swelling."

* Measured the changes in clinician's self-reported change implementation at the 45-day mark and collected self-reported write-in statements showing improved patient outcomes based on new clinical practice strategies implemented that were addressed in educational initiatives

RA Manager: Practicing Patient-Centered Care at the Point of Care

Patient Reported Outcomes

Facilitates communication of patients' unmet needs



Analysis of Patient Journey Entries

Difficulty With Activities of Daily Living



"What are the recommended RA disease measures for patient-reported functional and QoL outcomes?"

30% of patients reported feeling **tired** (n=375) or **fatigued** (n=693) daily

47% of patients reported being **not able to do everyday activities** such as shopping and errands without problems (n=1334)

56% of patients reported that they are **not able to grip** objects without problems (n=1334)

48% of patients reported being **not able to walk** on flat ground and climb steps without problems (n=1331)

- Clinical challenge in managing RA patients comes full circle as patients report persistent disease burden
- Shareable patient data provide clinicians insight into their individual patient's health journey at the point of care
- Enables SDM and adjustment of medical care to meet patient needs and strive to improve outcomes

CONCLUSIONS

- Participation with the *Rheumatoid Arthritis @Point of Care* clinician app has been significant, driving improved gains in clinical knowledge, competence, and performance, which can be translated into better patient outcomes
- Clinicians utilize the @sk | With Watson tool to answer clinical questions concerning diagnostic and treatment decisions, thereby narrowing practice gaps and informing better clinical decisions

- The large cohort of patients engaged with the *RA Manager* app reported persistent symptoms, which negatively impacted their quality of life and everyday activities, indicating a current unmet need for the optimal management of RA
- The *RA Manager* encourages patients to share and communicate their individual health journey with their clinician, providing clinical information and insight to enhance patient-centered care and shared decision making at the point of care and informing better clinical decisions

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