**QL06** 

# Shared Decision Making Through Mobile Technology: Formula for Improved Patient Outcomes

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# **Background**

Healthcare and healthcare delivery are being transformed through the adoption and integration of innovative mobile technologies and health-related apps into medical practice. A 2017 survey of 1500 respondents projects 98% of healthcare providers will utilize mobile devices to engage patients in their healthcare by 2022. Of patients responding to this survey, 95% were willing to share their app health metrics with their clinicians. 1 Mobile devices and apps increase access to point-of-care resources that support better collaborative shared decision making and improved patient outcomes.<sup>2-4</sup> In multiple sclerosis (MS), clinician and patient apps provide access to patient-reported outcomes and evidence-based information to enable clinicians to assess MS quality measures as outlined by the American Academy of Neurology (including diagnosis, documentation of disability scale score, cognitive impairment, fatigue outcomes, and quality of life).5

The Multiple Sclerosis @Point of Care app for clinicians, with cognitive learning tool @sk With Watson, paired with the Multiple Sclerosis Association of America (MSAA) patient app, My MS  $Manager^{TM}$ , use a HIPAA-compliant mobile cloud platform to provide practice-based tools designed to facilitate shared decision making between the clinician and patient. These tools provide clinicians with answers at the time it is actually needed—at the point of care—while assessing patient-reported outcomes. The clinician platform contains up-to-date information ranging from pathophysiology and diagnosis, to treatment and management of MS. @sk With Watson is designed to provide access to evidence-based answers to questions clinicians pose at point of care to improve patient outcomes. The patient app, My MS Manager<sup>TM</sup>, provides patients with the ability to collect and track timely data as well as utilize this organized data for follow-up discussion with their clinician.

# **Objective**

This analysis evaluates how clinicians use *Multiple Sclerosis @Point of Care* and *@sk With Watson*, and how clinicians benefit. In addition, the analysis assesses how patients use and benefit from the *My MS Manager*<sup>TM</sup> app and how both apps are used for shared decision making to improve patient care.

### **Methods**

Data were collected and analyzed from 6,938 participating clinicians, during the past 6 months, who treat MS patients, and their patients (highly active app users: 2,211). The goal was to assess how clinicians utilize the *Multiple Sclerosis @Point of Care* clinician app and link to patient data, and how patients use and communicate their data entries from the Mv MS Manager<sup>™</sup> patient app to connect/interact with their clinicians. Data included demographic information, clinicians' questions posed to Multiple Sclerosis @Point of Care's @sk With Watson cognitive tool, clinicians' self-reported impact of content on their patients' health outcomes, number of registered patient app users, patient access frequency, patient record entries, and proprietary patient survey findings that further assess how patients use the app and value their perceived benefits.

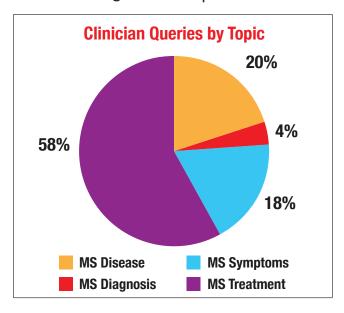
#### Results

# Multiple Sclerosis @Point of Care: How Clinicians Use This Platform

Clinicians engaging in learning utilizing the *Multiple Sclerosis @Point of Care* app value this platform in the practice setting. This is further amplified by the fact that 64% of clinicians come back to the platform multiple times per month.

# Use of the Multiple Sclerosis @Point of Care Clinician App

- 80% of the @sk With Watson clinicians posing questions were neurologists, internists, general practitioners, and family practitioners treating patients with MS.
- 72% of clinicians were committed to practicing clinical strategies as presented in the *Multiple Sclerosis @Point of Care* platform.



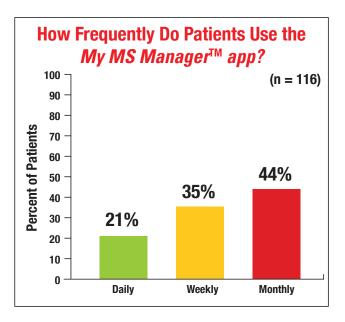
# My MS Manager™ App: How Patients Use This App

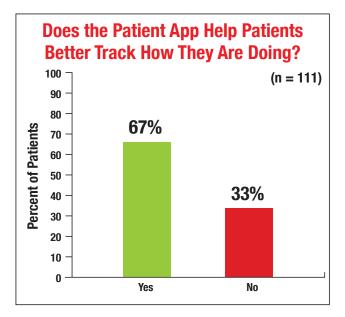
The My MS Manager™ patient app enables patients to enter and track their specific MS disease-related information, such as activities of daily living, symptoms, fatigue scale records, mood, medications, and other relevant information. The value of this app, as an on-thego tool, can be seen in the patient survey findings reflecting how the app positively affected their MS management.

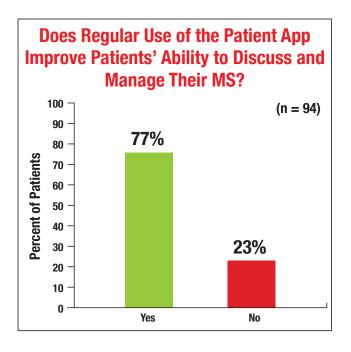
To date, highly active app users have recorded 48,242 journal records for activities of daily living, 7,453 fatigue scale journal records, and 8,713 adherence journal records.

### Patient Perspective: My MS Manager<sup>™</sup> Companion Patient App Survey Findings<sup>6</sup>

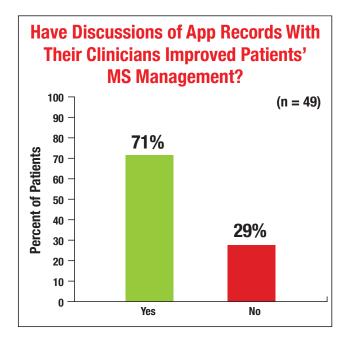
In order to assess the utility of the app from the patients' perspective, a proprietary survey was sent to 2,211 highly active app users, of the 14,738 registered MS patient users. Patient responses are summarized (overall respondents to each question [n] varied):

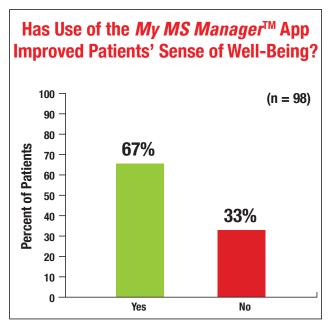


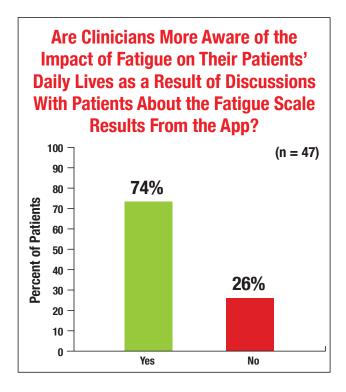


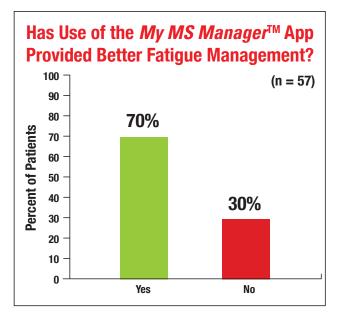


After Discussing the Patient App Records/Charts with Their Clinician, the Following Changes Were Made		
	(n = 91)	
Changes to medications	14%	
Changes to other parts of treatment plan	n 4%	
Suggestions for lifestyle changes	6%	
Requested more tests	10%	
No changes were made; doctor felt treatment plan was on track	66%	









What Motivated Patients to Start Using the <i>My MS Manager</i> <sup>™</sup> App? (n = 195)	
Wanted to feel I was doing something positive to manage my MS	36%
My doctor/clinician recommended I use it	5%
Wanted to see if having my information recorded and readily available would help conversations with my doctor	35%
Was anxious to try something that may help me manage my MS	24%

## How Has the Patient App Positively Affected Patients' Daily Life and Management of MS?

(n = 231)

Gives me sense of control over my MS and its symptoms	21%
Good for tracking drugs and dosages	20%
Tracks information about my MS that I plan to share with my doctor	31%
Gives me perspective of how I'm doing over specific periods of time	23%
Helps me chart how lack of sleep affects my fatigue level, depression, memory, moods	16%
Helps me keep track of my symptoms	29%
Helps me keep track of my symptoms and figure out if there is a common trigger for when they act up	18%

### What Are the Patients' 5 Favorite Features of the *My MS Manager*™ App in Order of Priority?

(n = 231)

**Tracking Symptoms** 

**Tracking Medication** 

My Journal/Daily Record Log

**Tracking Fatigue** 

**Tracking Mood** 

# **Conclusions**

#### Summary of findings:

- Use of the Multiple Sclerosis @Point of Care clinician app and the MSAA My MS Manager<sup>™</sup> patient app provides relevant information at the point of care.
- An increasing number of patients are using the My MS
   Manager™ patient app to enter their data, track their MS
   management, assess how they are doing, and share these
   data with their clinicians.
- Fatigue scale entries on the My MS Manager<sup>™</sup> app continue to increase and represent valuable patientreported information for their treating clinicians.
- 4. The My MS Manager™ patient app is improving patient-physician communication regarding MS, facilitating discussion of fatigue, enabling patients to track their symptoms and medications; this provides value to patients since they have a sense their clinician is more invested in their MS management.
- 5. This analysis shows Multiple Sclerosis @Point of Care and My MS Manager™ apps facilitate the interface of clinicians and MS patients for shared decision making that supports strategies for practice change and improved patient outcomes through point-of-care accessibility.

# References

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