

The MS-SUPPORT Decision Aid Promotes Collaborative Decision-making and Treatment Adherence for Multiple Sclerosis

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Results

Figure 3. <u>Patient</u> Evaluation of MS-SUPPORT <u>Before</u> HCP appointment (n=24)

Background

- Clinical guidelines recommend incorporating patient preferences into decision-making about disease modifying treatments (DMTs) to improve acceptance of and adherence to DMTs for the treatment of multiple sclerosis (MS).
- Adherence to DMTs is essential to achieve their full benefit and improve outcomes but can be a challenging for some patients.²
- We developed a novel shared decision making tool, MS-SUPPORT, that helps patients communicate their preferences to healthcare providers (HCPs) so they can be incorporated into decisions about DMT and potentially promote adherence.³

Objectives

To develop a practical tool to help MS patients and healthcare providers (HCPs) make better collaborative treatment decisions, and to assess its usability, feasibility and clinical utility.

Participants

Patients:

- •Confirmed MS diagnosis
- •Age 21-75
- Web access
- Upcoming MS HCP appointment

HCPs

- Neurologist
- Physician Assistants
- •Registered Nurses
- Nurse Practitioners

Intervention

MS-SUPPORT is an interactive, patient-centered, web-based tool (Figure 1)

Designed for MS patients to complete before a clinic visit

- Assesses their treatment goals, preferences, clinical situation, treatment history, health behaviors, and adherence behaviors;
- Provides them with targeted educational feedback;
- Generates a summary that can be shared with their HCP. (can be printed out, sent via a patient portal or by email)
- Takes about 30 minutes to complete (can be saved and returned to at a later time)

Figure 1: Example of MS-SUPPORT User Experience

The Multiple Sclerosis SUPPORT Tool (Sharing and Understanding Personal Preferences and Objectives Regarding Treatment) Multiple Sclerosis (MS) can be confusing, annoying, and stressful. There is a lot to deal with. This makes it hard to focus on what's important.	Disease Modifying Treatments (DMTs) can slow down MS and quiet disease activity They do this by reducing flare-ups and slowing the progression of disability But they have potential side-effects that must be balanced against their benefits. People take a DMT today as insurance for a better tomorrow.				
	《古 When making a decision : you would like to make th	about taking a D is decision?	MT, which ONE of th	ne following best de	scribes how
0	Make the final selection	n myself about w	hich treatment I will	I receive	
MS SUPPORT is a tool that helps you: • Learn more about your MS, your treatment options, your symptoms, and disease-modifying	Make the final selection	n myself after se	riously considering	my doctor's opinio	1
treatments (DMTs). - Explore your personal goals and preferences to help <u>you</u> focus on what's important to <u>you</u> when you manage your MS.	Share responsibility with my doctor when deciding what treatment is best for me				
 Share this information with your provider so that he or she knows what matters to you. 	Have my doctor make the final decision after considering my opinion				
People with MS and MS healthcare providers developed MS SUPPORT.					
 Information in this tool is based on the best medical research and has been reviewed by leading medical experts in MS. 	Leave all decisions regarding treatment to my doctor				
 It's available on your computer, smart phone, or mobile device. It keeps your responses confidential. 					
 In the last section of this tool, you can read a summary report of your responses. You can share your summary report with your healthcare provider. 					
How to use MS-SUPPORT:	Over the past 2 weeks, how often have you been bothered by the following problems?				
 After reading each page, you need to click on the NEXT>> button in the bottom right of each 				More than half	Noarhy
page to move to the next page.		Not at all	Several days	the days	everyday
It looks like this:	Feeling nervous, anxious, or on edge	0	0	•	0
You may need to scroll down to find it.	Not being able to				
 Even if there are no options to choose from, you still need to click the red next button to go to the next page. 	stop or control worrying		0	0	0
 If you want to go back to an earlier page, click on the BACK << button in the bottom left of the page, pointing to the left. 	Feeling down, depressed, or hopeless	0	0	٠	0
 Not all sections allow you to go back. 	Little interest or				
 A progress par at the top or each page less you know how much you have completed. Remember that you can "read it, print it, share it". 	pleasure in doing things	0	۰	0	0
You can share it using your patient portai.					



Table 1: Patient Characteristics (n=16)

Mean age	53.75 (37-71)
Gender, n (%)	
Male	2 (12.5)
Female	14 (87.5)
Race, n (%)	
White/Caucasian	11 (64.7)
Black or African American	5 (29.4)
Native American or Alaska Native	1 (5.9)
Education, n (%)	
2-year college or technical school	3 (18.8)
College graduate	10 (62.5)
Graduate school or professional degree	3 (18.8)
Type of MS, n (%)	
Relapsing remitting	12 (75.0)
Primary progressive	2 (12.5)
Secondary Progressive	1 (6.25)
Unsure	1 (6.25)
DMT Use, n (%)	
Current use	10 (62.5)
Past use only	2 (12.5)
Never	4 (25.0)
Last DMT switch, n (%)	
< 1 year ago	4 (33.3)
1-5 years ago	5 (41.7)
>5 years ago	2 (16.7)
Never switched	1 (8.3)
Not applicable	4 (n/a)

Figure 2. Patient Baseline Responses (n=16)



Schematic

Evaluations

- MS-SUPPORT was evaluated by 24 patients* and 3 HCPs using web-based surveys
- During alpha-testing, patients did <u>not</u> attend an HCP visit, so post-HCP visit evaluations were not collected; evaluations during this phase of development focused on usability (n=11).
- During beta-testing, patients attended an HCP visit; evaluations during this phase of development addressed impact on decision-making, communication, adherence, workflow and clinical visits (n=16).

*Note that 2 patients participated in both phases (n=24).

Figure 4: <u>Patient</u> Evaluation of MS-SUPPORT <u>After</u> HCP appointment (n=9)

■ 5 - strongly agree ■ 4 - somewhat agree ■ 3 - neither agree or disagree ■ 2 - somewhat disagree ■ 1 - strongly disag



Figure 5a: <u>HCP</u> Evaluation of MS-SUPPORT <u>After</u> HCP appointment (n=5)



HCPS were asked:

"In your opinion, to

what extent did the

use of MS SUPPORT

by your patient..."



A great deal A lot Somewhat Very little Not at all No response

 All 3 summaries were reviewed by HCP, taking 1-5 minutes very or somewhat useful

encounters

MS-SUPPORT to a colleague

Figure 5b: <u>HCP</u> Evaluation of **MS-SUPPORT** <u>After</u> HCP appointment



HCP Evaluation Responses

3 HCPs completed 5 evaluations of 5 patient

 3 patient summaries were received by HCPs (remainder were forgotten or unable to print); 2 were handed to HCP during visit, 1 was emailed

All reported the information in the summary was

All would definitely or probably recommend

HCPS were asked "How do you think MS SUPPORT affected the following?"

Key Findings

- Patients found MS-SUPPORT easy to use, easy to understand, and trusted the information in the tool (Figure 3).
- MS-SUPPORT helped patients talk with their HCPs, prepare for the visit, and make decisions about treatment (Figure 4). It also:
 - improved the quality of the visit.
 - helped patients understand the importance of taking DMTs as prescribed
 - motivated positive lifestyle changes (exercise, smoking, weight management).
- All patients wanted to share their personal summary with their HCPs
 - 67% shared it with their HCP, finding it easy to share.

HCPs

Patients:

HCPs reported a favorable impact on preparing the patient for the visit, quality of care provided, and efficiency of the visit (Figure 5a-b).

Implications

- MS-SUPPORT appears feasible for use by patients and HCPs in real-world clinical settings.
- MS-SUPPORT may facilitate collaborative decision-making, improve adherence, promote healthy lifestyles, and improve clinical efficiency.
- MS-SUPQPORT may help HCPs adhere to clinical guidelines recommending incorporating patient preferences into decision-making about DMTs.

Limitations

- Small sample size limits generalizability
- Lack of a control group may have resulted in response bias.
- Low HCP response due to difficulty contacting non-referring HCPs.
- NOTE: Issues with printing and sharing the patient summary with HCPs were addressed during beta-testing.

Next Steps

Randomized controlled trial to evaluate its impact on DMT use and decision-making processes.

References

- Rae-Grant A, Day GS, Marrie RA, et al. Practice guideline recommendations summary: DMTs for adults with multiple sclerosis. Neurology Apr 2018, 90 (17) 777-788.
- V. Devonshire, Y. Lapierre, R. Macdonell, et al. The Global Adherence Project (GAP): a multicenter observational study on adherence to disease-modifying therapies in patients with relapsing-remitting multiple sclerosis. 201. https://doi.org/10.1111/j.1468-1331.2010.03110.x
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