Development and Usability Testing of ANSWER-2: A Web-Based Decision Aid for Patients with Rheumatoid Arthritis Considering Biologic Therapy

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• Patient decision aids are designed to help individuals choose between treatment options by presenting information on potential benefits and harms and clarifying preferences relevant to the options.
• We developed an interactive web-based decision aid, ANSWER-2 for patients with rheumatoid arthritis (RA) who are starting or switching biologic therapy.

Objectives

The current study aims to test the usability of ANSWER-2.

Methods

• Developed using the International Patient Decision Aid Standards
• Contains 1 video clips featuring a rheumatologist discussing treatment options for RA and real patients discussing their preferences to different biologics
• A module to clarify patients’ preferences and 3) information of biologics presented in an order based on the patient’s personal preference
• Recruitment and Eligibility:
  • Patients with RA were recruited from rheumatologist clinics in Vancouver B.C.
  • Eligible if currently using biologics or recommended to start
  • Recruitment and testing continued at Arthritis Research Canada (ARC) location until no new navigational issues were found
  • Concurrent Think-Aloud method was used during sessions
  • Conducted content analysis of the transcripts to identify major themes of the user experience
  • Participants completed the System Usability Scale (SUS).

Results

Overall, participants were satisfied with the layout of ANSWER-2 and accessing the embedded videos.

Sample Characteristics (n = 7)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Gender</th>
<th>Age</th>
<th>65 or older</th>
<th>35-49</th>
<th>Disease Duration [median (IQR)]</th>
<th>Education (2 year College or Lower)</th>
<th>Internet Use; [mean (SD)]</th>
<th>Time to complete ANSWER-2 [mean (SD)]</th>
<th>System Usability Scale score, [mean (SD)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>3.3 years (IQR 2.5)</td>
<td>10</td>
<td>2.5 h/day (SD=2.1)</td>
<td>35 minutes (SD=10)</td>
<td>83.2 (SD=15.3)</td>
</tr>
</tbody>
</table>

Outcome: The ANSWER-2 prototype was user-friendly based on a SUS Score > 80.

Findings from participant interviews, however, revealed issues were addressed to improve navigational control and information clarity.

A Proof-of-Concept Randomized Control Trial is underway to test how well ANSWER-2 helps patients with RA to decide on starting or switching biologics.