

# Development of an Interprofessional Shared Decision-Making Teaching Tool (IP-SDM-T2)



Hanna Phan, Pharm.D., FCCP, FPPA<sup>1</sup>, Vitaliy Popov, Ph.D.<sup>2</sup>, Meghan Thiel, LMSW<sup>3</sup>

<sup>1</sup> Department of Clinical Pharmacy, College of Pharmacy, University of Michigan; <sup>2</sup> Department of Learning Health Sciences, Medical School, University of Michigan; <sup>3</sup> School of Social Work, University of Michigan

## INTRODUCTION

- Involving patients and families in the shared decision-making (SDM) process is essential for patient-centered care, including reaching informed decisions
- Interprofessional (IP) care teams should understand and apply fundamental elements of the SDM process and recognize contributions and values from **all** participants, especially those of the patient/family, is central to the overall process<sup>1,2</sup>
- The Shared Decision Making Questionnaire (SDM-Q-9) is a validated tool that was designed to encourage SDM between physician and patient.<sup>3</sup>
- Limited data exists regarding real-time assessment of IP-SDM in the experiential, interprofessional education (IPE) setting

## OBJECTIVES

- Adapt the SDM-Q-9 for use as part of a radar visualization tool, the **Interprofessional Shared Decision-Making Teaching Tool (IP-SDM-T2)**, designed for use as part of experiential IPE
- Describe first impressions of the IP-SDM-T2 using focus groups consisting of interprofessional care team members and learners
- Assess potential feasibility, acceptability, usability of the IP-SDM-T2 and identify areas for improvement of IP-SDM-T2 and how the tool may be best utilized in practice and IPE.

## METHODS

- This pilot project was deemed exempt by IRB MED (HUM00211261)
- An IP team adapted the Shared Decision-Making Questionnaire (SDM-Q-9)<sup>3</sup> a 9-item scaled tool which has two versions, one for physicians and one for patients

Figure 1. Patient Version, SDM-Q-9<sup>3</sup>

1. My doctor made clear that a decision needs to be made.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
2. My doctor wanted to know exactly how I want to be involved in making the decision.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
3. My doctor told me that there are different options for treating my medical condition.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
4. My doctor precisely explained the advantages and disadvantages of the treatment options.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
5. My doctor helped me understand all the information.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
6. My doctor asked me which treatment option I prefer.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
7. My doctor and I thoroughly weighed the different treatment options.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
8. My doctor and I selected a treatment option together.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree
9. My doctor and I reached an agreement on how to proceed.	completely disagree	strongly disagree	somewhat disagree	somewhat agree	strongly agree	completely agree

- The intent of the adaptation of the SDM-Q-9 was to translate it to IP patient care versus a 1:1 care between a given physician and patient. Similarly, there are two versions, one for care team members and one for patient/family members

Figure 2. Patient /Family Member Version for IP-SDM-T2

Assumptions:  
 - "Patient" refers to the person being treated  
 - "Family" refers to whoever the patient defines as their support system  
 - "The Care Team" refers to all interprofessional healthcare team members who provide care to the patient

Scale: [1] Completely Disagree, [2] Strongly Disagree, [3] Somewhat Disagree, [4] Somewhat Agree, [5] Strongly Agree, [6] Completely Agree

- The care team made it clear to the patient/family that a decision needs to be made.
- The care team wanted to know exactly how the patient/family wants to be involved in making the decision.
- The care team told the patient/family that there are different options for treating a patient's medical condition.
- The care team precisely explained the advantages and disadvantages of the treatment options with the patient/family.
- The care team helped the patient/family understand all the information.
- The care team asked the patient/family which treatment option they prefer.
- The care team and the patient/family thoroughly weighed the different treatment options.
- The care team and the patient/family selected a treatment option together.
- The care team and the patient/family reached an agreement on how to proceed.

## METHODS – Cont.

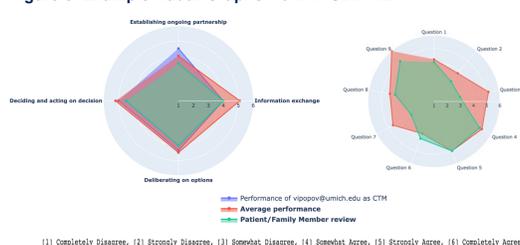
- The adapted items were then mapped to constructs of SDM:

Table 1. Constructs of SDM and Mapped Items

Construct of SDM	Mapped Adapted SDM-9 Item
Establishing ongoing partnership	1, 2
Information exchange	3, 5
Deliberating on options	4, 6, 7
Deciding and acting on decision	8, 9

- The adapted items were then integrated a radar feedback graphical tool using G Suite (Forms, Sheets, Colab, custom built Radar Chart Generator), where output is a visualization of individual, care team, and patient/family perspective on a given SDM situation

Figure 3. Example Radar Graphs from IP-SDM-T2



- Focus groups (5 sessions), consisting of IP educators and learners from the UM community were conducted in March 2022

Table 2. Focus Group Components & Workflow

Introductions
Define IP SDM
Orientation to IP-SDM-T2 and radar graphic output
Video on example clinical scenario with IP SDM
"Test Drive" IP-SDM-T2 as part of IP care team
Debrief and semi-structured discussion
Qualtrics® survey with System Usability Scale <sup>4</sup> and demographics

- Quantitative data analysis using descriptive statistics using STATA SE 16. Thematic analysis underway for qualitative data from focus group transcriptions.

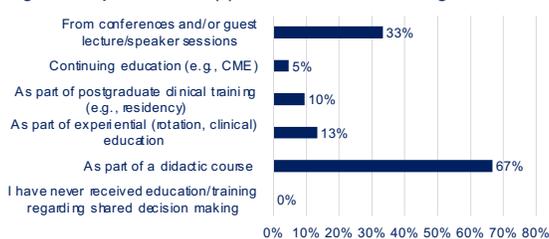
## RESULTS

Table 3. Demographics, Focus Group Participants (N= 21)

	IPE Learner (N=15)	IPE Educator (N=6)
<b>Health Care Discipline*</b>		
Medicine	14 (93.3)	1(16.7)
Dentistry	--	1(16.7)
Pharmacy	1(6.7)	1(16.7)
Clinical Psychology	--	1(16.7)
Social Work	--	1(16.7)
Respiratory Therapy	--	1(16.7)
<b>Primary Practice/Setting*</b>		
Outpatient/Clinic	--	5(83.3)
Other: Classroom/Lab	--	1(16.7)
<b>IP Team Experience (years)**</b>	--	7(1-30)
<b>Gender (Female)*</b>	13(86.7)	3(50)
<b>Age*</b>		
22-30 years	15(100)	--
31-40 years	--	2(33.3)
41-50 years	--	2(33.3)
51-60 years	--	--
61 years and older	--	2(33.3)

\*N(%), \*\*Median(Range)

Figure 4. Reported Source(s) of SDM Education/Training



## RESULTS – Cont.

Figure 5. Self Reported Practice of SDM (N= 21)

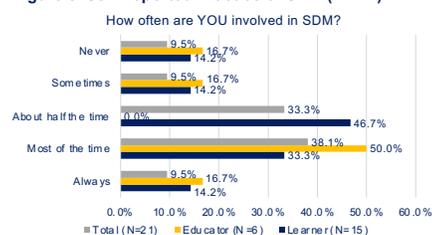


Figure 6. Reported IP Team Practice of SDM (N= 21)

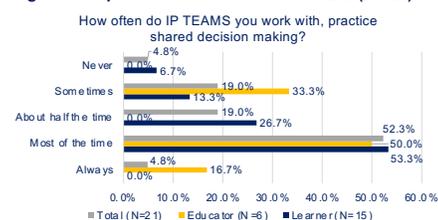


Table 4. System Usability Scale for IP-SDM-T2\*

	IPE Learner** (N=15)	IPE Educator** (N=6)	Total** (N=21)
I think that I would like to use this system frequently.	4(2)	3.5(1)	4(2)
I found the system unnecessarily complex.	2(0)	2(0)	2(0)
I thought the system was easy to use.	4(4)	4(1)	4(1)
I think that I would need the support of a technical person to be able to use this system.	2(1)	1.5(1)	2(1)
I found the various functions in this system were well integrated.	4(4)	4(0)	4(0)
I thought there was too much inconsistency in this system.	2(1)	1(1)	2(1)
I would imagine that most people would learn to use this system very quickly.	5(1)	4(0)	4(1)
I found the system very cumbersome to use.	2(1)	2(1)	2(1)
I felt very confident using the system.	4(0)	4(0)	4(0)
I needed to learn a lot of things before I could get going with this system.	2(1)	1.5(2)	2(1)
<b>Total SUS Score</b>	<b>57.8(5.5)</b>	<b>56(10)</b>	<b>57.5 (6)</b>

\*Likert Scale: (1) Strongly Disagree, (2) Somewhat Disagree, (3) Neither Agree or Disagree, (4) Somewhat Agree, (5) Strongly Agree

## LIMITATIONS

- Small sample size
- First prototype of application
- Limited hands-on capability by participants

## CONCLUSIONS & FUTURE DIRECTIONS

- The IP-SDM-T2 may help visualize SDM constructs from a direct patient care scenarios.
- The IP-SDM-T2 is a tool that may help measure and foster SDM making among IP teams and learners in the experiential setting.
- Future directions include mobile app development to improve ease of use and future studies (e.g., RCT study with and without the IP-SDM-T2, a pilot study in a clinical setting with patients (e.g., diabetes counseling).

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