

Multimedia Appendix 2. Mediation analysis

We followed Lowry and Gaskin (2014) to conduct mediation analysis using SmartPLS and Sobel test. The results of mediation analysis and Sobel test are provided in Table A. The three dimensions of patient satisfaction are Care Team Interaction (CTI), Atmosphere (ATMOS) and Instruction Effectiveness (IE). IV here refers to Post-adoptive use, MED refers to the corresponding mediator, and DV refers to the corresponding dependent variable. To conduct mediation analysis, we validated the significance of the paths between IV to MED to DV with SmartPLS.

In the table below:

- “Direct No Med” refers to the β of the link from IV to DV without the corresponding mediator included.
- “Direct w/MED” refers to the β of the link between IV and DV, with the corresponding mediator included.
- “IV \rightarrow MED” refers to the β of the link between IV and mediator.
- “MED \rightarrow DV” refers to the β of the link between mediator and DV.
- The label “SE” refers to standard error.

We then used a Sobel test calculator (available from www.danielsoper.com) and plugged in the values of IV \rightarrow Mediator and Mediator \rightarrow DV, along with the corresponding SE values. As shown by the values of the Sobel test statistic (> 1.96) and 2-tailed probability < 0.05 , all the mediators – health self-awareness, gratification and health perceptions – mediate the links between post-adoptive portal use and the three dimensions of patient satisfaction. To establish partial or full mediation, we considered the t-values of the “Direct w/MED” values. T-values greater than 1.96 constitute partial mediation, while t-values less than 1.96 constitute full mediation. In our model, gratification fully mediates the link between portal use and patient satisfaction dimensions. Health self-awareness partially mediates the link between portal use and CTI and ATMOS, while fully mediating the link between portal use and IE. Health perceptions partially mediates the link between partial use and CTI, while fully mediating the link of portal use to ATMOS and IE.

Table A

Mediation Analysis and Sobel Test Results

Relatio nship	Mediation test for Health Self-Awareness (HSA)			Mediation test for Gratification (GRAT)			Mediation test for Health Perceptions (HP)		
	CTI	ATMOS	IE	CTI	ATMOS	IE	CTI	ATMOS	IE
Direct									
No	-0.172	-0.098	-0.046	-0.038	0.038	0.088	-0.144	-0.07	-0.014
MED									
Direct									
w/	-0.154	-0.082	-0.03	-0.154	-0.082	-0.03	-0.154	-0.082	-0.03
MED									
IV →	0.162	0.162	0.162	0.394	0.394	0.394	0.158	0.158	0.158
MED									
MED →	0.296	0.265	0.241	0.27	0.288	0.279	0.131	0.19	0.227
DV									
IV →	0.041	0.041	0.041	0.037	0.037	0.037	0.037	0.037	0.037
MED SE									
Med →	0.064	0.06	0.057	0.056	0.046	0.055	0.05	0.058	0.054
DV SE									
Sobel	3.0041	2.9447	2.8868	4.3921	5.3971	4.5796	2.2331	2.5991	2.9957
Test	7918	8923	4932	9366	3124	409	7719	6054	2493
Stat									
1-tailed	0.0013	0.0016	0.0019	0.0000	0.0000	0.0000	0.0127	0.0046	0.0013
prob.	3149	1587	456	0561	0003	0233	6863	726	6897
2-tailed	0.0026	0.0032	0.0038	0.0000	0.0000	0.0000	0.0255	0.0093	0.0027
prob.	6298	3175	9121	1122	0007	0466	3726	4521	3793
Mediati on	Partial	Partial	Full	Full	Full	Full	Partial	Full	Full

Note: IV=independent variable, DV=dependent variable, MED=mediating variable, PAU=post adoptive use, HSA=health self-awareness, GRAT=gratification, HP=health perceptions, CTI=care team interaction, ATMOS=atmosphere, IE=instruction effectiveness.