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The Patient Engagement Capacity Model: What Factors Determine a Patient's Ability to Engage?

Article · March 13, 2019

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The Promise and Challenge of Patient Engagement

The health care system increasingly seeks to engage patients as partners in and drivers of their health and health care. The assumption is that engaged patients are healthier to begin with, and when they do have health problems, they are more likely to adhere to a care plan, resulting in more effective care and less wasted expense.

Providers and payers have created a great number and variety of tools such as shared decision-making aids and patient portals to help patients participate in health decisions and adhere to care plans, and have backed health policy initiatives such as the patient-centered medical home aimed at increasing engagement.

> *A focus on capacity and context can help providers and health care organizations identify the dimension(s) of engagement that create the greatest barriers for both individual patients and their patient population as a whole, and allocate their resources accordingly."*

What effect have these efforts had? Assessing patient engagement, and the impact of patient engagement interventions, is challenging. Some studies consider patients "engaged" if they either participate in study activities or use study tools. Researchers have also developed scales to measure the psychological concepts such as emotional state that indicate engagement or to count behaviors including preparing for appointments in advance or making a list of medications thought to be associated with high or low engagement.

These approaches are limited because they don't consider the context in which a patient engages — for example, their relationship with their provider, ease of access to appointments, or their financial situation — nor do they identify internal factors, such as lack of self-confidence or inability to use electronic tools, that can affect a patient's level of engagement or their capacity for increasing it.

We need models that address both context and capacity to fully understand why patients don't engage and how to increase their engagement.

The Engagement Capacity Model

We have created a model to conceptualize engagement capacity drawing upon social cognitive theory, developed in the 1960s and '70s by Canadian psychologist Albert Bandura to explain the various ways that people acquire behaviors. This theoretical framework is widely used specifically to study how people acquire their health habits. The theory includes the concept of "reciprocal determinism": the idea that there is a dynamic relationship between the person, their environment, and their behaviors, in which they continually influence each other and are influenced by each other. For example, when a person learns a new behavior, their confidence in performing that behavior in the future increases.

We believe this concept is particularly relevant in understanding capacity for patient engagement, because changes in one element (person, environment, or behavior) can result in changes in another. Identifying elements within these interconnected domains may improve our ability to help patients engage.

Engagement Capacity Framework
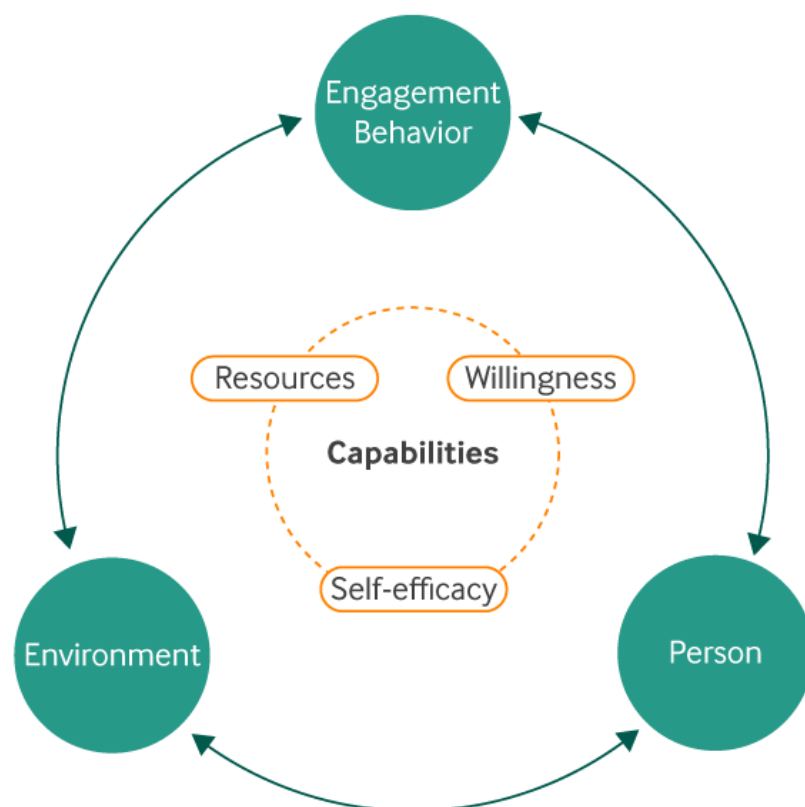
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Our model encompasses four dimensions that fall within the person-environment-behavior domains:

Self-efficacy: An individual's belief in their own capability to perform a behavior. Studies have linked increases in self-efficacy to improvements in chronic disease management, adherence to treatment regimens, and health-promoting behaviors.

Resources: Factors external to the individual that support participating in care: financial resources (e.g., household income or health insurance); access-related resources (Internet access to online patient materials, or availability of appointment hours at a convenient time); and person-related resources (e.g., a provider with whom the patient has good communication). Patients with fewer resources would be less likely to fully engage in their health care.

> *The Engagement Capacity Model can focus these efforts by enabling physicians and health care organizations to better classify a patient's capacity for engagement through assessment of their self-efficacy, willingness, resources, and capabilities."*

Willingness: The quality or state of being prepared to take action. For example, many providers now offer a patient portal through which patients can access their electronic health record and exchange messages with providers. However, patients may not be willing to share information electronically due to privacy concerns or discomfort with technology, and this lack of willingness hinders their ability to engage.

Capabilities: The above three elements are supported by an individual's "capabilities," or the knowledge and skills that enable them to perform a behavior. In the context of patient engagement, these may include knowledge of where to find health information or the ability to perform health-related tasks such as self-monitoring, understanding medication labels, and processing numerical information. Prior research has linked knowledge and skill to improved outcomes.

Exploring the Dimensions of Engagement

We held focus groups with patients who are managing chronic conditions and asked them to tell us what it means to participate in their health care and what providers can do to help them participate. We analyzed their answers in the context of the four dimensions described above.

Self-efficacy: One patient said she always had blood work done before her appointment: *"If I have questions, I already know what the numbers are so I can talk to a physician."* Another patient noted specifically how health information technology increased their self-efficacy: *"I used to write a lot more stuff down, before [the patient portal] because I wouldn't be able to remember. And you can see when your appointments are coming up and you can check back and compare all your biometrics."*

Resources: Some patients described how a support network helped them to engage: *"I will bring my wife with me because she has different concerns than I do. And she will hear something that I don't."* Other patients discussed tools they used, such as patient portals, to track and understand their test results: *"When [I] get a CBC done, I can look at every single one [of the individual results]. Sometimes something will be just slightly high or slightly low. Well, they wouldn't bother to mention that usually, unless it was an ongoing problem. But now I can see all those and so I can say, 'Well, this*

here says that it's high,' and then she can explain to me." Patients also cited access to providers with whom they felt comfortable. One explained, *"I feel like when I go to see her, I'm going to see a sister."*

> *It's questioning your doctor if they say things that you don't agree with, or if they make recommendations on things that you should be doing and you know it didn't work before, so I'm not going to waste my time trying it again."*

Willingness: Patients described a mindset of willingness to engage with providers: *"It's questioning your doctor if they say things that you don't agree with, or if they make recommendations on things that you should be doing and you know it didn't work before, so I'm not going to waste my time trying it again."* Another patient reflected, *"I think it's really important when I see somebody new that I give them a very detailed history, going back a number of years because with multiple different conditions, I want to make sure that I have included enough information."*

Capabilities: Some patients discussed skills they applied during a clinical encounter: *"When I get a new prescription, I always make sure that I repeat back to my doctor what the instructions are for taking it to make sure that I heard her correctly and she can correct me if I said something wrong."* Others described skills involved in making sure their voice was heard: *"You have to really be forceful as your advocate."* Patients also felt that providers played an important role in helping them gain the knowledge they needed to engage. As one patient said, *"I think it's probably helpful if the procedure has been explained or what you need to do has been explained by your physician or the nurse, [with] some written materials that you can look back to if you have questions."*

Why Capacity and Context Matter

How does this model help providers work with patients to increase their engagement? Consider three cases involving newly diagnosed diabetics who need to manage their disease:

- a patient who does not have access to diabetic supplies (low resources)

- a patient who does not feel confident injecting insulin (low self-efficacy)

- a patient afraid of needles (low willingness)

Each of these patients requires a different intervention. The low-resource patient needs money for supplies and/or a place to acquire them. The low self-efficacy patient needs coaching and encouragement. The low-willingness patient may need more specialized training focused on

helping them overcome their fear, if injectable insulin is the only effective treatment option. Without this model, all these patients might be lumped together in the same "not engaged" category, and it might take the provider longer to pinpoint how to help each one.

> *Each of these patients requires a different intervention.… Without this model, all these patients might be lumped together in the same 'not engaged' category."*

A focus on capacity and context can help providers and health care organizations identify the dimension(s) of engagement that create the greatest barriers for both individual patients and their patient population as a whole, and allocate their resources accordingly. This approach may also help researchers measure not only whether an intervention improved engagement, but also which components of engagement improved, thereby improving the design of targeted interventions both for individual patients and for specific populations.

For example, populations in which health literacy is low would require a different type of intervention from populations that struggle with poor access to services.

Currently, new resources for expanding patient engagement are proliferating. Tools for shared decision-making between patients and providers are becoming increasingly sophisticated and aim to improve the engagement of patients in their own health care decisions. The Engagement Capacity Model can focus these efforts by enabling physicians and health care organizations to better classify a patient's capacity for engagement through assessment of their self-efficacy, willingness, resources, and capabilities. For example, given the current push to encourage patients to utilize patient portals, the Engagement Capacity Model could help to identify reasons for not using a portal, such as low e-health literacy or lack of trust in electronic communication, and then create interventions to address these issues.

We believe this Engagement Capacity Model can help providers take into account the particular contexts of patients and identify salient factors that influence patient participation in their own health care.

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DISCUSS

HIDE 2 RESPONSES

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Stephen Michael

I know this is going to sound simplistic for academics (of which I am one), but what about including the concept of just asking patients what they need to be more engaged rather than trying to assess it? I've found over my 30 years in working in behavioral health that the simplest of techniques - asking the patient - is often overlooked. Whether we believe the patient is realistic or not, they are coming from a framework/social construct in their experience which assessments often miss. I have found with care teams that the most effective are those that just ask the patient what they need to succeed. And then work it from there. Simple, I know. But isn't this the best way to start patient engagement, by asking them what they need to participate?

April 16, 2019 at 10:50 am   **REPLY**

Alex Pirie

patient comment: sophisticated tools are all well and good for sophisticated patients, for everyone else, not so good. Personally, I rank high on "self-efficacy," but then spend considerable amounts of time on line and on the phone negotiating (current example is getting a shingrex 2nd vaccination). For ordinary care my primary obstacle is time in contact with the clinician. Checking the record, and then checking the boxes, then recording the present visit, take significant amounts of the hurried encounter now covered by insurance - forget any other questions one might have. For LEP patients requiring interpretation, the available "real" contact time is cut in half. For both the sophisticated and unsophisticated, the ordinary contact time for annual physicals and simple problem visits has become an ever sped up assembly line and is unsatisfying to all concerned (patient AND physician burnout ensues). And then there is the specialist who can't quite remember the log in from one's PCP's computer. Unsatisfying and unhealthy - another model, another tool (another password!) are not going to solve the problem of boosting patient engagement.

April 16, 2019 at 11:10 am   **REPLY**

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