This paper explores how patient activation may be a mediating factor between social determinants of health (SDoH) and health outcomes. Although we do not have data on all potential connections between SDoH and patient activation, we do have evidence suggesting that higher activation may lessen the impact of SDoH, while lower activation may worsen the impact of SDoH.

**Background**

There is ample evidence that activated individuals take a proactive approach to managing their health and their health care. They are more knowledgeable about health and are more confident in taking actions to promote and protect their health. Further, we know that economic status and educational status are only weakly associated with activation level.¹ That is, research shows that there is a full range of activation levels at all educational and income levels. This means that even though individuals may be disadvantaged in terms of education or income, some still possess the knowledge, skill, motivation and confidence to protect and promote their health. Further, we know that higher activated individuals also possess better problem-solving skills as compared to less activated individuals.

**Findings**

We hypothesize that the combination of motivation, skills (including problem-solving skills), and confidence to act, may help to protect individuals who face challenges in accessing basic needs, such as housing, medical care and food.

Research using the Patient Activation Measure® (PAM®) sheds some light on this question. The ability to obtain care when it is needed is critical to positive health outcomes. Highly activated individuals have greater success in navigating a highly complex and often confusing health system. In addition, barriers to care appear to differentially affect high and low activated individuals.

For example, individuals at lower activation levels were more likely to report that they did not get care when they needed it, as compared to those at higher levels of activation. Similarly, low activated individuals were more likely to delay care or to refrain from filling a prescription because of cost. These differences remained true even after controlling for differences in economic status, education, health status and insurance status.² That is to say, when faced with the challenge of no health insurance, the higher activated individuals were more likely to get needed care, to not delay care, and to obtain prescribed drugs than were less activated individuals with the same circumstances. (Table 1)

---


Table 1. Activation Level for US Adults with Chronic Condition

<table>
<thead>
<tr>
<th></th>
<th>All adults with a Chronic Condition</th>
<th>PAM Level 1</th>
<th>PAM Level 2</th>
<th>PAM Level 3</th>
<th>PAM Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Source of Care</td>
<td>91.0%</td>
<td>88.4%</td>
<td>88.5%*</td>
<td>91.3%</td>
<td>92.4%</td>
</tr>
<tr>
<td>Unmet Medical Need</td>
<td>12.2%</td>
<td>26.8%*</td>
<td>15.2%*</td>
<td>10.2%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Delayed Care</td>
<td>15.5%</td>
<td>47.1%*</td>
<td>39.1%*</td>
<td>30.2%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Did Not Get Prescription Drug Due to Cost</td>
<td>21.0%</td>
<td>37.4%*</td>
<td>26.3%*</td>
<td>19.9%</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

Source: Health System Change Research Brief No. 8 October 2008. Judith Hibbard and Peter J. Cunningham
*Differences with Level 4 statistically significant at p<.05.
Note. All estimates are based on regression-adjusted means controlling for age, gender, family income, education, health insurance status, race/ethnicity, number of chronic conditions, perceived health status, body mass index, urban vs. rural residence, and census region.

Summary

When faced with the same challenges, and having the same apparent resources in the form of health insurance, education and income, and health status, we observed differences by activation level in being able to access needed services. These observed differences by activation level, are likely explained by the greater motivation and skill possessed by the higher activated. Having greater problem solving skills means being able to figure out solutions when faced with barriers. Having greater motivation means persistence in finding a solution. Thus, data from one area of SDoH show that activation level mediates the relationship between SDoH and accessing a key resource for health.

Implications

The implications of the mediating effect of Patient Activation on the relationship between SDoH and health outcomes are two-fold. First, because it is possible to increase patient activation, efforts should focus on both reducing barriers to key determinants of health (e.g., reducing food insecurity), as well as implementing efforts to increase patient activation in a population. That is, if current efforts aimed at ameliorating SDoH, are paired with efforts to increase activation in the population, the effects on health outcomes will be greatly improved over what can be achieved with just a focus on SDoH.

Second, when implementing SDoH efforts in a population, it will be important to carefully monitor who is participating in or whom the program is reaching. For example, if a food security program were reaching mostly higher activated patients, it would likely have less of an impact than if the program were able to reach lower activated patients. Similarly, when assessing the impact of SDoH programs on a patient population, it will be important to know if they are helping the less activated who participate, and not just helping the higher activated participants.

Investing in efforts to ameliorate the impacts of the SDoH is important. However, understanding the activation levels within a patient population, and then working to increase activation will make those efforts more impactful. Paying attention to patient activation is an effective way to boost the impact of SDoH efforts.

References
