How much do clinicians support patient self-management? The development of a measure to assess clinician self-management support ☆

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ABSTRACT

Background: Primary care provider (PCP) support of patient self-management may be important mechanism to improving patient health outcomes. In this paper we develop a PCP-reported measure of clinician strategies for supporting patient self-management, and we psychometrically test and validate the measure.
Methods: We developed survey items based upon effective self-management support strategies identified in a prior mixed methods study. We fielded a survey in the fall of 2014 with 139 Fairview Health Services PCPs, and conducted exploratory factor analysis and Cronbach's Alpha to test for scale reliability. To validate the measure, we examined the Self-Management Support (SMS) scale's relationship to survey items on self-management support, as well as clinicians' patient panel rates of smoking cessation and weight loss.
Results: Nine survey items clustered reliably to create a single factor (Cronbach's Alpha=0.73). SMS scores ranged from 2.1 to 4.9. The SMS was related to each of the validation variables. PCPs who reported spending 60% percent or more of their time counseling, educating, and coaching patients had a mean SMS score of 4.0, while those who reported spending less than 30% of their time doing so had mean SMS scores 15% lower. PCPs' SMS scores exhibited significant but modest associations with their patients' smoking cessation and weight loss (among obese patients) (r=0.21 and r=0.13 respectively).
Conclusions: This study develops and tests a promising measure of PCPs' strategies to support patient self-management. It highlights variation across PCPs. Future work should examine whether increasing scores of PCPs low on the SMS improves chronic care quality outcomes.

1. Introduction

Recent policies to improve quality of care, such as public reporting of quality performance and pay-for-performance, are increasing clinicians' accountability for their patients' health outcomes.[1–4] These policies assume that by paying for quality or making quality performance public, clinicians will focus more on improving their patients' health outcomes. However, patients themselves contribute substantially to their own health outcomes.[5–9] Patient behaviors, including adherence to treatment regimens, self-management of chronic conditions, and making recommended lifestyle behavior changes, are important

determinants of many of the quality indicators that clinicians are being held accountable for. Not surprisingly, clinicians working under pay-for-performance programs often express frustration that their patients' lifestyle behaviors impact their incomes.[1,10]

Given patients' important role in influencing their own health, an important mechanism for clinicians seeking to improve patient health outcomes is providing self-management support to their patients.[11–14] Yet, providing this support is a relatively new role for many clinicians, and one that many report having little training in.[14–17] For example, a recent study of primary care clinicians (PCPs) within a Pioneer Accountable Care Organization found that when asked about key obstacles to improving their quality metrics, one-quarter cited not knowing how to effectively support patients in behavior change.[10]

There are measures of effective clinician support of patient self-management, however, they rely upon patient assessment of the care.[18–21] Patient assessments of clinician support and interactions have been shown to be affected by a number of patient-level factors such as activation level, attachment style, and socio-

economic status.[22–25] As far as we are aware, there is no evidence-based measure that assesses provider reported self-management support strategies.

In this paper we report on the development of a primary care provider (PCP)-reported measure of the use of patient self-management support strategies that have been identified as effective in a prior mixed-method study. We test the psychometric properties of the new measure, and examine how it relates to other PCP behaviors that are supportive of patient self-management, attitudes towards supporting patients in self-management, and whether it is predictive of key patient health behavior change.

2. Background

This paper builds on prior mixed methods research that employed the positive deviance approach to identify effective clinician strategies for supporting patient behavior change.[26] This methodology is used to identify the effective strategies used by top performers–or "positive deviants" on established performance measures.[27] The underlying assumption is that there are existing effective strategies being used, in this case by clinicians for supporting patient behavior change, and the goal of the research is to reveal the existing effective strategies. The method was developed in the global health arena, and it is increasingly being used for quality improvement related-research in the United States.[27–30]

The positive deviance process involves several steps. Initially quantitative data is used to identify top performers on specific performance measures and often on a comparator group of average or low performers. In our prior work, we identified PCPs within Fairview Health Services, a Pioneer Accountable Care Organization with over 280 PCPs in Minnesota, whose patients' activation scores increased over time and compared them to a group of PCPs whose patients' PAM scores increased not at all or increased very little. We measured patient activation, which is defined as having the knowledge, skills, confidence, and motivation to manage one's health and health care, using the Patient Activation Measure or PAM.[31,32]

The second step of the positive deviance process was to conduct in-depth interviews with a group of PCPs whose patients' change in activation was comparatively high (n=10) and with a group whose change was comparatively low (n=10). The goal of

Table 1.
Sample demographics and associations between demographic characteristics and the SMS measure.

	Percent of survey respondents (n=139)	SMS score (mean)	p-Value
PCP type			0.2668
Family medicine physician	56.8	3.7	
Internist or internist/pediatrician	16.6	3.7	
Nurse practitioner or physician assistant	26.6	3.9	
Gender			0.0151
Male	36.0	3.6	
Female	64.0	3.8	
Age group			0.3320
< 35	13.0	3.8	
35–49	51.5	3.8	
50–59	20.3	3.7	
60+	15.2	3.6	
Length of time at fairview			0.5343
< 1 Year	6.0	3.8	
1–5 years	38.8	3.8	
6–10 years	21.6	3.8	
11+ years	33.6	3.7	
Panel income tercile[a]			0.6187
Lower tercile	33.3	3.7	
Middle tercile	31.6	3.7	
Higher tercile	35.1	3.8	

[a] n=116.

Table 2.
Factor loadings for the PPI items in the single factor solution.

Key themes from prior qualitative research	Survey items	Loading
Emphasizing patient ownership	Tell the patient you will be their "coach" but that they are the one that has to carry out the plan	0.45*
Partnering with patients	Ask the patient what change s/he wants to focus on	0.57*
Identifying small steps for change	Work with the patient to jointly set very specific behavioral goals (e.g. walk up two flights of stairs or around the block daily)	0.73*
	Try not to overwhelm the patient with too many recommended changes	0.72*
	Challenge patients to try to take one small step toward a change	0.69*
Having frequent follow-up	Have patients come back frequently to check on progress towards behavioral goals	0.47*
	Celebrate with the patient when he/she makes even small behavioral improvements	0.52*
	Brainstorm with the patient on how to overcome the problems holding them back	0.39*
Showing patients care and concern	Tell the patient how much you care about him/her and his/her health	0.70*

* $p < 0.05$.