

Patient Activation in High Utilizers

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INTRODUCTION

Patients who actively participate in their health care have demonstrated improved outcomes in adopting healthy behaviors, controlling chronic illness, and obtaining preventive services. The Patient Activation Measure (PAM) is a validated self-evaluation tool that measures a patient's knowledge, skill, and confidence in managing one's health. Lower PAM scores are correlated with higher use of ER visits and hospitalizations in several patient populations, particularly in underserved, low-income groups. Patients with lower PAM scores can be identified for interventions to improve patient activation with the goal of improving health outcomes and reducing unnecessary utilization.

OBJECTIVE

To determine if patient activation scores correlate with subjective measures of patient complexity and utilization in an urban family medicine residency serving a diverse, low-income, underserved population.

METHODS

The PAM survey was administered to consecutive English and Spanish speaking patients presenting for care to faculty at a university-based family medicine residency affiliated with a federally qualified health center in Madison, WI. In addition, demographic information and a single-item general self rated health measure was collected from patients. For the patients who completed the PAM, the primary care provider (PCP) completed a five-question survey estimating patient complexity and utilization of health care resources.

Sample questions from the PAM survey (response on 7 point Likert scale):

"Taking an active role in my own health care is the most important thing that affects my health."

"I am confident that I can follow through on medical treatments I may need to do at home."

"I understand my health problems and what causes them."

"I am confident I can figure out solutions when new situations or problems arise with my health."

"I am confident that I can maintain lifestyle changes, like eating right and exercise, even during times of stress."

Single-item general self rated health measure:

"In general, how would you rate your health: excellent, very good, good, fair, or poor?"

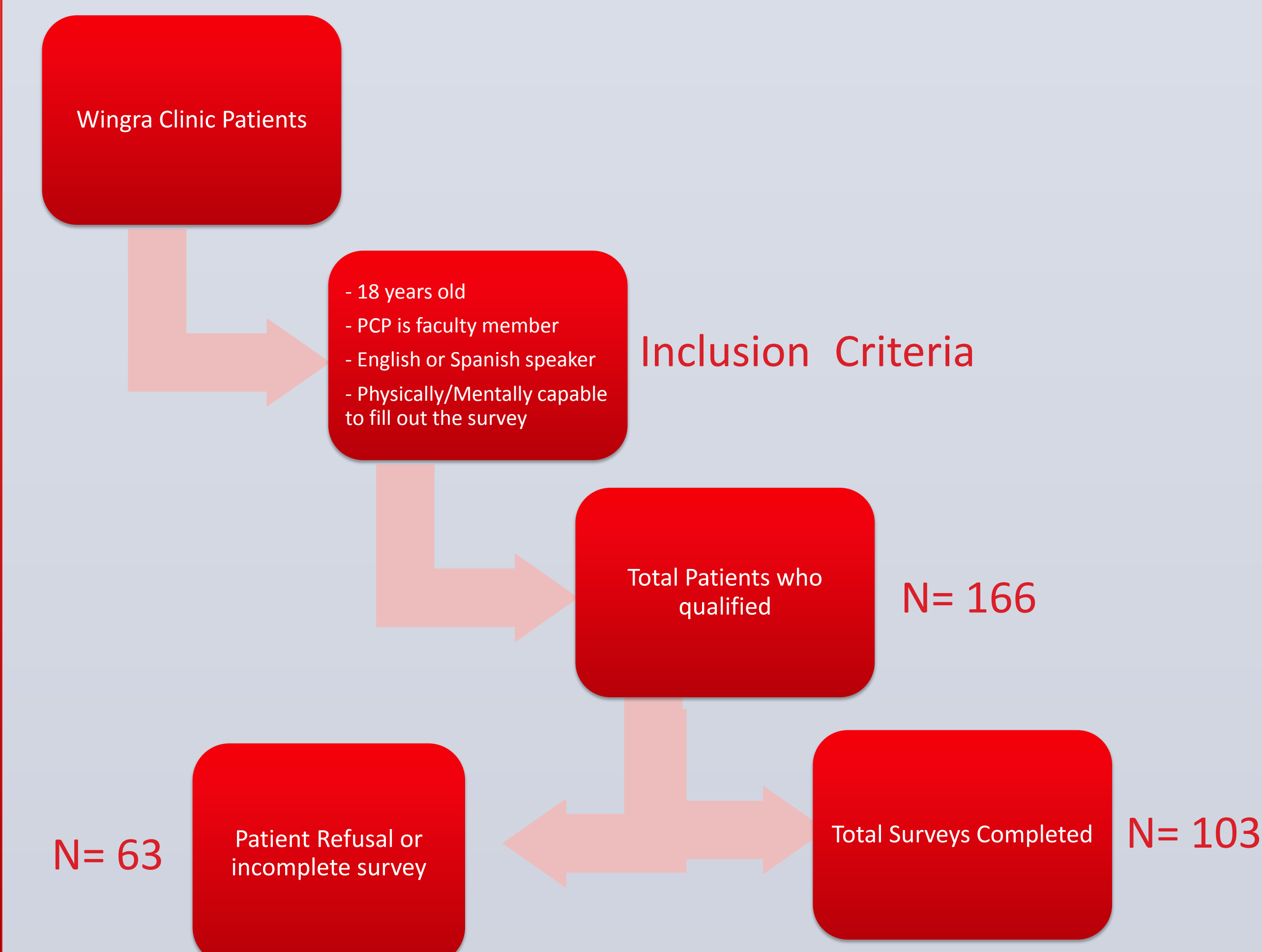
Patient complexity survey questions (response on 7 point Likert scale):

"This patient presents with a diagnostic challenge."

"This patient cooperates with treatment recommendations."

"This patient has a stable, supportive social network."

"This patient has consistent, adequate insurance coverage."



RESULTS

Table 1: Characteristics of the Patient Sample (N=104)

		n	%
Gender	Male	42	40.4
	Female	62	59.6
Age	18-30 years	15	14.4
	31-50 years old	29	27.9
	51-64 years old	41	39.4
	over 65 years old	19	18.3
Race	Asian	1	1
	American Indian	1	1
	Black/African American	19	18.3
	White	74	71.1
	Latino/Hispanic	8	7.7
	Declined	1	1
Education	Grade School	3	2.9
	High School/GED	35	33.6
	Vocational/Tech School	14	13.5
	College	34	32.7
	Masters	12	11.5
	Doctorate	6	5.8
Insurance	Private/Medicare	10	9.6
	Medicare	10	9.6
	Medicaid	22	21.2
	None	6	5.8
	Private	46	44.2
	Medicare/Medicaid	9	8.7
General health	Poor	5	4.8
	Fair	27	26
	Good	27	26
	Very Good	36	34.6
	Excellent	8	7.7
	Missing	1	0.9

Table 2. Pearson Correlation between PAM Score and Utilization Score (N=104)

Utilization Score	n	PAM score, mean (sd)	Significance
Too Low (1)	4	68.3 (8.4)	r = -0.294, p=0.003**
(2)	13	70.8 (17.1)	
(3)	22	66.6 (14.0)	
About Right (4)	27	59.1 (13.8)	
(5)	18	63.1 (12.6)	
(6)	18	55.7 (14.8)	
Too high (7)	2	56.7 (13.2)	

** p<0.01

Table 3. Generalized Linear Model of Utilization Scores (N=103)

	df	β	SE(β)	p-value
PC provider	9	.	.	0.0225*
PAM Score	1	-0.003	0.010	0.781
General Health	1	-0.606	0.143	<0.001***

*p<0.05

***p<0.001

Table 4. Generalized Linear Model of Utilization Scores (N=103)

	df	β	SE(β)	p-value
PC provider	9	.	.	0.0851
PAM Score	1	-0.006	0.010	0.5469
General Health	1	-0.496	0.140	<0.001***
Medicaid (Yes/No)	1	0.961	0.288	0.001**

**p<0.01

***p<0.001

Table 1 shows the demographic and single item general self rated health measure results. The patients were largely representative of the general clinic population.

Pearson correlation shows a statistically significant inverse correlation between PAM Scores and utilization, with lower activation associated with higher utilization (Table 2).

Generalized linear model (GLM) of utilization scores revealed that PCP and single item general self rated health are significant predictors of the utilization scores (Table 3). Further, when Medicaid is added as a variable to GLM, Medicaid and single item general self rated health remained predictors of utilization, while the PCP no longer predicted utilization (Table 4). PAM scores did not predict utilization with the GLM.

Age, gender, race, education were not significant predictors of utilization (not shown).

DISCUSSION

Although low patient activation scores are correlated with high utilization, as estimated by PCPs, the PAM score is not an independent predictor of estimated utilization in our study.

Future studies will evaluate patient activation scores from this data set against objective measures of utilization.

REFERENCES

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