

Implementation of the Patient Activation Measure for Mental Health for Pediatric Parents

By

Ashley K Gyer

Under Supervision of

Kristen Rawlett, PhD, FNP-BC

Second Reader

Ann Marie Felauer, DNP, RN, CPNP-AC/PC

A DNP Project Manuscript  
Submitted in Partial Fulfillment of the Requirements for the  
Doctor of Nursing Practice Degree

University of Maryland School of Nursing  
May 2020

## Abstract

### Problem & Purpose

There are risks of developing psychiatric disorders in children of parents with mental health diagnoses. Interventions are needed to address the parents needs and decrease the risk of children being diagnosed with a mental health disorder. Parents who are motivated to participate in their mental health care have better outcomes, with a positive effect on their children's care. While psychotherapy may be beneficial for many mental illnesses, not everyone benefits to the same degree and patient motivation is a crucial requirement for successful therapy.

The purpose of this project was to screen parents of children being treated in the clinic with the Patient Activation Measure for Mental Health (PAM-MH) to identify parents who are motivated to enter a program to improve their own mental health. Parents were screened and placed in one of four activation levels. The results may be used to tailor treatment to the specific child.

### Methods

A tool to identify patient motivation, the Patient Activation Measure (PAM), was introduced in 2004. The PAM was adapted for use in people with mental health conditions with development of Patient Activation Measure for Mental Health (PAM-MH) and it has been demonstrated to be a valid, reliable, and accurate measure of patient motivation.

The PAM-MH is licensed by Insignia health and a research license was granted for this project. The screen consists of 13 questions administered by a licensed therapist. It takes approximately 10 minutes. The screen was scored by Insignia and one of four activation levels was applied for therapy use.

### Results

There were 299 parents eligible for screening. During the project 104 were screened. There were 31 males, 83 females, 71 natural parents, 31 guardians, 17 white, 79 black, and 6 other. At project end, 34.8% percent were screened and assigned activation levels.

#### Conclusion

The project demonstrated that parental screening for activation is possible. The screen identified 38% parents in the 2 highest levels of motivation. Parents in higher levels of motivation are activated to assist in their therapy and referral to therapy would be of benefit. These findings further supported the project as a viable concept.

### **Introduction**

Studies have shown that parents of children with chronic disease, including mental health diagnoses, have a higher rate of mental health issues including depression (Goodman, Rouse, Connell, Broth, Hall, & Heyward, 2011). There are risks of developing a range of psychiatric disorders in children of parents with mental health diagnoses (Leijdesdorff, van Doesum, Popma, Klaassen, & van Amelsvoort, 2017). Interventions are lacking to address the parents needs and decrease the risk of children being diagnosed with a mental health disorder (van Santvoort et al., 2015). Beardslee et al. (2013) found that a decrease in maternal depression had a significant effect on the reduction of symptoms in children undergoing mental health treatment. While psychotherapy may be beneficial for many mental illnesses and adjustment problems, not everyone benefits to the same degree. Many clinicians consider patient motivation a crucial requirement for successful therapy (Greene, Hibbard, Sacks, Overton, & Parrotta, 2015). Drop-out, compliance, and maintenance of change are all related to motivation (Greene & Hibbard, 2011). Patients with greater motivation experience higher recovery, fewer mental health symptoms, better mental health self-care, and are more likely to take psychiatric medications as prescribed (Hibbard, Greene, Shi, Mittler, & Scanlon, 2015). Non-motivated patients are high users in the mental health system. A recent study supports the use of the PAM-MH as a useful screening to measure the activation of parents of youth that have emotional and behavioral problems (Green, Lambert, & Hurley, 2018). The study provides support for the reliability and validity of the measure.

The purpose of this project was to screen all parents of children treated in the clinic with the Patient Activation Measure for Mental Health (PAM-MH).

### **Literature Review**

This review will first focus on the relationship between mental illness in parents and their children. This will be followed by how motivation to participate in mental health care impacts positivity and how a parent's positivity impacts their child's mental health. Finally, a review of the development of the tool that will be used in the project to measure motivation will be included.

Plass-Christi et al. (2017) demonstrated that as many as 50% of children of parents with mental health disorders will develop a mental health disorder during childhood or adolescence. Females demonstrated an increase in mental health problems with increasing age and increasing mental health problems in the parents correlated with an increase in problems in the children. Parents that accompany children to the project clinic are predominantly female. The therapists note that as many as 50% of parents with children in the clinic exhibit symptoms of depression, such as lack of motivation and lack of interest in outside activities. There is currently no method to determine the parent's activation level to participate in their own mental health care.

Several studies (Plass-Christi et al., 2017; VanSantvoort et al., 2015; Leijdesdorff et al., 2017) support the association of mental illness in children to parents with a mental disorder. Identification of these parents and treatment is essential to the improvement of the children's diagnosed illness.

The project focuses on the construct that patient motivation to participate in their own mental health care is essential for the best utilization of available resources. If parents are motivated to participate in their own mental health care there is better adherence with their therapy, better mental health self-care, and better utilization of resources (Greene et al., 2015;

Hibbard et al., 2015; Moljord et al., 2015; Lara-Cabrera et al., 2016). Parents who participate in their own care have a positive impact on their children's care (Van Santvoort et al., 2015).

A means to identify motivation is patient activation. Increased patient activation measured by the Patient Activation Measure (PAM) developed by Hibbard, Mahoney, Stockard, and Tusler (2005) was associated with better illness self-management, greater odds of a positive outcome, and lower health care costs than those with a lower activation level.

Green et al. (2010) modified the PAM to develop the Patient Activation Measure for Mental Health (PAM-MH). This tool was shown to have excellent reliability and was valid in measuring patient activation in individuals with mental health problems.

Green, Lambert, and Hurley (2018) in an RCT of 156 parents found that the PAM-MH identified parents who were activated and allowed an intervention to be tailored to the need of the parents. This was an important strategy in the overall management of the child's mental health care.

The above studies show it is important to identify parents of children with a mental health diagnosis that need mental health care and are motivated to actively participate in their own mental health care (Appendix A). The PAM-MH has been demonstrated to be valid and reliable in making this determination. The project implemented the procedure of using the PAM-MH questions to screen the parents of children enrolled in therapy in the clinic. The result of this screen placed the parents in one of four activation levels. Level 1 is Disengaged and Overwhelmed. These individuals are passive and lack confidence, they have low knowledge concerning their diagnosis with weak goal-orientation. Level 2 is Becoming aware, but still struggling. Individuals some knowledge but large gaps are present. They believe health is out of their control but can set simple goals. Level 3 is Taking Action. Individuals have key facts and

are building self-management skills. They are goal oriented. Level 4 is Maintaining Behaviors and Pushing Further. Individuals have adopted new behaviors but struggle in times of stress and change. Maintaining a healthy lifestyle is a key focus. Based on these activation levels the therapists were able to determine those parents in the top two activation levels that would benefit from immediate referral to a mental health program in the clinic. A long-term goal is for the clinic to develop a program to improve the activation levels of the lower groups and ultimately place them in a mental health program.'

### **Theoretical Framework**

Lewin's Change Theory (Lewin, 1951; Cummings, Bridgeman, & Brown, 2016) is a three-stage process that must be accomplished before the change becomes part of the routine procedure (Figure 1). Lewin's theory states behavior is an equilibrium of forces that are working in opposing directions. To change this equilibrium requires an "unfreezing" by an increase in driving force, a decrease in restraining force or a combination of both. Once unfreezing is accomplished, it allows a "change" of thoughts or actions to occur that is more productive. In order to make this change the new status quo, a "refreezing" is necessary to prevent going back to the old way of operation. An example of change, using the theory in a nursing setting, is documented by Hussain et al. (2017).

A driving force to address parents of children in the clinic who struggle with mental health care is the director of the clinic. The barriers to unfreezing include the parents who do not realize that the clinic also serves adults and lack of a means to identify parents of the children in the clinic who are motivated to participate in their own mental health care. The availability of a screen for patient motivation, in conjunction with driving forces, will help overcome the equilibrium and "unfreeze" the current practice of not screening the parents. Unfreezing will

allow the current standard procedure, no screen, to undergo a “change” to a new normal. The change will be to institute a screen of the parents of children undergoing treatment in the clinic.

As the staff accepts the screen it will “refreeze” or establish a new standard operating procedure that will be a routine screen of all parents when children are accepted for treatment. This screening, as a change in practice will provide the opportunity for the staff to give resources and referrals for the parents who are motivated to actively participate in their own mental health care.

### **Methods**

The proposed project was a quality improvement project to identify parents of children in therapy in the clinic who are motivated to actively participate in their own mental health care. Approval of the project was obtained through the University of Maryland, Baltimore (UMB) Institutional Review Board with a Non-Human Subjects Research (NHSR) determination.

The project was conducted in a community mental health clinic that is an outpatient component of a Community Psychiatric Program. Parents of children enrolled in therapy in the clinic were screened using the PAM-MH. The PAM-MH is only available in English. The screening was limited to parents who comprehend English. The parents of children enrolled in therapy at the start of the program were screened at their next visit. Parents of newly admitted children were screened on the first clinic visit. During the project these parents were screened using the PAM-MH questions (Appendix B) supplied by Insignia Health. The screen is licensed by Insignia Health and a research license has been granted for this project (Appendix C). Parents to be screened were logged on a weekly master and given a deidentified participant number. Only the clinic director had access to the weekly master. The PAM-MH screening form and a demographic form (Appendix D) contained only the deidentified number. Qualifies therapists

conducted the screen. The PAM-MH took no more than 10 minutes to conduct and did not impede the normal patient flow. Once the screen was performed the screening sheet was submitted to Insignia Health and an activation level was returned. This activation level was supplied to the therapists for use in treatment planning.

Weekly calculations including the number of parents eligible to be screened, and the percentage of those that were actually screened. Weekly run charts were calculated based on the number of parents screened out of the possible number of parents eligible to be screened seen in clinic during the week. A weekly report of the number of parents in each of the four activation levels was compiled. The weekly data report and the result of the clinic run chart were presented each week at the staff meeting on Tuesday.

### **Results**

The intervention was a practice change in the clinic. This change did not produce any unexpected consequences. There were 299 parents eligible to be screened during the implementation. Of these, 104 (34.8%) completed the screen and were assigned activation levels. Unexpected barriers, to be discussed later, were encounters and led to a lower percentage of screen than was included in the short-term goals. Run charts were done to follow the percentage screened (Figure 2). Weekly reminders at staff meetings, notices on bulletin boards and a reminder was placed on charts that needed screens. The number in each activation level were Level 1 (15.4%), Level 2 (46.2%), Level 3 (24%), and Level 4 (14.1%). Obtaining the screening result was the short-term goal of the project. Other demographic data was collected (Appendix E). The additional demographic data was not part of the short-term goal and is presented for possible future consideration or study.

### **Discussion**

There were a significant number of eligible parents that were not screened. The project goal was to screen at least 50% of eligible parents, ultimately only 34.8% were screened. There were several causes for a screen not being performed. Often the children were not accompanied by the parent or guardian to consent for the screening. Many parents refused, thinking the result of the screening might label them in a way that they would have the stigma of having a mental disease. Other parents did not feel comfortable revealing the necessary demographic information or answering screening questions. Notwithstanding attempts to improve the screening percentage the final goal was not achieved.

Patients were identified in all 4 activation levels. The implementation of this project supports the idea that parents who would benefit from the information provided in the results can be identified by the PAM-MH and allow referral for further therapy. Those parents identified in Level 3 and Level 4 would benefit from therapy. The screening identified 38% of the total patients that would benefit by referral for therapy. Being able to identify potential patients at this level that would benefit, supports the intended use of the screen to identify those parents in level 3 and Level 4 who would benefit from knowing the PAM-MH level identified by the screen.

The percentage in each level was similar to other US studies. A European study showed the Dutch have lower levels than US while Germans, Danish, and Norwegian have higher levels (Rademakers et al., 2016). However, lower screening percentages than expected is a limitation that could affect the generalizability of the findings.

### **Conclusion**

The fact that 38% (Level 3 & 4) of those screened would benefit from participating in the screen and subsequent mental health care was supportive of the plans goal to identify parents activated to assist in their own therapy. The findings supported the implementation as a

potentially useful project. Complications in recruiting and convincing parents to participate in the implementation, reduced the benefit that may have been identified. A higher screening percentage would have strengthened the findings and further supported the project as a viable concept.

The screen is a proprietary product and the annual cost is based on the number of patients that may potentially be served. Due to the volume of patients served by the clinic, unless the screening rate is improved, the project would be too expensive for the clinic and make future implementation unlikely. If the screening rate could be improved, the percent of patients identified for referral to therapy would likely produce savings in wasted resources that could be saved to offset the cost of the program. The project is useful in that it identified parents who would benefit from therapy.

Even though the yielded results were not optimal this intervention is very important because it will impact the mental health of children. More work needs to be done to help the parents realize the importance of the screen and how it will help their own mental health. Their fears of a stigma must be allayed.

## References

- Beardslee, W., Brent, D., Weersing, R., Clarke, G., Porta, G., Hollon, S., . . . Garber, J. (2013). Prevention of depression in at-risk adolescents: Longer-term effects. *JAMA Psychiatry*, *70*(11), 1161-1170. doi:10.1001/jamapsychiatry.2013.295
- Cummings, S., Bridgman, T., & Brown, K. (2016). Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management. *Human Relations*, *69*(1), 33-60. doi:10.1177/0018726715577707
- Goodman, S., Rouse, M., Connell, Broth., Hall., & Heyward, D. (2011). *Clinical Child and Family Psychology Review*, *14*, 1-27. doi:10.1007/s10567-010-0080-1
- Green, A., Lambert, M., & Hurley, K. (2018). Measuring activation in parents of youth with emotional and behavioral disorders. *Journal of Behavioral health Services and Research*, *46*(2), 306-318. doi:10.1007/s11414-018-9627-6
- Green, C., Perrin, N., Polen., Leo, M., Hibbard, J., & Tusler, M. (2010). Development of the Patient Activation Measure for Mental Health (PAM-MH). *Administration and Policy in Mental Health and Mental Health Services Research*, *37*(4), 327-333. doi:10.1007/s10488-099-023906
- Greene, J., & Hibbard, J. (2011). Why does patient activation matter? An examination of the relationships between patient activation and health-related outcomes. *Journal of General Internal Medicine*, *27*(5), 520-6. doi:10.1007/s11606-011-1931-2
- Greene, J., Hibbard, J., Sacks, R., Overton, V., & Parrotta, C. (2015). When patient activation levels change, health outcomes and costs change, too. *Health Affairs*, *34*(3), 431-437. doi:10.1377/hlthaff.2014.0452

- Hibbard, J., Greene, J., Shi, Y., Mittler, J., & Scanlon, D. (2015). Taking the long view: How well do patient activation scores predict outcomes four years later? *Medical Care Research and Review*, *72*(3), 324-337. doi:10.1177/107558715573871
- Hibbard, J., Mahoney, E., Stockard, J., & Tusler, M. (2005). Development and testing of a short form of the patient of the patient activation measure. *Health Services Research*, *40*(6 Pt 1), 1918-1930.
- Hussain, S., Lei, S., Akram, T., Haider, M., Hussain, S., & Ali, M. (2017). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge*, In press. Retrieved from [https://ac.els-cdn.com/S2444569X16300087/1-s2.0-S2444569X16300087-main.pdf?\\_tid=647425a4-14e3-4994-936b-](https://ac.els-cdn.com/S2444569X16300087/1-s2.0-S2444569X16300087-main.pdf?_tid=647425a4-14e3-4994-936b-)
- Lara-Cabrera, M., Salvesson, Ø., Nettet, Me., De las Cuevas, C., Iversen, V., & Gråwe, R. (2016). The effect of a brief educational programme added to mental health treatment to improve patient activation: A randomized controlled trial in community mental health centres. *Patient Education and Counseling*, *99*(5), 760-768. doi:10.1016/j.pec.2015.11.028
- Leijdesdorff, S., van Doesum, K., Popma, A., Klaassen, R., & van Amelsvoort, T. (2017). Prevalence of psychopathology in children of parents with mental illness and/or addiction: An up to date narrative review. *Current Opinion in Psychiatry*, *30*(4), 312-317. doi:10.1097/YCO.0000000000000341
- Lewin, K. (1951). *Field theory in social science*. London: Tavistock Publications.
- Moljord, I., Lara-Cabrera, M., Perestelo-Pérez, L., Rivero-Santana, A., Eriksen, L., & Linaker, O. (2015). Psychometric properties of the Patient Activation Measure-13 among out-

patients waiting for mental health treatment: A validation study in Norway. *Patient Education and Counseling*, 98(11), 1410-1417. doi:10.1016/j.pec.2015.06.009

Plass-Christi, A., Otto, C., Klasen, F., Wiegand-Grefe, S., Barkman, C., Hölling, H., . . . Ravens-Sieberer, U. (2018). Trajectories of mental health problems in children of parents with mental health problems: results of BELLA study. *European Child & Adolescent Psychiatry*, 27(7), 867-876. doi:10.1007/s00787-017-1084-x

Rademakers, J., Maindal, H., Steinsbekk, A., Gensichen, J., Brenk-Franz, K., & Hendriks, M. (2016). Patient activation in Europe: An international comparison of psychometric properties and patients' scores on the short form Patient Activation Measure (PAM-13). *BMC Health Services Research*, 16, 570-576. doi:10.1186/s12913-016-1828-

Van Santvoort, F., Hosman, C., Janssens, J., van Doesum, K., Reupert, A., & van Loon, L. (2015). The impact of various parental mental disorders on children's diagnoses: A systemic review. *Clinical Child and Family Psychology Review*, 18(4), 281-299. doi:10.1007/s10567-015-0



## Kurt Lewin Change Model

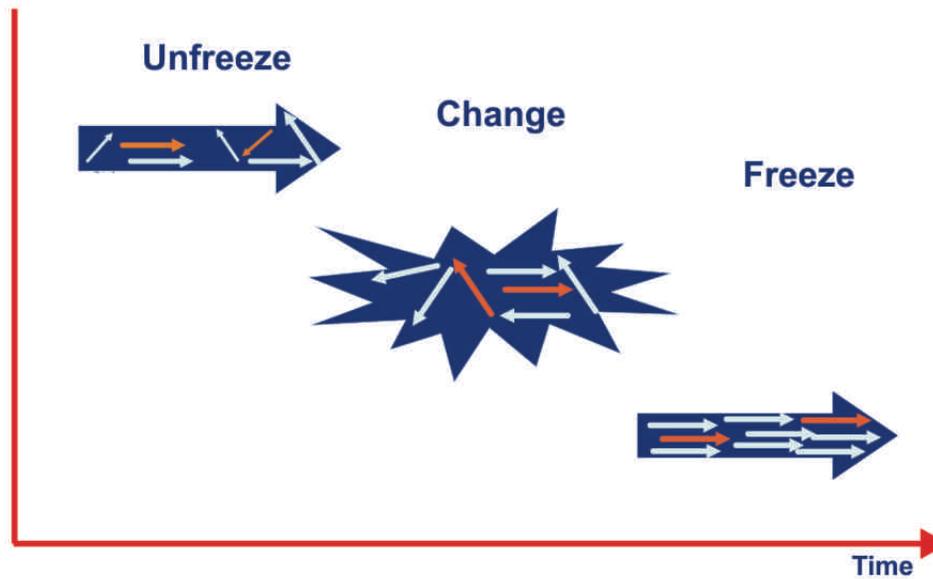


Figure 1. Lewin Change Theory

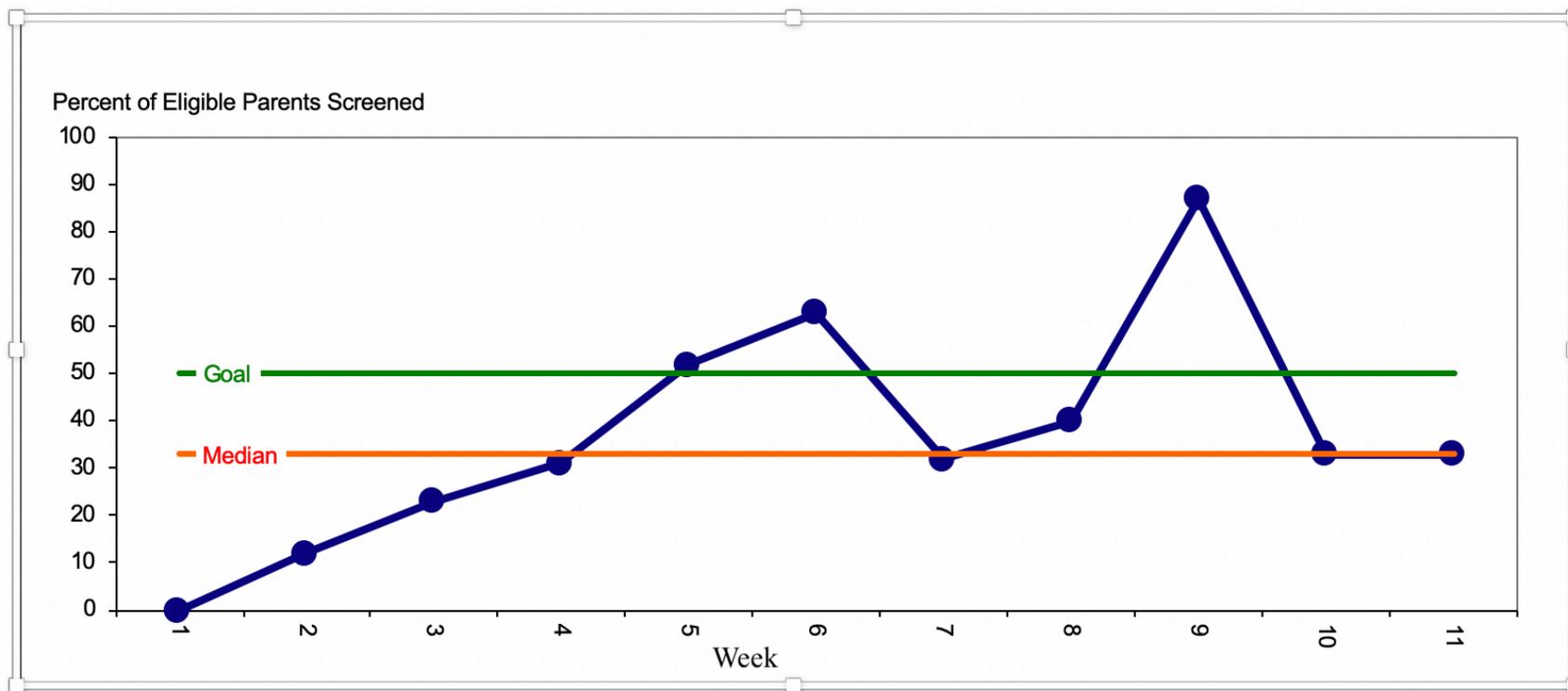


Figure 2. PAM-MH Screens

## Appendix A

## Evidence Review Table

Author, year	Study objective/intervention or exposures compared	Design	Sample (N)	Outcomes studied (how measured)	Results	*Level and Quality Rating
Greene, Hibbard, Sacks, Overton, & Parrotta, 2015	To evaluate the Patient Activation Measure on patient outcomes and costs over time and whether changes in activation results in a change in outcome and costs.	Longitudinal study	Patients from 44 primary care clinics (n=32,060) had baseline Patient Activation Measure collected and a follow-up score collected two years later.	Outcomes from four areas collected: clinical indicators, healthy behavior, preventive screening, and avoidance of costly medical utilization	Higher baseline activation was predictive of better outcomes for nine health indicators including lower costly utilization. The greater the activation level, the greater the odds of a positive outcome. Over the two years, people who had an increase in activation level had a lower cost than those who remained at a lower level (p<.001). A decrease in activation level over the two years demonstrated an increase in cost (p<.001)	3 B
Greene & Hibbard, 2011	To determine how patient activation is related to a large range of patient health and utilization outcomes	Cross-sectional study	Patients (n=25,047) all had primary care visits in prior six months and completed Patient Activation Measure during visit	Outcomes obtained from electronic health record in areas of prevention (colon cancer, cervical cancer, and breast cancer	More activated people were more likely to have better preventive care (p<.01), less likely to smoke (p<.001) or have elevated BMI (p<.001), and less likely to have used the ED or have been hospitalized (p<.001). Higher activation levels were not	3 B

				screening, unhealthy behavior smoking and obesity), clinical indicators (blood pressure, A1c, and lipids), and costly utilization.	more likely to have lower levels of blood pressure, A1c, or lipids than those with lower activation levels	
Hibbard, Greene, Shi, Mittler, & Scanlon, 2015	To determine in patients with chronic conditions whether the Patient Activation Measure predicts outcomes 4 years later and whether a change in activation is related to a change in outcome.	Longitudinal study	Patients (4,865) examined with baseline Patient Activation Measure and analysis of outcomes 4 years later.	Outcomes included self-management of chronic disease, self-management knowledge, general health behavior, functional healthy, and costly utilization	Increase in patient activation correlated with improved outcome measures of self-management of chronic disease ( $p < .05$ ), self-management knowledge ( $p < .01$ ), healthy behavior ( $p < .01$ ), and number of ER visits ( $p < .10$ ). Once activated the benefit persists for several years.	3 B
Moljord, Lara-Cabrera, Perestelo-Pérez, Rivero-Santana, Erikson, & Linaker, 2015	Study in 2 community mental health centers to evaluate an implementation aimed at improving patient participation in mental health services.	RCT	Patients (n=237) awaiting outpatient mental health treatment with a random selection (n=60) of a group that did not receive any intervention or treatment during wait. A responsiveness	Patient Activation Measure-13 (PAM-13) was used in all subjects. The control group was used for test-retest reliability. The responsiveness	In the test-retest data the patient subsamples did not vary significantly ( $p = 0.99$ ). In the responsiveness group there was a significant improvement in the activation level between the first and second assessment. All 13 items increased with eight statistically significant ( $p < .005$ ). ANOVA of	II B

			group (n=51) was selected for an implementation	group were tested before and after an educational intervention	intervention and test-retest subjects yielded a significant interaction effect with a higher improvement in the intervention group (p<.001). The study highlighted the importance of interventions in those with low PAM-13 scores to support readiness to change	
Lara-Cabrera, Salveson, Nettet, de las Cuevas, Iversen, & Gråwe, 2016	Study to assess the effect of a pre-treatment intervention based on patient involvement, peer-support, and self-management with the objective of encouraging the patient to take an active role in their own health	RCT	Patients from 2 community mental health centers randomized to control group (CG) (n=26) to receive treatment as usual and intervention group (IG)(n=26) to receive a 4-hour educational seminar followed by treatment as usual	Assessments of both groups done at baseline, one month after baseline, and four months after baseline. Outcome measurements included PAM-13 and secondary measures of patient satisfaction, well-being, mental health symptoms, motivation, and treatment participation.	The intervention group showed a significantly greater improvement of PAM-13 than the control group from baseline to one month (p=.01) and baseline to four months (p=.,04). The secondary outcomes showed greater satisfaction in IG compared to CG (p<.001), improved mental health in IG compared to CG (p=.03), in treatment participation the CG received significantly more drug treatments (p=.06) and had significantly higher percentage of missed scheduled sessions (p=.049). This trial supports interventions aimed at improving patient activation in mental health patients	II B

Green, Perrin, Polen, Leo, Hibbard, & Tusler, 2010	Study to assess a mental health model of the Patient Activation Measure	RCT	A randomized trial of an intervention with participants (n=30) randomized to intervention and others (n=12) placed in control	Baseline and 14 weeks after baseline of intervention had PAM-MH administered to determine test-retest reliability and to determine sensitivity to change between the test and control group.	The test-retest was determined to have good reliability (Pearson's $r=.74$ ). The change was measured over time for the test and control group with the change over time of the intervention group ( $d=0.74$ ) much greater than the control group ( $d=0.29$ ).	II B
Green, Lambert, & Hurley, 2018	Study to assess the psychometric properties of the PAM-MH to determine the activation of parents to support and engage in their child's mental health care.	Qualitative study	A screen of caregivers (n=156) of children receiving educational service for emotional or behavioral disorders	Caregivers screened with PAM-MH, Strength and Difficulties Questionnaire (SDQ), Family Empowerment Scale (FES), and Caregiver Strain Questionnaire-Short Form 7 (CGSQ-SF7)	Pearson correlations between the PAM-MH and the FES, CGSQ-SF7, and SDQ were performed and demonstrated the validity of the PAM-MH in identifying mental health activation in the parents tested	VI B

### Rating System for Hierarchy of Evidence

#### Level of the Evidence   Type of the Evidence

- I (1)                      Evidence from systematic review, meta-analysis of randomized controlled trials (RCTs), or practice-guidelines based on systematic review of RCTs.
- II (2)                     Evidence obtained from well-designed RCT
- III (3)                    Evidence obtained from well-designed controlled trials without randomization

IV (4)	Evidence from well-designed case-control and cohort studies
V (5)	Evidence from systematic reviews of descriptive and qualitative studies
VI (6)	Evidence from a single descriptive or qualitative study
VII (7)	Evidence from the opinion of authorities and/or reports of expert committees

Melnyk, B.M. & Fineout-Overholt, E. (2014). *Evidence-based practice in nursing & healthcare: A guide to best practice* (3rd ed.). New York: Lippincott, Williams & Wilkins.

### **Rating Scale for Quality of Evidence**

A: High – consistent results with sufficient sample, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific literature

B: Good – reasonably consistent results; sufficient sample, some control, with fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence

C: Low/major flaw – Little evidence with inconsistent results; insufficient sample size; conclusions cannot be drawn

Newhouse, R.P. (2006). Examining the support for evidence-based nursing practice. *Journal of Nursing Administration*, 36(7-8), 337

Appendix B

PAM-MH Screening Question



Name	
ID	
Date	

Below are statements people sometimes make when they talk about their health. Please indicate how much you agree or disagree with each statement as it applies to you personally.

Circle the answer that is most true for you today. If the statement does not apply, select N/A.

1.	When all is said and done, I am the person who is responsible for taking care of my mental health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
2.	Taking an active role in my own mental health care is the most important thing that affects my mental health and ability to function.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
3.	I am confident I can help prevent or reduce problems associated with my mental health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
4.	I know what each of my prescribed mental health medications do.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
5.	I am confident that I can tell whether I need to go to the doctor or whether I can take care of a mental health problem myself.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
6.	I am confident that I can tell my mental health clinician concerns I have even when he or she does not ask.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
7.	I am confident that I can follow through on mental health treatments I may need to do at home.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
8.	I understand my mental health condition(s) and what causes them.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
9.	I know what treatments are available for my mental health condition(s).	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
10.	I have been able to maintain (keep up with) lifestyle changes, like eating right or exercising.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
11.	I know how to prevent problems with my mental health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
12.	I am confident I can figure out solutions when new problems arise with my mental health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
13.	I am confident that I can maintain lifestyle changes, like eating right and exercising, even during times of stress.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A

## Appendix C

## Insignia Health License



Ashley Gyer &lt;agyer@umaryland.edu&gt;

---

**Research License - Order #: 34682 - Insignia Health**

1 message

---

**Insignia Health** <info@insigniahealth.com>  
To: Ashley Gyer <agyer@umaryland.edu>

Sun, May 5, 2019 at 9:09 AM

**Dear Ashley,**Thank you for applying for a **Research** license with Insignia Health!We're in the process of configuring your order within our system. A link to your PAM® Score Sheet and PAM survey documents system will be delivered to [your license account](#) within 10 business days.You can [access your license account at any time](#) using the email above and the password you entered during the purchase process. On the account dashboard, look for the link to "**Read First - PAM ScoreSheet Resource Guide**" for tips on using the score sheet. Also included are links to guides and information on best practices for using PAM and related products.

After you receive your score sheet, choose the PAM survey that matches your study needs (Patient Activation Measure, Parent PAM or Caregiver PAM) and use the score sheet to record statement answers and obtain the activation score and level for each individual in your study.

If you have any questions, please contact [support@insigniahealth.com](mailto:support@insigniahealth.com).

This email also serves as your payment receipt. Below are your order details.

---

**ORDER DETAILS****Order #:** 34682  
**License #:** 1557062576-1588684976  
**License expiration:** 2020-05-04**New/Renewal:** New Purchase  
**PAM Scoring Option:** PAM 13  
**PAM Version:** Patient Activation Measure (PAM) 13  
**Research Population Size:** 75-500**Order Date:** 2019-05-05  
**Total:** \$75.00  
**Payment Method:** American Express ..... 7002 12/2021  
**Card Holder:** David Gyer**Name:** Ashley Gyer  
**Job Title:** DNP, PMHNP Student  
**Phone:** 985-856-2239  
**Company/Organization:** University of Maryland School of Nursing  
**Address:**  
[840 Oella Ave, Apt 201](#)  
[Ellicott City, MD 21043](#)

## Appendix D

## Demographic Questions

## Demographic Data Form

Demographics Data

Assigned ID \_\_\_\_\_

Date \_\_\_\_\_

Therapist \_\_\_\_\_

1. Type of patient
  - a. New
  - b. Continuation
2. Gender of person screened
  - a. Male
  - b. Female
3. Relationship of person screened to patient
  - a. Natural parent
  - b. Legal guardian
4. Age group
  - a. <31
  - b. 31-40
  - c. 41-50
  - d. 51-60
  - e. >60
5. Age of mother at birth of patient \_\_\_\_\_
6. Race
  - a. White
  - b. Black
  - c. Other
7. Education
  - a. High school graduate or less
  - b. Some college or trade school
  - c. College
8. Self-rated health
  - a. Poor
  - b. Fair
  - c. Good
  - d. Very good
  - e. Excellent
9. Self-reported Chronic conditions (Comorbidity)
  - a. None
  - b. Heart condition
  - c. Arthritis
  - d. Chronic pain
  - e. Depression
  - f. Diabetes
  - g. Hypertension
  - h. Lung disease
  - i. Cancer
  - j. Mental health diagnosis, If yes list diagnosis \_\_\_\_\_

## Appendix E

### Project Testing Results

AshleyGyer DNP Project Statistics

DEMOGRAPHIC DATA AND RESULTS N=104			PAM-MH LEVEL			
			LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
<b>Patients Available for Screen</b>		299				
<b>Total Patients Screened</b>		104 34.80%	16 15.40%	48 46.20%	25 24.00%	15 14.40%
<b>Pt Type</b>						
	New	36	6	17	10	3
	Continuation	68	10	31	15	12
<b>Gender</b>						
	Male	31	4	13	11	3
	Female	83	12	35	14	12
<b>Relationship to Patient</b>						
	Natural parent	71	12	35	16	8
	Legal Guardian	33	4	13	9	7
<b>Age Group</b>						
	<31	26	8	10	5	3
	31-40	32	4	17	10	2
	41-50	29	2	13	9	5
	51-60	6	0	5	0	4
	>60	10	2	3	1	4
<b>Race</b>						
	White	19	3	10	4	2
	Black	79	11	38	17	13
	Other	6	2	0	4	0
<b>Education</b>						
	High School or less	50	10	22	13	5
	Some college or trade school	31	4	13	9	5
	College	23	2	13	3	5
<b>Self-rated health</b>						
	Poor	3	1	1	0	1
	Fair	34	11	13	9	1
	Good	45	3	23	11	8
	Very Good	18	1	8	4	5
	Excellent	4	0	3	1	0