Southern California CSU DNP Consortium

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Assessing Clinicians' Endorsement of Patient Activation in Health Management

A DOCTORAL PROJECT
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By

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ABSTRACT

The management of chronic conditions in the U.S. requires new strategies to more efficiently mobilize patients to be active partners in their health. The concept of empowering patients to have ownership in the management of their health and diseases is not new, yet the challenge continues with ways to actually enhance patient activation. One such strategy is the Patient Activation Measure (PAM™) which assesses patient knowledge, skill, and confidence for self-management (Hibbard, Stockard, Mahoney, & Tusler, 2004). The PAM™ has demonstrated positive predictive properties for behavior change in patients (Hibbard et al., 2004). This is a valuable tool for clinicians, as a patient’s score can serve as a guide for tailoring disease specific messaging and interventions. A relatively new and reliable measure to assess and differentiate between clinicians, who support patient self-management/activation, is called the Clinician Support for Patient Activation Measure (CS-PAM™) (Hibbard, Collins, Mahoney, & Baker, 2009).

Prior research studies have demonstrated that departures from traditional patient-clinician roles are positively correlated with higher patient activation, but the success of this dynamic relies on clinician motivation for patient engagement. Continuing education training often does not incorporate strategies for partnering with patients. Few studies have examined the impact of training on clinician’s beliefs on their role in enhancing patient self-management and the degree a clinician’s belief in supporting
patient activation has on the patient’s health outcomes. This project determined the impact of a tailored primary care provider (PCP) training on patient activation through participants’ adoption of taught strategies following training. Expert reviewers and pilot PCPs assessed the face validity of the educational training and post-training survey. The multi-method training was then delivered to PCPs after they completed the CS-PAM™. Prior to training, as measured by the CS-PAM™, 61% of participants endorsed patient activation, the importance of patient knowledge and involvement in his/her care. In contrast, one month following training, over 85% of clinicians agreed they were confident in recognizing the value of patient activation and recognized its characteristics, and 71% reported modifying their practice to increase patient activation. Higher scoring CS-PAM™ clinicians were more likely to be early adopters of training strategies. A need for additional patient activation training was reported by 34% of participants. Clinician focused multi-method trainings on patient activation offers an effective way to improve the PCP’s ability to impact patient activation and the engagement of patients in their own healthcare.
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BACKGROUND

The health of a nation is only as good as the health of its citizens. In 2015, the United States (U.S.) ranked 37th in health care delivery systems among the World Health Organization’s (WHO) 191 member states (World Health Report, 2015). The U.S. ranks last of the 11 industrial nations in clinical performance outcomes, with reported spending of $8,508 per person on health care in 2011 compared to $3,406 in the United Kingdom, which is ranked first overall (Commonwealth Fund Report, June 16, 2014). As of 2012, one half of all U.S. adults (about 117 million people) had a diagnosis of one or more chronic health condition and 31.5%, almost a third of the population, were living with multiple chronic conditions (Ward, Schiller, & Goodman, 2014). Living and managing chronic medical conditions presents a multitude of challenges to the afflicted individuals, as well as the health care delivery system they have to navigate (Bennett, Coleman, Parry, Bodenheimer, & Chen, 2010; Coleman, Austin, Brach, & Wagner, 2009; Rijken et al., 2014; Santana & Feeny, 2014; Ward et al., 2014). The consequences are burdens that impact our nation’s emotional, social, physical and fiscal health.

Of the many chronic medical conditions experienced by individuals in the U.S., diabetes mellitus type 2 (DMT2) and chronic obstructive pulmonary disease (COPD) are two whose high prevalence and progressive stages of disease manifestation make them important targets of health outcome improvements. According to the Center for Disease Control and Preventions’ (CDC) 2014 National Statistics Report, 9.3% of the U.S. population has diabetes with a total cost of $245 billion dollars spent annually (2014). One of every three deaths in the U.S is related to cardiovascular disease, with total costs at more than $316.6 billion annually (Mozaffarian et al., 2016). Furthermore, COPD was
estimated to impact about 6% of the adult U.S. population, with total costs at
approximately $49.9 billion (Global Initiative for Chronic Obstructive Lung Disease
[GOLD], 2016).

Health care is evolving and dynamic requiring a multilayered approach to
decrease morbidity and mortality associated with the poor management of complex
diseases, such as DMT2 and COPD. The chronic care model evokes this collaborative
and integrative approach of well-trained clinicians, access and equity, and the notion of
informed and activated patients (Coleman et al., 2009). According to Wagner et al.
(2001), activated patients are individuals who possesses three components: 1) belief that
they have an important role as a patient, 2) confidence and knowledge to take action to
improve their health, and 3) execution of behaviors to maintain and improve their health,
despite life’s stressors. Furthermore, the theory of activation postulates that activation is
a learned behavior (Hibbard & Mahoney, 2010). Numerous studies have established that
the more engaged patients are in the management of their disease, the better their health-
related outcomes (Greene & Hibbard, 2012; Hibbard & Greene, 2013). Patient activation
is therefore crucial for chronically ill patients, as the nature of their disease requires
complex health treatment regimens that involve constant monitoring and imperative
lifestyle changes.

The management of chronic conditions in the U.S. requires new strategies to more
efficiently mobilize patients to be active partners in their health. As the nation moves
from a fee-for-service reimbursement model to a pay-for-performance model, payment
will be associated with improved patient outcomes, improved quality, and restrained cost,
rather than quantity of services provided (Epstein, 2013; Sommers & Bindman, 2012).
The concept of empowering patients to have ownership in the management of their health and diseases is not new, yet the struggle continues with ways to actually enhance patient activation. There is one such validated psychometric tool developed by Judith Hibbard et al. in 2004, known as the Patient Activation Measure (PAM™). The PAM™ assesses patient knowledge, skill, and confidence for self-management and scores them according to an assigned stage of activation (Hibbard, Stockard, Mahoney, & Tusler, 2004). Findings support positive predictive values for healthy behaviors, disease-specific self-management behaviors and consumerist-type behaviors with higher PAM™ scores (Alexander, Hearld, Mittler, & Harvey, 2012; Greene & Hibbard, 2012; Hibbard, Mahoney, Stock, & Tusler, 2007). This positive prediction becomes advantageous, as a patient’s score can serve as a guide for tailoring disease specific interventions. The PAM™ score itself is a modifiable risk factor, because it represents activation. For example, early stages of activation require interventions that focus on knowledge enhancement, while later stages of activation necessitate interventions designed to develop skills and confidence in self-management tasks (Hibbard et al., 2004). The use of PAM™ as a tool to support patient engagement with self-management is not new, but its use as an outcome measure is only now gaining momentum.

Improving the value of the patient-clinician relationship enhances a patient’s self-management skills, thereby decreasing the burden of disease. However, clinicians do not have the luxury of engaging in extensive, time intensive interventions and often need practice and guidance in listening and being attentive to where the patient is in understanding their chronic disease. Slatore (2010) maintains that communication skills are modifiable and clinicians who receive strategic training will demonstrate better
adoption of skills that promote patient-clinician communication. Alexander et al. (2010) demonstrated that departures from the traditional patient-clinician role are correlated with higher patient activation, but the success of this dynamic is dependent on initial clinician motivation for patient engagement. Primary Care Providers (PCPs) have a crucial role in supporting patient self-management and therefore activation, yet traditional training does not incorporate these notions or strategies for partnering with patients (Alvarez, Greene, Hibbard, & Overton, 2016). A relatively new and reliable measure was developed to assess and differentiate between clinicians who support patient self-management and therefore activation called the Clinician Support for Patient Activation Measure (CS-PAM™) (Hibbard, Collins, Mahoney, & Baker, 2009). Additionally, the literature on Motivational Interviewing (MI) has demonstrated the applicability and feasibility of its methods despite real time limitations that PCPs encounter during face-to-face office visits (Vowles & Thompson, 2012).

Consensus exists that patient activation is crucial in improving patient health outcomes. Yet, few studies have examined actual clinician beliefs concerning patient activation and the degree to which a clinician’s belief in supporting patient activation impacts health outcomes (Hibbard et al., 2009). For this project, a Southern California large multi-specialty medical group that serves patients with chronic diseases was the target population to begin closing this gap in the literature.

**Purpose Statement**

The purpose of this Doctor of Nursing Practice (DNP) project was to develop, deliver and evaluate the impact of a tailored PAM™ educational teaching module(s) for primary care providers (PCPs) in internal and family medicine. The teaching module was
based upon the principals of motivational interviewing (MI) strategies best suited to a patient’s PAM™ score, to enhance the clinical efficacy of participating clinicians and to promote improved patient activation. Additionally, this project assessed if there were specific provider characteristics and beliefs, which were meaningful for PAM™ adoption.

The development and delivery of a training educational module for PCPs was the goal of this DNP project. This goal was accomplished through a review of the literature, attending PAM™ conference(s), and having the training module reviewed by content and education experts. The deployment of the developed training module was to 40 PCPs practicing in a specific geographical region for a large multi-specialty medical group serving Southern California. A CS-PAM™ survey was administered before training to assess participating PCPs’ baseline belief in the importance of patient activation. At one-month post training, a follow up survey was given to evaluate the impact of training in changing clinician behavior.

Additionally, investigation and coordination with the Information Technology Department and stakeholders involved in the project occurred to develop the functionality of documenting PAM™ scores in the existing electronic health record. Such efforts ensured that the appropriate evaluation tools would be available to extract outcome data for Phase Two.

Phase Two, anticipated to follow the completion of this DNP Project and part of the project recommendations, will involve the examination of whether clinicians’ views about the patients’ role in the management of their own health (CS-PAM™) and the clinician’s participation in training are positively associated with changes in patients’
PAM™ scores. The author is interested to determine if there is a difference in measurable health outcomes between the PAM-exposed clinical sites and the clinical sites delivering standard care.

**Supporting Framework - Iowa Model of Evidence Based Practice**

A theoretical framework serves as a structure to guide one’s research. It provides the blueprint that supports an author’s investigation, providing the steps to identify a plan, interpret the findings, and then adjust accordingly. Titler et al.’s recently updated Iowa Model of Evidence Based Practice (2015), hereafter referred to as the Iowa Model (Figure 1), was used for this project. Since its first introduction in 1994, numerous academic and clinical settings have utilized this framework to introduce evidence into practice for clinical improvements (Brown, 2014; Cullen & Adams, 2010; Doody & Doody, 2011; Kowal, 2010; Titler et al., 2001). Clinicians are often left feeling they cannot make practice changes because they lack the training that supports the implementation of existing evidence (Cullen & Adams, 2010). Doody et al. (2011) discusses how translation of knowledge into practice is inhibited not by lack of evidence per se but by clinicians’ lack of awareness about information and skill deficits. The Iowa Model describes a way for such knowledge transformation and guides the implementation of research into clinical practice (Brown, 2014; Doody & Doody, 2011; Titler et al., 2001).

Often it is time and lack of experience that serve as barriers for practice change, yet the Iowa Model provides step-by-step processes to make change a reality. Two examples illustrate the ease and success of the Iowa Model. Brown (2014) demonstrated the step-wise approach utilized by a group of oncology nurses for organizational change
to implement the wearing of bright-colored non-skid socks for those identified at risk for falls. Kowal (2010) documented a method by which Surgical Intensive Care Unit nurses introduced a proper tool to replace an erroneous tool used to assess pain in nonverbal patients, which was then implemented hospital wide.

For this DNP project, the first step of the Iowa Model began with the need for change by identifying the trigger issues/opportunities and then stating the question/purpose. This project involved identified clinical and patient issues. Additionally, this project was aligned with the organization’s initiative in accordance with a philosophy of care. The purpose for change was specifically related to improving patient health outcomes and improved disease management by decreasing symptom burden related to DMT2 and COPD, implementing best-practice training modules for clinicians, and minimizing the financial burden for the patient and the medical group.

Next the Iowa Model offered the first of three decision points with feedback loops that provided direction in the management of the project. The first decision triangle was to consider whether the issue identified was a priority problem for the organization. In this case, the project was in alignment with the organization’s goals to provide quality care, enhance patient-clinician interactions, improve patient health outcomes and minimize loss of revenue. According to the model’s algorithm, the project was able to proceed to the next step of forming a multidisciplinary team. The team consisted of the Chief Clinical Officer of the California Market, Senior Director of Disease Management, Regional Manager for Health Enhancement, Project Manager for Health Enhancement, a
Figure 1: Iowa Model of Evidence-Based Practice to Promote Quality Care

Permission to reproduce model is found in Appendix A.
Medical Assistant (MA) selected from the company’s MA Counsel, and the author, who is also a practicing PCP. The Iowa Model directed change not only with the evidence it gathered but by encouraging multidisciplinary viewpoints, inclusive of the practitioner, healthcare team, and the organization (Kowal, 2010).

The next two steps were a review and critique of relevant literature. The second decision triangle of the Iowa Model was to determine if sufficient evidence existed to make a change in practice. The next step was to design and pilot the practice change. Phase One incorporated engagement, consideration of resources, development of protocols and an evaluation plan, all crucial elements at this point in the model. Phase Two will involve promoting adoption on a larger scale and collection and reporting of post-pilot data (Titler et al., 2001). To execute Phase One of this project, the sponsoring organization worked to develop a plan to train clinicians. Motivational interviewing (MI) was incorporated into the development of the training material as it related specifically to PAM™ and the two disease states mentioned throughout this proposal (refer to the methodology section). Initial belief of the importance of patient activation was measured pre training and post intervention of adopted behavior change was measured one-month after training was implemented.

The third and final decision triangle asks if the practice change is appropriate for adoption within the organization and the final two steps are about greater integration and sustaining the practice change and dissemination of the results. In this step, which is currently beyond the timeline of this DNP project, if it is determined that the training modules for PAM™ were successful, then wider scale implementation will be developed to encompass PCPs in the other regions of this large primary and specialty care medical
group serving California. With continued monitoring of outcomes with positive results, dissemination will occur among the other four markets statewide, making it part of the company’s national policy for quality improvement in this arena of healthcare.
REVIEW OF THE LITERATURE

Search Strategies

A literature review was conducted utilizing the databases: CINAHL PsychINFO and Academic Search Premier EBSCO databases, PubMed, Science Direct, and Google Scholar. Search terms and combinations of terms included: chronic disease management, patient activation, Patient Activation Measure-13™, patient-clinician relationships, patient centeredness, motivational interviewing, diabetes mellitus type 2, chronic obstructive pulmonary disease, and clinician training modules. The search was restricted to include only scholarly journals published between 2000-2016 and in the English language. Subject areas included: medicine, public health, psychology, and nursing. The only exclusion criteria were research articles whose subjects were children.

The purpose of this project was to develop and implement a PCP DMT2 and COPD specific educational module that is sensitive to the utilization of PAM™ in a primary care setting and improve patient clinical outcomes. To achieve this, the literature was explored concentrating on five key categories of interest: patient activation, Patient Activation Measure™, Clinician-Support Patient Activation Measure™, patient-clinician relationship and Motivational Interviewing.

Patient Activation

Approaches to improve the quality of healthcare involve patients’ active participation in their health and disease management. The significance of this shift should not be underestimated. The Center for Medicare and Medicaid Innovation supports patient activation and engagement measures as a factor in scoring applications for the Accountable Care Organizations (ACOs) (Nutting et al., 2009). Patient activation
occurs when the patient believes he or she has an important role in his/her health and has the knowledge, skills, confidence, and emotional commitment to execute this role (Hibbard et al., 2004). The importance of assessing a patient’s level of activation has been reported in the research, positively demonstrating that informed, skilled and self-assured patients are more likely to perform activities that promote their own health accompanied by sustained behavior changes (Hibbard et al., 2007b; Mosen et al., 2007; Remmers et al., 2009) as well as improve healthcare outcomes (Harvey, Fowles, Xi, & Terry, 2012; Hibbard, Greene, & Daniel, 2010). In fact, less activated patients are more likely to be hospitalized, use the emergency department, and nearly twice as likely to be readmitted to the hospital within 30 days of discharge (Begum, Donald, Ozolins, & Dower, 2011; Greene, Hibbard, Sacks, Overton, & Parrotta, 2015; Mitchell et al., 2014; Remmers et al., 2009; Sheikh et al., 2016).

In 2013, findings supported the direction of healthcare delivery systems (inclusive of the clinicians’ role) to strengthen the ability of patients’ participation in their care with activation thereby promoting a proactive role in health/disease management (Greene, Hibbard, Sacks, & Overton, 2013). The research to date indicates that patient activation is a modifiable risk factor and herein lays the heightened significance of its adoption. The PAM is the primary patient activation model available to clinicians.

**Patient Activation Measure (PAM-13)™**

PAM-13™ is a 13-item survey (Appendix B) that assesses a patient’s activation level (defined above under Patient Activation Subsection of Literature Review), with higher scores equating to higher levels of activation. PAM™ is a one-dimensional, interval level, Guttman-like scale assessing a patient’s knowledge, skill, and confidence
regarding the self-management of chronic disease (Hibbard, Mahoney, Stockard, & Tusler, 2005; Hibbard et al., 2004). This tool has been psychometrically validated in several chronically ill adult populations, with research demonstrating a 4-6-point difference on the PAM™ scale as statistically meaningful (Fowles et al., 2009; Hibbard et al., 2007b; Lubetkin, Lu, & Gold, 2010; Mosen et al., 2007). The PAM™ has shown predictive properties for self-management behaviors such as preventative and adoption of health promoting behaviors, health information seeking and use of that information, healthcare use, level of engagement in the patient-clinician encounter, and improvement in various health outcomes (Hibbard, Greene, & Tusler, 2009; Hibbard & Mahoney, 2010; Hibbard et al., 2004; Marshall et al., 2013; Mosen et al., 2007; Shah et al., 2014). In a randomized controlled trial of 479 chronic disease patients, a statistically significant positive change ($p < .05$) in health behavior was seen as activation was increased with engaging in regular exercise, managing stress, paying attention to the amount of fat in their diet, keeping a blood pressure log, keeping a glucose log, and taking diabetes medication as recommended (Hibbard, Mahoney, Stock, & Tusler, 2007a).

The PAM™ was initially validated on a randomly selected national probability sample of 1515 participants 45 years and older (Hibbard et al., 2004) and has since been utilized with other populations, including persons with chronic diseases (DMT2, COPD, heart failure, hyperlipidemia, osteoarthritis, Human Immunodeficiency Virus, multiple sclerosis, and other neurological conditions), company employees, senior citizens, and persons undergoing spinal surgery. Additionally, studies have begun to examine activation differences among diverse racial/ethnic communities and discovered that the tool lacks cultural sensitivity (Cortes, Mulvaney-Day, Fortuna, Reinfeld, & Alegria,
Many PAM-13™ intervention studies demonstrated similar patterns of patient characteristics that affected patient activation either positively or negatively. Educational attainment, disease morbidity, employment status, and depression are all strongly associated with influencing the level of patient activation (Alegría et al., 2008; Marshall et al., 2013; Packer et al., 2015; Skolasky, Mackenzie, Wegener, & Riley, 2008; Stepleman et al., 2010). Alegría et al. (2008) revealed that targeted interventions to Hispanics (80% of total sample, N= 231) via Care Manager coaches increased patient activation scores and subsequent attendance/retention in mental health care services. Marshall et al. (2013) found a strong relationship between higher rates of depression and reported lower activation scores, which translated to a noteworthy finding of poor anti-retroviral medication adherence in HIV positive patients. Packer et al. (2015) looked at 722 respondents with diverse neurological conditions and found that assessing patient activation in patients with neurological conditions whose trajectory are not prevented by lifestyle changes (i.e. gait problems, altered sensation) is minimally helpful, despite PAM-13™ proving to be a reliable and valid instrument.

The body of literature primarily focuses on individuals already afflicted with chronic disease; however, one study expanded the lens of the PAM™ and looked at employed populations with health risks, such as BMI, smoking status, and composite risk score, and found that the PAM™ can be used in a broader population health context with success (Fowles et al., 2009). Additionally, one study focused on a rural setting and concluded that while the current PAM™ continues to demonstrate excellent convergent
and divergent validities and high person and item reliability indices, it still lacks in capturing the unique challenges of rural populations and will need modifications for improved implementation (Hung et al., 2013). Furthermore, hospitals in 25 states are using PAM™ to categorize their patient populations by disease burden and ability to self-manage (by proxy of their PAM™ score) to determine allocation of time needed to spend with patients during their hospital stay and in preparation for discharge home (Mitchell et al., 2014). The hospitals can therefore be more prudent in utilizing their resources (time, staff, etc.) and working more intensively with patients who demonstrate lower activation scores and hence poorer self-management skills than patients with higher activation scores.

PAM™ has been translated into 25 languages (Personal Communication, 2016). Eight international studies have validated translation of the American PAM-13™ into their native language (one study used PAM-22™): 1) Bengali for use in a government hospital in India; 2/3) Danish for both a primary care and community mental health center (two unique studies); 4) Dutch for a national medical database; 5/6) German for a primary care setting and with an elderly multi-morbid population via telephone communication (two unique studies); 7) Korean in a community health center for osteoarthritis; and 8) British English in a primary care setting for the underserved. All findings demonstrated success in creating a standardized translation and adaption of PAM™, with validation of the psychometric validity for data quality and internal consistency from the original version. A common finding among four of the studies was that the order of the questions needed to be arranged differently, indicating some tasks were found easier to achieve for subjects in foreign countries than the US study.
population (Ahn, Yi, Ham, & Kim, 2015; Maindal, Sokolowski, & Vedsted, 2009; Rademakers, Nijman, van der Hoek, Heijmans, & Rijken, 2012; Zill, et al., 2013). With the original PAM-13™, items are arranged progressively in order of difficulty, reflecting the fact that patient activation is developmental in nature (Hibbard et al., 2005); therefore, it is likely the above noted difference is attributed to the unique perspectives of ethnic and cultural differences in health care concepts.

Another common thread to all international validation studies was some degree of social desirability bias, overstating the participants’ responses. The largest ceiling effect among this group was seen by Zill et al. (2013), Saha et al. (2014), and Molijord et al. (2015) and less so by Rademakers et al. (2012), Brenk-Franz et al. (2013), Anh et al. (2015) and Maindal et al. (2009). Within various U.S. studies this limitation bias was also observed and becomes problematic when one wants to utilize PAM-13™ for measuring change over time due to low responsiveness (Frosch, Rincon, Ochoa, & Mangione, 2010; Hung et al., 2013; Rask et al., 2009; Ryvicker, Feldman, Chiu, & Gerber, 2013).

The PAM™ validation studies demonstrated PAM™ as a useful instrument that helps differentiate patients into subgroups based on their level of activation and structures interventions to an individual’s stage of activation, rather than imposing a rigid framework for engagement (Frosch et al., 2010; Hendriks & Rademakers, 2014; Marshall et al., 2013; Mosen et al., 2007; Packer et al., 2015; Skolasky et al., 2008; Stepleman et al., 2010). This is an asset for clinicians and patients to optimize a patient’s ability to manage their illness over many years, as is the case with chronic diseases and conditions. However, caution needs to be exercised, as other studies have challenged that the
differences noted in response scaling plead further investigation to more accurately identify which items are most applicable to patients in different clinical settings (Mosen et al., 2007; Packer et al., 2015; Rask et al., 2009). One study even concluded less positive findings, noting that diabetic patients with high PAM™ activation scores did not demonstrate a subset of behaviors integral to patient-clinician communication and decision making (Ledford, Ledford, & Childress, 2013).

**Clinician Support for Patient Activation Measure (CS-PAM)™**

CS-PAM™ is a 13-item survey (Appendix C) that assesses a clinician’s belief about the importance valued on a patient’s self-management of their health. Hibbard et al. (2009) used items adapted from the PAM™ as a foundation to create the CS-PAM™. Whereas with the PAM™, the items inquire into the individual’s ability to engage in different behaviors that impacted their chronic illness, the CS-PAM™ measures the individual clinician’s acceptance regarding the importance of patient self-management and the individual clinicians’ beliefs about how important each component of a patient’s knowledge, skills and confidence is in a patient’s self-management of their chronic disease (Alvarez et al., 2016; Hibbard et al., 2009). This tool has been psychometrically validated in the U.S., England, and the Netherlands, with higher scores indicating a clinician’s belief in the importance of patient activation for the management of their patient’s health (Hibbard et al., 2009; Rademakers, Jansen, Van der Hoek, & Heijmans, 2015).

As the landscape of healthcare shifts, exploring the beliefs and attitudes of clinicians is a relatively new concept within healthcare. It is however imperative to know a clinician’s understanding and acceptance of how to best support and activate a patient.
Interestingly, a common theme among the limited research is that clinicians scored high on patients listening to them and less favorably with respect to patients being part of the care team model and functioning as independent information seekers (Alvarez et al., 2016; Hibbard et al., 2009; Rademakers et al., 2015; Stoilkova-Hartmann, Janssen, Franssen, Spruit, & Wouters, 2015). This translates to the need to educate clinicians to have a better understanding of what activates patients and provide them with the tools to be able to translate knowledge into action. Effective self-management is more than following medical advice (Level 1), it involves recognizing that patients must take independent actions and make independent judgments (Level 4). The CS-PAM™ offers a tool to reliably assess and differentiate clinicians’ attitudes and beliefs, thereby allowing the organization to focus interventions on assisting in the growth of those clinicians who are lower scoring and thereby reduce the variance among PCPs, patient engagement and health outcomes (Alvarez et al., 2016).

**Patient-Clinician Relationships**

The model of healthcare in the U.S. is changing, transitioning from a reactive acute disease treatment model into a chronic disease management model (Boyer & Lutfey, 2010; Remmers et al., 2009; Rijken et al., 2014). This is demonstrated by the new lexicon utilized within healthcare, referring to patients as consumers and clients of services, rather than patients seeking medical attention. The consequence of this new language represents a paradigm shift, empowering individuals to be active participants in decisions related to their health care and interaction with members of the healthcare team (Boyer & Lutfey, 2010). Historically, the patient-clinician relationship developed within the concept of the sick role, where the patient passively followed the expert advice of an
authoritative medical figure; however, many studies have documented the evolution of this relationship over the past 50 years into a shared partnership with mutual responsibilities and united expectations (Alexander et al., 2012; Becker & Roblin, 2008; Boyer & Lutfey, 2010; Parchman, 2010; Vowles & Thompson, 2012). As chronic conditions and diseases become the primary archetype of healthcare, the U.S. is shifting into a partnership model, involving collaborative care and self-management decisions. Fundamental to this paradigm shift is the recognition by clinicians that they bring professional expertise about a disease; however, it is the patient who is the true expert of how their life impacts and is impacted by a disease state (Bodenheimer, Lorig, Holman, & Grumbach, 2002).

The Chronic Care Model (CCM), introduced in 1996 by Wagner, established the significance of a reciprocal patient-clinician relationship. Many health outcomes are contingent on the quality of these face-to-face interactions, with improved influence on health when patients are seen as vital actors in the management of their illness and when providers are seen as supporters to guide a patient’s self-management (Bodenheimer et al., 2002; Vowles & Thompson, 2012). By definition, chronic diseases cannot be cured and therefore it is crucial in its management to recognize that the desired health state will vary between individuals and among the individuals themselves at different points of time. Poorly managed chronic diseases and conditions are the cause of premature death, reduced quality of life, and increased medical costs (Alexander et al., 2012; Parchman, 2010; Slatore, 2010).

Alexander et al. (2012) demonstrated that three of the four proposed dimensions to a positive patient-clinician relationship impact activation: (1) quality of the
interpersonal exchange between the patient and physician, (2) fair and respectful
treatment of the patient by physicians, and (3) frequency of physician communication
with the patient outside of the office visit. The fourth dimension not significantly
associated with patient activation was treatment goal setting. Findings from the Parchman
et al. (2010) study offer support that high levels of patient activation coupled with a more
balanced patient-clinician relationship during an office visit, resulted in improved
outcomes related to DMT2 medication adherence and improvement in glucose and lipid
values. Slatore et al. (2010) were the first team to describe positive associations between
clinician communication and patients with COPD, with listening, caring and attentiveness
demonstrating the largest correlation with intermediate outcomes, such as quality of care
and confidence.

Collaborative relationships encourage quality exchange during an office visit that
establishes a constructive working dynamic between patient and clinician, yet this role
remains uncomfortable to many providers and patients (Alegría et al., 2008; Alexander et
al., 2012; Clark & Gong, 2000; Clark, Costello, Gebremariam, & Dombkowski, 2015;
Vowles & Thompson, 2012). While communication skills are arguably modifiable, busy
clinicians do not have the convenience of always engaging in intensive interventions;
therefore, concentrating on specific strategies that are implementable will encourage
adoption of enhancing the patient-clinician relationship (Bunnell et al., 2012; N. M. Clark
& Gong, 2000; Stepleman et al., 2010).

Clinicians need focused training on understanding patient activation and its
translation for specific disease management, allowing for tailored interventions and
development of care plans (Brenk-Franz, Hibbard, Hermann, Freund, & Szecsényi, 2013;
Moljord et al., 2015; Woodard, Landrum, Amspoker, Ramsey, & Naik, 2014). Clinicians also need to develop the identified behavioral skills that promote motivated interactions with patients, creating more equitable relationships and thereby promoting greater disease management (Clark & Gong, 2000; Clark et al., 2015; Slatore, 2010). In 2009, Hibbard, Greene and Tusler conducted a quasi-experimental study that consistently demonstrated the positive impact of tailored interventions on patient activation via improved blood pressure and lipid levels and decreased ED/hospitalizations and office visits. This study explored the relationship of tailored individual care plans to activation levels conducted by LifeMasters intervention coaches.

**Motivational Interviewing (MI)**

Healthcare in the U.S. is dominated by conditions that are greatly influenced by behavior (Murray et al., 2013), and guiding patients to make and sustain behavior change is a major responsibility of PCPs during patient-clinician interactions. Motivational Interviewing (MI) is one such approach to improving behavior modification in patients seeking treatment in primary care settings. Conceived by psychologists for the treatment of alcoholism in 1983, the premise is that the voice for change comes from the patient, rather than directed by the clinician. And while the definition of MI has transformed over the past three decades, the most current definition, which was utilized in this project, is a conversation of collaboration that reinforces a person’s inner motivation and commitment to change (Miller & Rollnick, 2013).

The literature on MI supports the applicability and feasibility of adopting and implementing techniques to facilitate behavior change (and activation) in patients that can be successfully implemented in a primary care settings (Conn, Hafdahl, & Mehr,
2011; Greaves et al., 2008; Lundahl et al., 2013; Moran, Bekker, & Latchford, 2008; O’Halloran et al., 2014; Pantalon et al., 2013; Rubak, Sandbaek, Lauritzen, Borch-Johnsen, & Christensen, 2006; Searight, 2009). VanBuskirk & Wetherall (2014) performed a meta-analysis of MI studies involving primary care populations and reported a statistically significant ($p < .05$) effect size of .19 for adherence. Furthermore, the effectiveness of MI appears to be strengthened when added to other evidence-based methods and delivered in 15-20 minute sessions (Miller & Rose, 2009; Sonntag et al., 2012; VanBuskirk & Wetherell, 2014).

Studies also demonstrated that challenges exist with MI training of clinicians, such as the need for ongoing practice, real-time feedback and sensitized counseling techniques, the discrepancy between perceived and actual understanding/adoption of MI techniques, and poor descriptions of existing trainings make replication difficult (Martins & McNeil, 2009; Miller & Rose, 2009; Moran et al., 2008; Rubak et al., 2006; Sonntag et al., 2012). Yet, MI is a tool that is easy to learn and offers an evidence-based model for clinicians to discover how to activate patients. Research has demonstrated that clinicians who are trained to focus on exploring and making explicit the pros and cons of the needed change reduce sources of resistance and engage change talk, thereby developing action plans to position the identified change into the patient’s everyday routine (Moran et al., 2008; Sonntag et al., 2012; VanBuskirk & Wetherell, 2014).

**Summary**

Although clinical use of PAM™ is well supported through the research, there are still gaps in the research literature to demonstrate that clinicians can reliably assess patient activation and then engage the patient within the time constraints of a clinical
encounter. Motivational interviewing is one way to reduce this gap. There have been minimal published reports on CS-PAM™ training via MI and assessing what link exists among PCP behavior, patient activation and patient outcomes. Herein lies the gap this DNP project attempted to fill.
METHODS

This study incorporated a pre-intervention CS-PAM™ and one-month post training survey of participating primary care providers (PCPs) in a large multi-specialty medical group, serving patients in Southern California. Participants completed a one-hour in-person training on patient activation with strategies aimed at tailoring the delivery of the message to a patient’s level of activation.

Participants and Setting

Participants for Phase One were 42 PCPs from one of four geographical regions. Eligibility criteria included physicians, nurse practitioners or physician assistants who currently practice family or internal medicine in a primary care setting, are employed by the company, and care for patients at least 18 years or older with known DMT2 and/or COPD. All eligible PCPs were asked to participate and were free to decline or discontinue participation at any time. All participants were provided informed consent (Appendix D) and implied consent was achieved when the confidential on-line surveys were completed. No financial incentives were provided to participants. Randomization of clinicians was unfeasible due to the small convenience sample. Permission to conduct this study at a large multi-specialty medical group was granted by the Clinical Chief Officer for the California Market and IRB approval was obtained from California State University Fullerton, HSR-16-0286 (Appendix E).

Method of Intervention

An educational training was developed and conducted for participating PCPs by this author (Appendix F). Two content experts and an educational specialist conducted the initial review of the teaching materials. Their approval was obtained for the training
module material, mode of delivery and proposed length of time for the training session. Subsequently, two demonstration training sessions were conducted with seven actively practicing PCPs (four MDs, three NPs) at two primary care settings and adjustments were further made to the training content and handouts based on their feedback. Handouts and case studies were created by this author and obtained approval from Insignia (developers of CS-PAM™).

The course module was based on material presented in the manual from the 3rd edition book *Motivational interviewing: Helping people change* (Miller & Rollnick, 2013), clinician training material available from Insignia Health Inc., and content found during a literature review on health management strategies for clinicians treating DMT2 and COPD in a primary care setting. The educational session was held in a conference room setting at the participants’ place of work. Each 60-minute session included three to eight participants at 10 different sites. Each session started with a short introduction to the methods of MI and PAM™ and was followed by group discussions on specific skills needed for tailoring interventions for the specific patient.

Specific MI skills that were highlighted included (Miller & Rollnick, 2013; Prochaska & DiClemente, 1982):

- Empowering by identifying and activating the patient’s intrinsic values and goals to inspire behavior change
- Re-framing ambivalence to clarify perceived benefits and associated costs
- Eliciting and reinforcing a patient’s ability to operationalize a specific goal
- Mastering the ‘stages of change’ model
- Reflective listening
Specific PAM™ skills that were highlighted included (Insignia Health Inc., 2011):

- Reframing style of interaction from provider directed and compliance focused to patient driven tailoring autonomy to match a patient’s level of activation
- Interpreting PAM™ activation level and corresponding likely patient characteristics
- Understanding strategic goals and implementing action planning related to PAM™ level

**Instruments**

There were three instruments utilized for this project. The first measurement tool was a demographics survey developed by the author. The second tool was the CS-PAM™ and the third was a post training survey that the author also created.

**Demographics Survey**

An on-line seven-question survey was administered to collect information on provider variables that might influence PAM™ adoption, such as professional status, years in practice, specialty, age, sex and ethnicity (Alvarez et al., 2016; Hibbard et al., 2009; Stoilkova-Hartmann, Janssen, Franssen, Spruit, & Wouters, 2015). (Appendix G)

**Clinician Support-Patient Activation Measure (CS-PAM)™**

A pre-intervention online survey was administered to assess clinicians’ patient activation readiness through the CS-PAM (Appendix C). The CS-PAM™ was adopted from the PAM™, which was initially validated in 2003 via a telephone survey of 1,469 randomly selected adults in the U.S., aged 45 years and older. Respondents were selected via a random digit dial selection and screening for age eligibility only. The demographics of participants mirrored well with the 2000 U.S. Census data (Hibbard et
al., 2004). Data were used in the development of the original 22-item measure and the short form of PAM-13™, which is the one used in this project. The Hibbard et al. (2014) original analysis determined the PAM™ to be a uni-dimensional, interval level, Guttman-like scale, where the ordering of items on the scale reflects a developmental model of activation.

The PAM-22™ psychometrics are reliable, validating the use of this instrument. It has a reported Rasch person reliability between .85 (real) and .87 (model), a Cronbach’s alpha of .91, SEM times of 1.96, which equals a 95% CI, Cohen’s kappa of .80, .90, and .90 ($p < .001$), infit values between .71 and 1.44, and outfit statistics between .80 and 1.34 (Hibbard et al., 2004). Furthermore, there exists evidence supporting the construct validity of PAM™, with scores of higher activation reporting better health ($r = .38, p < .001$) and lower rates of office visits, emergency room visits and hospital nights ($r = .07, p < .01$) (Hibbard et al., 2004). The PAM-13™ has demonstrated the same psychometric properties as its parent (Hibbard et al., 2005).

The CS-PAM™ utilized a Rasch analysis (like PAM™) and was found to demonstrate overall sound psychometric properties. Hibbard et al. (2009) reported a Cronbach’s alpha of 0.86, person reliability 0.80, in- and out-fit scores within acceptable range, and the 14 items calibrated between 34 and 68. The CS-PAM 13™ is a shorter version of the original 14-item CS-PAM™ and has demonstrated similar psychometric properties as its parent (Hibbard et al., 2009; Hibbard et al., 2005).

Clinicians’ attitude toward patient activation was scored on a five-point scale (1 = not important, 4 = extremely important, 5 = not applicable), and a raw score was calculated by summing the responses. Items with no response or with a “not applicable”
response were scored as “missing.” A sum score was calculated with a potential range from 1-100, indicating the level to which it is easy (1) or difficult (100) for clinicians to agree with that specific patient competency statement. Therefore, higher scores indicate more positive beliefs about the importance of a patient’s role in their care, and thus a more engaged clinician for patient activation. The raw scores were converted into three activation levels (Insignia Health Inc., 2010): Level 1 implies that a clinician believes a patient should follow medical advice; Level 2 indicates that a clinician believes that a patient can make independent judgments and actions related to the management of their health; and Level 3 means the clinician believes that a patient can function as part of the care team and seek information independently (Insignia Health Inc., 2010). The developer, Insignia Health Inc., at the University of Oregon in the United States, granted license for use of the CS-PAM 13™ for this study (Appendix H).

**One-Month Post Intervention Survey**

A 10-question survey, developed by the primary author, was administered at one month following the training to assess the clinicians’ understanding of patient activation and the level of adoption into their clinical practice. Expert reviewers and the PCPs who approved the educational training confirmed face validity. To provide additional information on three of the Likert scale questions, three open-ended questions were included. Conventional content analysis was used to identify themes in the open-ended responses.

**Data Collection**

An electronic survey package was sent to study participants that included (a) cover letter with implied consent and (b) direct link to SurveyMonkey for demographics
survey and CS-PAM™ pre-training. Another email was sent to the same study participants one month after, with a direct link to SurveyMonkey for the post training survey. To improve the response rates, three to five follow-up reminder emails were sent weekly after the initial emailing.
RESULTS

Complete results and tables for this study are delineated in a manuscript prepared for submission to the *Journal of Doctoral Nursing Practice* (Appendix J). This project was accepted for a poster presentation at the Upsilon Beta Research Conference & Annual Induction on April 8, 2017 and at the Western Institute of Nursing on April 21, 2017 (Appendix K).

This chapter includes highlights of key findings.

A total of 42 primary care providers were offered the opportunity to participate in Phase One of this project. With completion of the post-intervention survey, the final study size was 31. Demographic characteristics of the participants and non-participants were similar (Table 1). There was no statistical significance for correlation between PCP demographic characteristics and CS-PAM™ level: as noted in the literature, the female participants scored higher on CS-PAM™ than male participants. Of the final 31 participants, range of CS-PAM™ score was Level 1 (lowest) at 45%, Level 2 at 16%, and Level 3 at 39%.

At one-month post intervention, 85% of clinicians recognized the value of patient activation, compared to 55% pre-training. Additionally, 89% stated they were able to recognize distinctive PAM™ level characteristics with 71% of the participants reporting modification in behaviors one month after training. Participants who were able to recognize the value of patient activation did modify their behaviors after the training ($r_s = 0.69194, p = <.001$).

With conventional content analysis, the following three qualitative themes emerged, each accompanied by a selected quote from participants.
1) Ways training modified practice: “I have tried to provide recommendations with activation in mind, trying to use the appropriate techniques taught in training. What I am focusing on is my messaging to the patient.”

2) Challenges to adopting strategies after teaching; “Sometimes just forgetting to pay attention to a patient’s PAM level due to multiple issues that need to be addressed during the visit, and not because I don’t see its value.”

3) Need for additional training/practice: “Single lectures rarely modify behaviors, we need follow up sessions to reinforce learning.”
DISCUSSION

The literature supports that more activated patients have better health outcomes and lower health care costs than those who are less activated (Greene et al., 2012; Hibbard et al., 2013) but is less robust in exploring clinician beliefs and behaviors that activate patients (Alvarez et al., 2016). This project explored whether there is a clinician profile for patient activation and if patient activation training was helpful in promoting behavior change in PCPs. The findings showed that PCP’s support for patient activation reported in this study (73.47%) were slightly higher than those documented in the literature (66.1%) (Alvarez et al., 2016; Rademakers, Jansen, Van der Hoek, & Heijmans, 2015; Rademakers, Nijman, van der Hoek, Heijmans, & Rijken, 2012; Stoilkova-Hartmann et al., 2015). Qualitative statements reinforced the need for additional training to further promote the adoption of the recognized association between their delivery of messaging and the movement of their patient’s level of activation.

Participants identified the training to be helpful in setting a foundation for different patient activation strategies to use in daily clinical practice, with higher scoring CS-PAM™ clinicians more likely to be early adopters of the strategies presented in the training. Positive clinician behavior modifications were also reported for improving patient-clinician partnership, such as listening to patients and gauging PAM™ level with tailored messages. However, challenges to its adoption and maintenance were attributed to the lack of subsequent trainings and to insufficient time with patients to initiate/enhance new skills learned in training. These results coincide with findings from well-designed studies on this topic (Alegría et al., 2008; Blakeman, Macdonald, Bower, Gately, & Chew-Graham, 2006; Macdonald, Rogers, Blakeman, & Bower, 2008).
How clinicians learn, adopt, and adhere to educational interventions is complex. Successful trainings focus on behavioral objectives and utilize multicomponent interventions: 1) variety of media for presentation, 2) practice enablers, 3) clinical scenarios and vignette (Dave Davis, Davis, & Davis, 2010). This study incorporated all three components, yet in the follow-up survey, participants indicated that more trainings, including vignettes for self-learning and more practice enablers, such as patient handouts, would be of value. It can take up to a year to integrate new strategies around motivational interviewing into daily clinical practice (Rubak, Sandbaek, Lauritzen, Borch-Johnsen, & Christensen, 2006) and offering targeted trainings about communication and coaching skills with case studies is beneficial when provided over a period of time (Rademakers et al., 2012).

Validation of all training material by content experts is a key strength of this project. Additionally, it was well accepted by participants and has organizational desire for continuation. The generalizability of the project's findings is limited due to the project’s small convenience sample from a single healthcare organization. Furthermore, as the theoretical underpinning of this project is that beliefs precede behaviors, the data analysis through rank correlation decreases the ability to state with certainty that one variable caused a change in another variable. In addition, all data were obtained through self-reports, which leans towards a social desirability bias. Attempts to decrease this bias of discrepancy between what is expected of a clinician and what is the clinician’s actual behavior were done by administering confidential initial and follow-up on-line surveys.

Although statistical significance was found with some variables, it is not generalizable due to the small group size and low power of the study. Future studies with
larger samples need to be designed to continue examining the relationship between PCPs’
belief in the significance of patient engagement and the actual changes in both clinician
behaviors and patient engagement. Additionally, due to the short study time, it is
unknown if changes would be sustained and would lead to a positive difference in both
provider and patient health care behaviors over time.
CONCLUSION

Within the primary care setting, the patient-provider relationship is a delicate one, either promoting or hindering a patient’s ability to self-manage their chronic disease(s). For PCPs who are low scoring on the CS-PAM™, a clinician focused series of multimethod training sessions focused on patient activation offers a low-cost but effective way to improve the PCP’s impact on the quality of their patient’s healthcare.

The paradigm shift of healthcare and its management of chronic diseases requires a shift in the clinician’s role, understanding that part of their responsibility is in supporting patients to be activated leaders of their own care. Patients with chronic conditions want to be more active in their care and receive support for skill building by their clinicians (Shonce, Marsolo, Margolis, & Opipari-Arrigan, 2014). To comply with the emerging trends, codes and standards for clinician performance in healthcare educating and training clinicians on the ways to support patient activation through self-management are imperative.

The CS-PAM™ is a viable tool that healthcare organizations can utilize to initially assess their clinicians and then implement a series of trainings to help low scoring clinicians gain the knowledge and skills in supporting the patient’s role. Creating a uniformly and consistent training module that is multi-disciplinary for PCPs offers a strategic competitive edge in our changing healthcare system. It is the belief of the author that a singular training, as utilized in this study, serves to lay the groundwork, but a series of trainings are needed to achieve the intended goal of significantly improving the clinicians’ belief in patient activation and subsequent adoption of patient activation strategies that can impact the patient’s health outcomes.
RECOMMENDATIONS

Recommendation for practice: One-time trainings can create an erroneous confidence of learned skillset and knowledge (Miller & Rollnick, 2009; Miller & Rose, 2009); therefore, the author proposes to enhance the training intervention by including multiple sessions. It is recommended that these sessions highlight key strategies and account for more time to practice with real case scenarios from the participating providers in a multi-disciplinary venue (Bellolio & Stead, 2009; Gulbrandsen, Jensen, Finset, & Blanch-Hartigan, 2013; Zabar et al., 2010). The author also believes that informal learning merged with the formal training administered in this study, could have additive effects. One such modality is e-learning. The data from on-line experiential learning for clinicians demonstrate the potential to be a cost-effective reinforcing tool, especially as it provides participants the autonomy to self-navigate their learning (Davis et al., 1999; Fordis et al., 2005; Rebbeck, Macedo, Paul, Trevena, & Cameron, 2013; Skye, Wimsatt, Master-Hunter, & Locke, 2011; Spaan, Dekker, van der Velden, & de Groot, 2016).

Recommendation for further study: Further research is needed to identify and measure the impact of clinician trainings and the relationship in activation over time to the level of clinician belief and active promotion of patient activation on the metrics of specific health care outcomes related to chronic disease management (Legare et al., 2011; Zabar et al., 2010). Examples of appropriate metrics would include, but are not limited to, decreased hospitalization and ER rates, decreased hgb A1C, improved adherence to diabetic medications, increased adherence to COPD medications.
REFERENCES


APPENDIX A

PERMISSION TO USE AND/OR REPRODUCE THE IOWA MODEL (2015)

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APPENDIX B

PATIENT ACTIVATION MEASURE (PAM™)

Below are some statements that 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 by circling your answer. Your answers should be what is true for you and not just what you think others want you to say.

If the statement does not apply to you, circle N/A.

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

CLINICIAN SUPPORT FOR PATIENT ACTIVATION MEASURE (CS-PAM™)

Clinicians have different views and expectations about their patients. Please respond to the statements below as they apply to you and your practice. If the statement does not apply, select N/A.

As a Clinician, how important is it to you that your patients with chronic conditions:

<table>
<thead>
<tr>
<th>1. Are able to take actions that will help prevent or minimize symptoms associated with their health condition(s).</th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Extremely Important</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Are able to figure out solutions when new situations or problems arise with their health condition(s).</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>3. Bring a list of questions to their office visit.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>4. Are able to make and maintain lifestyle changes needed to manage their chronic condition.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>5. Can follow through on medical treatments you have told them they need to do at home.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>6. Know what each of their prescribed medications is for.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>7. Are able to determine when they need to go to a medical professional for care and when they can handle the problem on their own.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>8. Understand which of their behaviors make their chronic condition better and which ones make it worse.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>9. Understand the different medical treatment options available for their chronic condition(s).</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>10. Tell you the concerns they have about their health even when you do not ask.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>11. Want to be involved as a full partner with me in making decisions about their care.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>12. Look for trustworthy sources of information about their health and health choices, such as on the web, news stories, or books.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
<tr>
<td>13. Want to know what procedures or treatments they will receive and why before the treatments or procedure are performed.</td>
<td>Not Important</td>
<td>Somewhat Important</td>
<td>Important</td>
<td>Extremely Important</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Insignia Health. “Clinician Support - Patient Activation Measure; Copyright © 2008 - 2010, University of Oregon. All Rights reserved.”

Contact Insignia Health at www.insigniahealth.com
APPENDIX D

COVER LETTER FOR PARTICIPANT CONSENT

Dear Clinicians,

You are invited to participate in a research study entitled, “ASSESSING CLINICIANS’ ENDORSEMENT OF PATIENT ACTIVATION IN HEALTH MANAGEMENT”. This study is being conducted by Demetra Bastas-Bratkic, a FNP/MPH in a Doctor of Nursing Practice Program at California State University, Fullerton (CSUF). Demetra Bastas-Bratkic is working with support of research committee members from the School of Nursing at CSUF.

The purpose is to provide a quality improvement project that will assess the impact of tailored training on clinicians’ belief in their role in patient activation. Demographic variables will be compared to the results of this Clinician Support-Patient Activation Survey (CS-PAM™). The primary goal of this study is to determine how much value a clinician places on an activated patient who exhibits a variety of self-management skills. A secondary goal will be to observe if high scoring clinicians are correlated with patients’ momentum on the patient activation scale.

In this study, you will be asked to complete an electronic survey, which includes demographic data and a Clinician Support-Patient Activation Survey (CS-PAM™). Your participation in this study is voluntary and you are free to withdraw your participation from this study at any time. There may be minimal risks associated with completing the survey as it asks about your value of an activated patient. This risk is no more than that encountered in daily interactions with patients. You may skip any question on the survey and you may stop the survey at any time should you feel uncomfortable. The survey should take only 10-15 minutes to complete.

This survey has been approved by the Institutional Review Board of California State University, Fullerton. The surveys collect no identifying information. All of the responses in the surveys will be recorded anonymously.

While you will not experience any direct benefits from participation, information collected in this study may benefit the organization’s adoption in improving patient outcomes through patient activation in the future by better understanding the role clinicians’ belief in the patients’ role in the management of their disease management.

If you have any questions regarding the survey or this research project in general, please contact Demetra Bastas-Bratkic, CFNP-BC, MPH, at dbastasbratkic@csu.fullerton.edu or by phone at 410-245-6803. You can also contact her advisor Penny Weismuller, DrPH, RN, at pweismuller@fullerton.edu or by phone at 714-478-2469. If you have any questions concerning your rights as a research participant, please contact the IRB of California State University, Fullerton at irb@fullerton.edu or by phone at (657) 278-7640.

By completing and submitting this survey, you are indicating your consent to participate in the study. Your participation is appreciated.

Demetra Bastas-Bratkic, CFNP-BC, MPH, Doctor of Nursing Practice student, California State University, Fullerton

Please click on the survey link below and provide us with your feedback.
APPENDIX E

APPROVAL TO PERFORM STUDY AT PARTICIPATING SITE

June 14, 2016

Penny Weismuller, DrPH, RN
DNP Consortium Coordinator
California State University, Fullerton: School of Nursing, EC-190, Attn: DNP
800 N. State College Blvd
Fullerton, California 92831

Dear Dr. Weismuller,

The purpose of this letter of agreement is to show our support relating to our employee Demetra Bastas-
Bratkic, CFNP, MPH. We are aware that she is pursuing her Doctor of Nursing Practice, with a deliverable in
the form of a unique project for degree obtainment.

The company is aware of NP Bastas-Bratkic's need to perform her quality improvement project of developing,
delivering and evaluating a tailored PAM teaching module for primary care providers practicing in one of our
four geographical regions. Additionally, we support her assessment of clinician engagement in the value of
patient activation. A validated survey tool will be used from Insignia, of whom we have an existing contract
with. She is receiving direct support from team-members within our Disease Management and Health
Enhancement office and Information Technology. We look forward to her project and its findings.

Sincerely,

Chief Clinical Officer
Chief Medical Officer
APPENDIX E

IRB APPROVAL LETTER

CALIFORNIA STATE UNIVERSITY, FULLERTON

Office of Research Development
P.O. Box 4880 or 881 N. State College West, M11405, Fullerton, CA 92831 / T 657-278-7043 / F 657-278-7238

APPREVAL NOTICE
From the Institutional Review Board
California State University Fullerton

Date: August 29, 2016
From: Dr. Matt Englar-Carlson, Chair
CSUF Institutional Review Board
To: Demetra Bastas-Bratik
Department: Nursing
Re: Use of Human Subjects in Research Project entitled: Assessing Clinicians' endorsement of patient activation in health management

The forms you submitted to this office regarding the use of human subjects in the above-referenced proposal have been reviewed by the Regulatory Compliance Coordinator and the Chair of the California State University Fullerton Institutional Review Board ("CSUF IRB"). Your proposal is determined to be exempt per 45 CFR § 46.101(b)(2).

The CSUF IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval notice does not replace any departmental or additional approvals which may be required.

If the above-referenced project has not been completed by August 28, 2017 you must request renewed approval for continuation of the proposal.

It is of utmost importance that you strictly adhere to the guidelines for human participation and that you follow the plan/methodology/procedures described in your research proposal. Any change in protocol or consent form procedure requires resubmission to the CSUF IRB for approval prior to implementation.

Additionally, the principal investigator must promptly report, in writing, any unanticipated or adverse events causing risks to research participants or others.

Please be advised that if you are seeking external funding for this proposal, the above-referenced title should match exactly with the title submitted to the funding sponsor. Any change in project title should be submitted to the CSUF IRB prior to implementation.

By copy of this notice, the chairman of your department (and/or co-investigator) is reminded that s/he is responsible for being informed concerning research projects involving human participants in the department, and should review all protocols of such investigations as often as needed to ensure that the project is being conducted in compliance with our Institutional policies and with DHHS regulations.

This Institution has an Assurance on file with the Office for Human Research Protections.
The Assurance Number is 00015384.

Cc: Dr. Penny Weismuller
Application No: 188-16-0288
APPENDIX F

CLINICIAN TRAINING SESSION SCRIPT

A Training Script for Clinician Training regarding Patient Activation

Created by Demetra Bastas-Bratkic, CFNP, MPH, DNP student

Created: October 4, 2016
Modified: October 14, 2016
**Preparation**
- Print Sign-in sheets
- Print handouts
  - PowerPoint presentation
  - Supplemental handout with MI and Key Strategies synopsis
  - Clinical case studies
  - CS-PAM™
- Flash drive with PowerPoint presentation
- Confirm with site that they will provide
  - Workable whiteboard or easel paper with appropriate markers
  - Computer with projector
  - Able space for break out groups during case studies

**Introductions (1 minute)**
- Hello, my name is Demetra Bastas-Bratkic, a fellow clinician. As you know, your clinic has been one of the sites selected to participate in a quality improvement project for our California Market. As clinicians, we each have a different style in how we practice. This project’s aim is assess the impact of tailored training on clinicians’ belief in their role in patient activation. Let me thank you for taking the time to complete the confidential pre-survey before today and thank you in advance for your active participation in today’s training.

**Overview (3 minutes)**
- **Objectives (1 minute)**
  - I would like to take a minute to review the objectives of this training.
  - Read the three objectives

- **Why is this Important? (2 minutes)**
  - The health of a nation is only as good as the health of its citizens.
    - The U.S. spends more money than any industrial nation on healthcare for its citizens, in fact 2x as much, and yet has some of the worst health outcomes. (World Health Report, 2015 Commonwealth Fund Report, 2014)
  - As of 2012, ½ of all adults diagnosed with 1 or more chronic condition (Ward, Schiller & Goodman, 2014)
    - Living and managing chronic medical conditions presents a multitude of challenges to the afflicted individuals, as well as the health care delivery system they have to navigate (Bennett, Coleman, Parry, Bodenheimer, & Chen, 2010; Coleman, Austin, Brach, & Wagner, 2009; Rijken et al., 2014; Santana & Feeny, 2014; Ward et al., 2014).
  - DMT2, COPD account for the top 5% of overall costs.
    - The consequences of poorly managed chronic medical conditions are burdens that impact our community’s emotional, social, physical and fiscal health.
Self management has become increasingly important

- Recognizing that patients’ lives are constantly evolving and that the management of chronic diseases is complicated, we must adopt a multilayered approach if we want to positively impact health outcomes. Once such way is through patient activation.

**Patient Activation (2 minutes)**

- Patient activation is a key concept that emerged from Wagner’s Chronic Care Model. Dr. Judith Hibbard operationalized this concept with the creation of the Patient Activation Measure™ (to be discussed next). But first, what is patient activation and how does it impact us as clinicians?

  - NARRATIVE for the graphic on slide
    - **Patient activation** = two components: First the patient must believe they have an important role in their health/healthcare AND secondly, the patient must possess four characteristics that allow them to perform this role: knowledge, skills, confidence, and emotional commitment (Hibbard, Stockard, Mahoney, & Tusler, 2004)
      - Once a patient is activated, they become engaged in the management of their disease through positive behavior changes, which leads to improved health outcomes
      - Empowerment need not involve decision making but must involve active participation

- So what is the significance of this to us as clinicians? Why do we want activated patients?

**So What? (3 minutes)**

- Well- first, patient activation is a modifiable risk factor
  - This means that if we can gauge how activated our patient is, we can use it as a tool to tailor our interventions to improve the therapeutic value of the clinic visit. We will actually have the opportunity today to practice this.

- The more activated patient, the better medication adherence
  - Each point increase in PAM™ score correlates to a 2% increase in medication adherence.

- More activated patients have greater decreases in HbA1c
  - Mean decrease of 0.74-1.01 %, p < 0.01 (Remmers et al, 2009;Williams, et al. 2015)

- More activated patients rate their PCP 0.4 points more positively on CHAPS (Greene, Hibbard, Sacks & Overton, 2013)
  - This translates into rating from Level 4 that were 10-14% > rating from patients at Level 1
Less activated patients are more likely to be hospitalized and use the ED, which translated to $145 and $11 per person per month respectively (Hibbard, Greene, Tusler, 2009).

- More activated 0.02 fewer hospital stays, ED visits per month—calculated off claims data used for the study cost savings

Less activated patients are nearly 2X as likely to be readmitted to the hospital within 30 days of discharge (Mitchell et al., 2014).

Fundamental to this shift is the recognition by us that while we bring professional expertise about a disease, it is the patient who is the true expert of how the disease impacts their lives and vice-versa. So how do we measure patient activation?

**Patient Activation Measure (PAM™) (3-5 minutes)**

- Narrative to slide:
  - 13-item survey that assesses a patient’s activation level based on response categories for each question (strongly agree, agree, disagree, strongly disagree). Responses are scaled and transformed to a score ranging from 0-100, which are then assigned a Level 1-4, with higher scores equating to higher levels of activation. (Hibbard, Mahoney, Stockard, & Tusler, 2005; Hibbard et al., 2004).
  - This tool has been psychometrically validated in several chronically ill adult populations.
  - PAM™ has shown predictive properties for self-management behaviors (Hibbard, Greene, & Tusler, 2009; Hibbard & Mahoney, 2010; Hibbard et al., 2004; Marshall et al., 2013; Mosen et al., 2007; Shah et al., 2014)
    - Preventive care
    - Adoption of health promoting behaviors
    - Health information seeking and use of that information
    - Appropriate healthcare use
    - Improved level of engagement in the patient-clinician encounter,

Just to **reiterate** what was discussed on the previous slide—Each point increase in PAM score correlates to a 2% decrease in hospitalization and 2% increase in medication adherence. This is great for our patients because it decreases the negative outcomes and burden of their disease management.

**A quick caveat** before I go into reviewing the levels: Patient who are depressed or have sub-clinical depression are less likely to get activated until the depression is addressed (Insinia).

Now, let’s tackle each of the Levels to build our foundation to understand what each levels of activation looks like with respect to patients. *(Click when you discuss each level and the national sample % will display)* (National sample ages 45+; Hibbard, Stockard, Mahoney, & Tusler, 2004).

- **Level 1: 12%**. Lacks AWARENESS- adopt a passive/recipient role.
♦ **Level 2: 29%**. Lacks KNOWLEDGE to make associations
♦ **Level 3: 37%**. Lacks CONFIDENCE AND SKILLS to support new behaviors
♦ **Level 4: 22%**. Lacks CONFIDENCE if able to maintain during life stress/health crisis

- This positive prediction becomes advantageous, as a participant’s score can serve as a guide for tailoring disease specific interventions
  - For example, early stages require focus on knowledge enhancement, while necessitate development of skills and confidence in self-management tasks (Hibbard et al., 2004)

- **Click once more for display of summary statement**: Knowing the PAM value is advantageous, as a participant’s score can serve as a guide for tailoring disease specific interventions.

➤ **Route of Health Messages (3 minutes)**

- Patient activation is our tool, it determines the processing route of the health messages we are trying to deliver.
- Lecturing at patients or arguing with them to change their unhealthy behaviors is rarely successful. And although we know this, the reality is it might occur when we get caught up in the demands of practicing high impact patient care.
- So, how do we maximize the short time we have to build our patient-provider relationships? We understand their level of activation and we target our messaging accordingly.

- **Promotion-focused** (Ledford (2016) (Higgins as the originator of the concept)
  - Individual pursues an “ideal self”
  - Motivated by accomplishments, hopes and aspirations
  - Respond best to optimism and praise
  - More likely to take chances and seize opportunities
  - Make decision by weighing relative pros of Option A and B

- **Prevention-focused** (Ledford (2016) (Higgins as the originator of the concept)
  - Individual pursues behaviors to prevent negative consequences
  - Motivated by concerns around safety, duties, and obligations
  - Respond best to reassurance and security
  - Make decision by weighing relative cons of Option A and B

- For example: When I talk about using toothpaste for a “whiter smile” and “fresh breath,” it appeals to individuals who are promotion-orientated. But when it’s about “avoiding cavities and gingivitis,” it’s about prevention and resonates with individuals who are prevention-orientated.
  - One is not necessarily better but you need to know your audience. And we have studies that show that the more activated a patient is, the more
promotion-oriented they are, so the messaging needs to change depending on your patient.

- One variable that influences the success of health messages is framing. Framing refers to whether we choose to emphasize the benefits of taking action or the consequences of not taking an action. Let’s explore these two types, gained-framed and loss-framed. Although the difference will seem subtle, it can influence whether or not your health message is effective. (Dr. Katherine Margolis, 2013)

- **Gain-Framed Messages (1.5 minutes)**
  - Emphasizes the benefits of taking action
  - Tend to be more promotion-focused and thus more readily adopted by more activated patients.
    - Something good WILL happen, which can make one feel pleased and more motivated to participate
  - Read the examples.
  - Let’s think about promoting exercise behaviors: If level 1 or 2 (less activated, we would suggest WALKING- is a safe exercise, low risk) vs level 3 or 4, more activated so cross fit could work.
  - DRUG initiation: Switch focus away from negative SE and instead discuss positive outcomes.

- **Loss-framed Messages (1.5 minutes)**
  - Emphasizes the consequences of not taking action.
  - Tend to be more prevention-orientated
  - Same situation feels worse when framed in terms of losses, so more anxiety provoking “fear of, so I avoid”. This can hinder someone’s acceptance to change and so your messaging was counterproductive
  - Go over examples
  - (N=130: PAM™ score 33.6% level 1 AND 36.7% level 2 (70.3% at 1 and 2) (Ledford, 2016))
  - We all are aware of the importance of P4P and quality indicators and our increasing responsibility for our patients’ care outcomes; Yet, let’s be honest, for health outcomes to improve, patients must also do their part—they must follow through on treatment regimens and recommended lifestyle changes. And for this, 5 key strategies were tested and validated to be common among PCPs to effectively support greater activation of their patients.

- **Five Key Strategies to Support Patient Activation (3-5 minutes)**
  - Mean change in PAM™ score was 7.5 points among the most activating clinicians, whereas it was 3.1 points among the lowest activating clinicians (Greene et al., 2016)
• The importance of providers knowing how to activate their patients cannot be stressed enough. As you can see, clinicians who activate their patients, move those patients along the PAM level continuum faster, which as it has been repeatedly states, has a positive predictive value for improved health outcomes for chronic disease management.

- Review each of the strategies (Greene, Hibbard, Alvarez, & Overton, 2016/ Alvarez, Green, Hibbard, & Overton, 2016)

  - Emphasizing Patient Ownership
    ♦ Idea of a coach
      ➢ Greatest impact is seen in Levels 1 and 2
  
  - Partnering with Patients
    ♦ To create goals—all Levels
    ♦ To strategize and problem solve
      ➢ Good for Levels 3 and 4
    ♦ Recognizing the impact of their disease on their lives outside of clinic walls—all Levels
  
  - Identifying Small Steps
    ♦ Meeting patient where they are at to avoid overwhelming them—bombardment with 10 things isn’t helpful for any level
      ➢ ASK THEM!
    ♦ Levels 1 & 2- Start with just one change/adjustment
  
  - Scheduling Frequent Follow-up
    ♦ Cheer the successes
    ♦ Problem solving before the problem/stress/trigger gets ahead
  
  - Showing Care

- Now we are going to focus on DMT2 and COPD with some case studies to put into practice the strategies and messaging we have just discussed to enhance our abilities to promote patient activation.

- DMT2 (1 minute)
  
  - Before we get started, let’s take a minute to acknowledge that as PCPs, we are often at the front line of T2DM management and face the day-to-day challenge of making the best choices for our patients (read stats).
  
  - And we know that despite the evidence linking good disease control with improved outcomes, glycemic control in patients with T2DM remains suboptimal…why?? Narrate the boxes
  
  - Before we get into the case studies—let’s review the 5 Key Strategies to remember as we go forward (read from the handout they have). And I would like to point out at the PAM score will be placed into the narrative of the vital
So...let’s do our first case study together, so you know what’s expected.

**CASE STUDY 1 - DMT2, Mr. Lopez, PAM™ score 4** *(use white board to record participant comments)*

- **Distinguishing characteristics of Level 4**
  - Has made most of the necessary behavior changes—he has done very well in terms of weight reduction/maintenance and DM management.
  - Understands his own actions can positively impact his health
  - Challenge is with maintaining during times of stress

- **Strategic goals**
  - Increase confidence/skills for maintaining behaviors, especially with stress/crisis
  - Build his ownership and motivation—focus on the issue he wants to focus on—even if not his diabetes directly
    - Although not obese, this patient IS concerned about body weight--Work on problem solving. I.e. singular goal (5 KEY STRATEGIES): Provide HE materials for group or 1:1 weight management class

- **Action planning**
  - Focus in on maintaining behaviors- weight, food choices, exercise, medication adherence (strategy 1)
    - Level 3 and especially 4; respond to stats and numbers, as they have minimal symptoms management b/c DM is well controlled. Push for lower Hgb A1c-make that part of goal.
    - Add-on therapy may be needed to improve glycemic control—but as the patient is only modestly above his ADA-recommended HbA1c goal of 7.0%, aggressive therapy is not warranted (GAIN FRAMING and strategy 2).
  - Build sense of efficacy for coping with problem situations—ID situations where he still falls short—THEN work on developing skills to prevent/minimize set backs (strategy 2 and 3)
    - Plan ahead for known situations- such as when he travels (ACTIVE LISTENING!)
  - Continue to build knowledge base
  - Reach toward NEW GOALS to continue to improve health to optimal health (strategy 1)

Now you will break out into groups, you will have 5 minutes to prepare/then we will discuss as a group.
CASE 2- Mr. Lucini, PAM™ score 1

Distinguishing characteristics of Level 1

- Does not feel in charge of his own health/care—many comorbidities
  - DM, morbid obesity, HTN, elevated urine microalbumin level, hyperlipidemia
  - Peripheral neuropathy (distal and symmetrical by exam)
- Managing his diabetes ALONE is overwhelming
  - “One new medication at a time is enough because too many medications would make a sick man out of me.”
  - His perception of the state of his health equates to the number of medications prescribed
- Lacks confidence in his ability to manage his health
  - The patient’s wife believes that a “natural solution” is better than medication
- Limited problem solving/coping skills as seen in self-care management/lifestyle deficits:
  - Limited exercise
  - High carbohydrate intake
  - No self monitoring blood glucose program
  - Poor understanding of diabetes

Strategic goals

- For him to understand his role in his future health
  - Meet patient where he is (strategy 1, 5)
- Understand his own actions can positively impact his health (GAIN FRAMING vs. LOSS FRAMING)
- Create awareness between cause and effect
  - Use food since it is important to him (strategy 3)
  - Remember that at Level 1 and 2, numeric values are not relevant- they are too abstract. Instead focus on symptom improvement as they are more concrete and therefore resonate more.
- Build his ownership and motivation—focus on the issue he wants to focus on—even if not his diabetes directly
  - More frequent office visits, HE group or 1:1 disease management classes (strategy 2, 4)

Action planning (all strategies are used for him)

- Monitor choices and outcomes: When you do X, how do you feel? (self monitoring sugars or eat McDonalds?)
- Encourage action- single item. i.e. bring 2 questions to next visit; No bread as snack
• Promote exercise behaviors—If level 1 or 2: WALKING- is a safe exercise, low risk.
• Encouragement is key at this stage—build confidence. Express support for their decision. Provide materials that addressed the prevention of diabetes complications around exercise- as he voiced a strong desire to focus energies on changes in food and physical activity.

Medication initiation:
• A first-line medication for this patient had to be targeted to improving glucose control without contributing to weight gain.
• Although the use of an ACE inhibitor was indicated both by the BP reading and presence of micro-albuminuria, the decision to wait until the next office visit to further evaluate the need for antihypertensive medication afforded the patient and his wife time to consider the importance of adding this pharmacotherapy.

Great work; let’s try a patient with COPD.

❖ COPD
  ➢ Before we get into the case study, let me take a second to remind you:
    ▪ One of most prevalent chronic diseases worldwide, 4th leading cause of mortality (GOLD, 2016)
    ▪ Point is to identify and stratify those most in need of additional support and then refer to our internal disease management programs

Now for our final case study…

*** Breakout into groups with handouts*** White board responses

❖ CASE STUDY 4: COPD, Mrs. Ishikawa, PAM™ score 2
  ➢ Distinguishing characteristics of Level 2
    ▪ Lacks basic knowledge and confidence about COPD/tx and/or self-care
    ▪ Little experience/success with behavior change
    ▪ Expects clinician to be one in charge—new to you, so establish relationship/trust

  ➢ Strategic goals
    ▪ Gain adequate knowledge base for making better choices
    ▪ Build confidence
    ▪ Build stress management- engage husband
    ▪ Build problem solving skills

  ➢ Action planning
    ▪ Continue to work on increasing awareness/knowledge—referral to COPD program; handouts
Small steps to improve behavior: Focus on medication understanding. 1) Patient brought it up as a concern and 2) we know its importance to decreasing the burden of her disease
- “I see you aren’t sure about your medications, would it be okay if we took a few minutes to talk about?” (From Insignia handout)
- Consider frequency, route, cost, simplification, efficacy
  - i.e. Easy to confuse about using fluticasone/salmeterol and/or tiotropium vs albuterol/ipratropium or levalbuterol for acute symptom relief
- Finally, the regimen demonstrates examples of therapeutic duplication – ipratropium and tiotropium, both anticholinergic agents; albuterol and levalbuterol, both short-acting beta-agonists
  - Make changes- GAIN TRUST because active listening, engagement and cost savings
- List making

❖ Conclusion- read final quote slide

If extra time...another case study

*** Breakout into groups with handouts*** White board responses

❖ CASE STUDY 3: DMT2, Mrs. Washington, PAM™ score 3 (TIME PERMITTING, RETURN TO THIS CASE)
  ➢ Distinguishing characteristics of Level 3
    ➢ Has basic facts of her DM and treatments
      - Her HbA1c has improved since starting metformin, but is still not at target. The underlying causes for hyperglycemia in this patient include dietary factors, inadequate exercise, and obesity.
    ➢ Some experience and success in making behavioral changes
    ➢ Some confidence in handling limited aspects of her health
  ➢ Strategic goals
    ➢ Start to build on her past experience and success to increase her confidence and ability in handling all aspects of her condition
      - “Tell me more about how you succeeded at lowering your Hgb a1c.”
      - Perform SMBG to empower her by providing objective criteria necessary to validate the benefits of lifestyle modifications.
    ➢ Extend/maintain behavior change by working on problem solving/stress management
      - Related to the financial concerns she mentioned--Explore
  ➢ Action planning
- Start building a sense of efficacy for specific behaviors—small steps that are relatable to her quality of life goals and clinical indicators
- Continue to build the knowledge base
  - Website resources
- Briefly counsel on lifestyle changes to improve her diet and increase her physical activity—acknowledging her new financial concerns
  - Refer to a diabetes education and support class.
  - Social work referral- food stamp qualify
- A number of issues should be considered when choosing between medication classes, including:
  - Patient preference for route of administration and other factors
  - Efficacy in reducing HbA1c
  - Potential to cause hypoglycemia
  - Potential to induce weight gain
  - Side effects
  - Cost
APPENDIX F

CLINICIAN TRAINING POWERPOINT PRESENTATION

Developed for DNP Project at CSUF © 2016

Solely For Internal Use Only- Permission is required.

Patient Activation - What is our Role as Clinicians?

Demetra Bastas-Bratkic, CFNP, MPH

California Market
November 22, 2016

Solely For
Financial Disclosures

The CME faculty, and CME sponsor/planner Demetra Bastas-Bratkic, FNP, and the CME committee members disclose no relevant financial relationships with commercial interests.

Objectives

1. Describe patient activation and its relevance to patient healthcare outcomes.

2. Match specific interventions to a patient’s disease state based on a patient’s activation score.

3. Provide an experience to practice applying key strategies that support patient activation.
Why is this Important?

- The health of a nation is only as good as the health of its citizens.
- As of 2012, ⅓ of all adults were diagnosed with one or more chronic conditions. (Ward, Schiller & Goodman, 2014)
- DMT2, COPD and HF account for the top 5% of overall costs.
- Self management has become increasingly important.

Patient Activation

Knowledge

Skills

Patient Activation

Confidence

Emotional Commitment

Patient Engagement

Positive behavior changes

Improved health outcomes
So What?

- Patient activation is a modifiable risk factor
- Activated patients have better medication adherence
- Activated patients have greater decreases in HbA1c
- Activated patients rate their PCP 0.4 points more positively on CAHPS (Greene, Hibbard, Sacks & Overton, 2013)
- Activated patients had a 29% lower hospitalization cost and 28% lower ED cost than non-activated patients (Hibbard, Greene, Sacks, 2016)
- Less activated patients are nearly 2X as likely to be readmitted to the hospital within 30 days of discharge (Mitchell et al., 2014)

Patient Activation Measure™

**Level 1 12%**
Disengaged and overwhelmed
Individuals are passive and lack confidence. Knowledge is low, goal-orientation is weak, and adherence is poor. Their perspective: “My doctor is in charge of my health.”

**Level 2 29%**
Becoming aware, but still struggling
Individuals have some knowledge, but large gaps remain. They believe health is largely out of their control, but can set simple goals. Their perspective: “I could be doing more.”

**Level 3 37%**
Taking action
Individuals have the key facts and are building self-management skills. They strive for best practice behaviors, and are goal-oriented. Their perspective: “I’m part of my health care team.”

**Level 4 22%**
Maintaining behaviors and pushing further
Individuals have adopted new behaviors, but may struggle in times of stress or change. Maintaining a healthy lifestyle is a key focus. Their perspective: “I’m my own advocate.”

Knowing the PAM™ value is advantageous, as a participant’s score can serve as a guide for tailoring disease specific interventions.
Route of Health Messages

Activated patients prefer promotion-oriented messages

Level 3 and 4

Non-activated patients respond better to prevention messages

Level 1 and 2

Gain-Framed

Emphasizes the benefits of taking action.

- “Using sunscreen can help you avoid skin cancer.”
- “Start living. Stop smoking.”
- “Use of condoms can reduce the likelihood you will get HIV and other sexually transmitted diseases.”
Loss-Framed

Emphasizes the consequences of not taking action.

- “Not using sunscreen can lead to skin cancer.”
- “Because people smoke, 430,000 lives are lost in the United States each year.”
- “If you decide not check your sugars, you will not feel the peace of mind that comes with knowing your health status.”

Five Key Strategies to Support Patient Activation

Mean change in PAM score was 7.5 points among the most activating clinicians & 3.1 points among the lowest activating clinicians (Greene et al., 2016)

- Emphasizing Patient Ownership
  - “I’m here to coach you, let’s think of something you can do.”

- Partnering With Patients
  - “How are we going to get you to quit smoking? How can we work together?”

- Identifying Small Steps
  - “Why don’t you count out the number of cigarettes for the day and give the rest to your spouse.”

- Scheduling Frequent Follow-up
  - “What do you think is holding you back from being successful?”

- Showing Care
  - “I care about you and want you to be healthy.”
Diabetes Mellitus Type 2 (DMT2)

- 85,513 individuals within our organization
- 9.3% prevalence of DMT2 with total cost of $245 billion/yr. (CDC, 2014)

DMT2- PAM™ score: Level 4

Mr. Lopez is a 68-year-old Mexican male with well-controlled but not optimum DMT2 control (Hgb A1c 7.4%). Mr. Lopez comes requesting medication adjustments based on commercials and articles. His health and exam is otherwise unremarkable.

- What are the distinguishing characteristics of Level 4?
- What are your strategic goal (s)?
- What is your action planning?
DMT2- PAM™ score: Level 1

Mr. Lucini is a 52-year-old male from Italian heritage, with a 5-year h/o poorly controlled DMT2 (Hgb A1c 12.6 %) and BMI 42.6 d/t excess intake of calories. Mr. Lucini has limited knowledge regarding diabetes self-care management and states that he does not understand why he has diabetes since he “never eats sugar”.

- What are the distinguishing characteristics of a Level 1 patient?
- What are your strategic goal (s)?
- What is your action planning?

Chronic Obstructive Pulmonary Disease (COPD)

- 36,517 with COPD within our organization
- Patient activation influences clinician’s behavior:
  - Level 1: Ask patient what is their experience living with their COPD
  - Level 2: Add how their COPD specific symptoms influence their daily life
  - Level 3: Add what are their coping skills for their COPD specific symptoms or burden
  - Level 4: Add what are their maladaptive coping skills for their COPD specific symptoms or burden
COPD- PAM™ score: Level 2

Mrs. Ishikawa is a 72-year-old Japanese woman who is establishing care, with known COPD. In the past year she reports 5 exacerbations with 3 tx-courses, including intermittent home oxygen (2L). Quit smoking 5 years ago but has a 30-pack year history. Polypharmacy, with confusion about the use and timing of current medications. She also expresses concern with the cost of her medications.

- What are the distinguishing characteristics of Level 2?
- What are your strategic goal(s)?
- What is your action planning?

Tell me and I forget. Teach me and I remember. Involve me and I learn. – Benjamin Franklin
DMT2- PAM™ score: 
Level 3

Mrs. Washington is a 45-year-old woman with improving Hgb A1c at 7.6%. Mrs. Washington skips meals and report having difficulties purchasing healthy food options because of financial constraints. She likes to exercise but only gets in 10-15 minutes a day during break. Exam unremarkable.

- What are the distinguishing characteristics of Level 3?
- What are your strategic goal (s)?
- What is your action planning?
Case One: Mr. Lopez:
DMT2, PAM™ score: Level 4

Mr. Lopez is a 68-year-old Mexican male with well-controlled but not optimum DMT2 control (hgb A1c 7.4%). Mr. Lopez comes requesting medication adjustments based on commercials and articles. His health and exam is otherwise unremarkable.

68-year-old male patient with T2DM has received optimal metformin monotherapy for the last 2 years (current dose of 2000 mg/day) and tolerates the treatment well. Hypoglycemia has not been an issue to date. His body mass index (BMI) is 28 kg/m², which he has worked hard to reduce from 35 kg/m² over the last 2 years. He has mild hypertension, which is well controlled on an angiotensin-converting enzyme inhibitor. His blood lipids are well controlled on a statin 10 mg daily.

He now presents at the clinic with an HbA1c of 7.4%. During consultation, the patient mentions he has seen advertisements for sodium-glucose co-transporter 2 (SGLT2) inhibitors and questions their efficacy.

FMH: Mother with DMT2, on insulin; Father h/o unknown; Healthy siblings
SHx: Supportive wife, 2 adult children; Non-smoker; No alcohol or illicit drug use
Occupation: Director of a successful on-line travel company. He travels frequently and notes that “this seems to be the toughest times to stick to my diet and exercise routine”.
Exercises daily, cardio/weights
Allergies: NKDA
Vaccines UTD.

VS: 124/68; 72
PE- stable, unremarkable presentation today. No acute concerns.
Case Two: Mr. Lucini  
DMT2, PAM™ score: Level 1

Mr. Lucini is a 52-year-old male from Italian heritage, with a 5-year h/o poorly controlled DMT2 (hgb A1c 12.6 %) and BMI 42.6 d/t excess intake of calories. Mr. Lucini has limited knowledge regarding diabetes self-care management and states that he does not understand why he has diabetes since he “never eats sugar”.

52 yo man with a 5-year history of DMT2 and pre-diabetes 2 years before official diagnosis. He has a sedentary job and lifestyle. His diet history reveals excessive carbohydrate intake in the form of bread and pasta. His normal dinners consist of 2 cups of cooked pasta with homemade sauce and three to four slices of Italian bread. During the day, he often has “a slice or two” of bread with butter or olive oil. He also eats eight to ten pieces of fresh fruit per day at meals and as snacks. He prefers chicken and fish, but it is usually served with a tomato or cream sauce accompanied by pasta. His wife has offered to make him plain grilled meats, but he finds them “tasteless.” He drinks 8 oz. of red wine with dinner each evening. He stopped smoking more than 10 years ago.

Although both his mother and father had DMT2, he has limited knowledge regarding diabetes self-care management and states that he does not understand why he has diabetes since he “never eats sugar”. In the past, his wife has encouraged him to treat his diabetes with herbal remedies and weight-loss supplements, and she frequently scans the Internet for the latest diabetes remedies. He has never seen a dietitian.

Currently, he presents with a 22lb weight gain in past year (BMI 42.6kg/m²). He was on a sulfonylurea, 2.5 mg qam, but self-discontinued because of dizziness, diaphoresis and agitation. He also takes a 10 mg statin, which he tolerates (LDL 135). He does not test his blood glucose levels at home and expresses doubt that this procedure would help him improve his diabetes control. “What would knowing the numbers do for me? You already know my sugars are high.”

EXAM: VS:  BP: RT arm 154/96 mmHg; Pulse: 88 bpm; Respirations 20 per minute.  
Well appearing, morbidly obese  
Cardiac: RRR 
Vascular: no carotid bruits; femoral, popliteal, dorsalis pedis pulses 2+ bilaterally 
Neuro: diminished vibratory sense to the forefoot, absent ankle reflexes, monofilament (5.07 Semmes-Weinstein) felt only above the ankle
Case Three: Mrs. Ishikawa
COPD, PAM™ score: Level 2

Mrs. Ishikawa is a 72-year-old Japanese woman who is establishing care, with known COPD. In the past year she reports 5 exacerbations with 3 tx-courses, including intermittent home oxygen (2L). Quit smoking 5 years ago but has a 30-pack year history. Polypharmacy, with confusion about what medications to use and when. She also expresses concern with the cost of her medications.

72 yo female who presents with her husband to establish care. Her biggest concern today is her COPD. She is currently asymptomatic but “worried because I have it more now and so many medications”. She reports she was diagnosed 3 years ago. In the past year, she reports 5 exacerbations, 3 of which required treated. Patient was unsure of what she was given, but husband reports they treated her with antibiotics and oral steroids. The most recent episode, 2 months ago, required home oxygen 2L for 2 weeks, but she denies using/needihg it now. No hospitalizations in the past 6 months.

Patient’s husband has noted no change in her alertness or mental status denies. She usually is able to help around the house with light work and loves needlepoint. Mrs. I. is confused about what “medication to take when and why”. She is unable to tell you with confidence, but did bring all her meds with her. Her husband is also not sure of what she actually takes. It is clear, during discussions they relay she is unable to comply with her current complex and expensive regimen. “It is a bit too much really, now that you ask us”.

PMH: HNT-well controlled. COPD:
FMH: Father, died of MI at age 59, also had diabetes, hypertension, smoker
SHx: 30 pack year smoking history (quit 5 years), worked on farm, retired. No alcohol or illicit drug use.
Medications : Lisinopril 20 mg BID; Metoprolol 50 mg BID; Spironolactone 25 mg qd; Tiotropium DPI one cap inhaled qd; Albuterol/ipratropium MDI or solution for nebulization q 6 hours prn; Levalbuterol MDI two puffs q 4 to 6 hours prn;

NKDA.
Vaccines UTD. A0x3.
BP 120/80, HR 66, Pulse Ox: 98% RA; K+ 4.0; Na+140; GFR 60.
PE- stable, unremarkable presentation today.
Spirometry with FEV1 35% predicted that does not change significantly after inhaled bronchodilator
Case Four: Mrs. Washington
DMT2, PAM™ score: Level 3

Mrs. Washington is a 45-year-old woman with improving hgb A1c at 7.6%. Mrs. Washington skips meals and report having difficulties purchasing healthy food options because of financial constraints. She likes to exercise but only gets in 10-15 minutes a day during break. Exam unremarkable.

45 yo woman with DMT2 who arrives for a follow-up visit. Her HbA1c 6 months ago was 8.2% and now has dropped to 7.6%. She has been compliant with metformin 1000 mg twice daily. She reports that her home blood sugar readings have improved (120-130 mg/dL) but stills has “some highs, 180s”. She denies polyuria, polydipsia, or blurry vision.

Mrs. W admits to a few dietary indiscretions, such as having multiple servings of dessert when going out with friends. She also reports on days when the she skips lunch, her midday blood glucose level drops to 70-80 mg/dL. She has maintained her lack of sugar-sweetened beverage consumption, as you guys discussed at last visit. Mrs. W informs you she initiating a cinnamon supplement x 2months. However, she reports having difficulties purchasing healthy food options because of financial constraints.

For exercise, she has been walking 10 to 15 minutes a day, during her lunch (as agreed to at last visit) but wants to increase activity. She has not gained or lost significant weight since she started treatment for diabetes. Mrs. W informs you that her employer will reimburse her for gym membership. She works as an office manager.

Meds: HTN tx with 40 mg ACE qd; dyslipidemia tx with 20 mg statin qd daily; GERD tx with 20 mg PPI qd
VS: BP 122/76 mm Hg, HR 82, RR 18, BMI 32.6.
On exam, the lungs are clear to auscultation, the heart RRR, and the abdomen is non-tender. Peripheral pulses are normal, and there is no lower extremity edema. The foot exam shows normal sensation to light touch and no skin or toenail lesions.
## APPENDIX F
### CLINICIAN HANDOUT (PRACTICE ENBLER)

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<table>
<thead>
<tr>
<th>PAM™ SCORE LEVEL</th>
<th>Likely Patient Characteristics</th>
<th>Strategic Goals</th>
<th>Action Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- Does not feel in charge of own health &amp; care. - Managing health is overwhelming. - Lacks confidence in ability to manage health. - Has few problem solving &amp; coping skills. - May not be very aware of own behaviors.</td>
<td>- Understand role in health &amp; functioning. - Understand how (+/-) actions impact health. - Create awareness between cause &amp; effect. - Work on problem solving &amp; coping. - Build ownership &amp; motivation.</td>
<td>- Monitor choices and outcomes: When you do X, how do you feel? - Discuss self-monitoring. - Engage with single goals to learn more about their condition. - Lots of encouragement.</td>
</tr>
<tr>
<td>2</td>
<td>- May lack basic knowledge re: condition, treatment option, and/or self-care. - Has little experience or success with behavior change. - Low confidence in ability to manage health. - Looks to their clinician to be in charge.</td>
<td>- Gain an adequate knowledge base for making good choices. - Build confidence by achieving success in very small behavioral modification steps. - Start to build notion of stress management &amp; problem solving skills.</td>
<td>- Continue to increase awareness &amp; build knowledge. - Small steps toward behavior change. - Discuss reasons for medications, side effects, and benefits. - Lists are helpful.</td>
</tr>
<tr>
<td>3</td>
<td>- Have basic facts of condition &amp; treatments. - Has some experience &amp; success in making behavioral changes. - Demonstrates some confidence in handling limited aspects of their health.</td>
<td>- Start to build on past experiences &amp; successes to increase their confidence &amp; ability in handling all aspects of their condition. - Extend &amp; maintain behavior changes. - Develop problem solving &amp; stress management.</td>
<td>- Start building a sense of efficacy for specific behaviors - Connect behavior changes to their quality of life goals and clinical indicators. - Continue to build the knowledge base. - Achieve best-practice self-care.</td>
</tr>
<tr>
<td>4</td>
<td>- Has made most of the necessary behavior changes. - Challenge is in maintaining behaviors over time or during times of stress.</td>
<td>- Focus on increasing confidence &amp; skills for maintaining behaviors. - Develop skills in coping &amp; problem solving.</td>
<td>- Focus on “lagging” behaviors. - Build a sense of efficacy for coping with problem situations by identifying what throws them off track. - Continue to build knowledge base.</td>
</tr>
</tbody>
</table>
- Reach toward new goals.

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APPENDIX G

DEMOGRAPHIC SURVEY

Assessing Clinicians' Endorsement of Patient Activation in Health Management
Demographic Data Survey

Please complete the following questions about yourself.

1) How would you describe yourself professionally?
   a. Physician
   b. Physician Assistant
   c. Nurse Practitioner

2) How many years have you been in practice? ______

3) Do your practice:
   a. Family medicine
   b. Internal medicine
   c. Other: ________________

4) What is your age? _____

5) What is your sex?
   a. Female
   b. Male
   c. Transgendered

6) How do you describe yourself? (Please check the one option that best describes you)
   a. American Indian or Alaska Native
   b. Asian or Asian American
   c. Black or African American
   d. Caucasian
   e. Hispanic
   f. Middle Eastern
   g. Multiracial
   h. Native Hawaiian or Other Pacific Islander
   i. Would rather not say
   j. Other: ________________

7) What is your primary language?
   a. English
   b. Spanish
   c. Vietnamese
   d. Chinese
   e. Other: ________________
APPENDIX H

APPROVAL TO USE THE CLINICAL SUPPORT-PATIENT ACTIVATION (CS-PAM)™ SURVEY

RE: CS-PAM
Steve Christianson [schristianson@insigniahealth.com]
To:
Demetra Bastas-Bratkic, NP [CA]
Cc:
Steve Christianson [schristianson@insigniahealth.com]
Friday, July 15, 2016 5:06 AM

Thanks for the follow-up Demetra! My apologies for not getting back to you before now. I’m open to having you use CS-PAM at no additional cost for this initial project. I’d like to see how (and from whom) you are introducing the survey (as well as process and intent), and perhaps provide some input if you’re open to it. Let me know how you’d like to proceed, and we’ll be ready to assist.

Best,
Steve
Steve Christianson, MSW, LICSW
VP, Client Services
Mobile: 612-859-6634
APPENDIX I

ONE-MONTH POST TRAINING SURVEY

1) Did you participate in a Clinician Support-Patient Activation (CS-PAM™) training?
   a. Yes
   b. No

2) I am confident in recognizing the value of my patient's activation?
   a. Strongly disagree
   b. Somewhat disagree
   c. Neither agree nor disagree
   d. Somewhat agree
   e. Strongly agree

3) What would increase your confidence in the value of patient activation?

4) I am able to recognize distinctive PAM™ level characteristics in my patient.
   a. Strongly disagree
   b. Somewhat disagree
   c. Neither agree nor disagree
   d. Somewhat agree
   e. Strongly agree

5) If you find it challenging to identify distinctive PAM™ level characteristics in your patient, please expand on the reason(s) why this is difficult to implement in practice. If you are able to, please provide one or two examples of such characteristics.
6) I have modified my practice since receiving the Patient Activation- What is Our Role as Clinicians?
   a. ☐ Strongly disagree
   b. ☐ Somewhat disagree
   c. ☐ Neither agree nor disagree
   d. ☐ Somewhat agree
   e. ☐ Strongly agree

7) How exactly have you modified your practice? If not, please explain why not?

8) I see the connection between my practice style and my patient's PAM™ score improving?
   a. ☐ Strongly disagree
   b. ☐ Somewhat disagree
   c. ☐ Neither agree nor disagree
   d. ☐ Somewhat agree
   e. ☐ Strongly agree

9) There is not enough time during my visit to address disease management based on my patient's activation measurement?
   a. ☐ Strongly disagree
   b. ☐ Somewhat disagree
   c. ☐ Neither agree nor disagree
   d. ☐ Somewhat agree
   e. ☐ Strongly agree

10) Is there anything else you would like to share regarding patient activation training and your practice?
APPENDIX J

MANUSCRIPT SUBMITTED TO THE JOURNAL OF DOCTORAL NURSING PRACTICE

Assessing Clinicians' Endorsement of Patient Activation in Health Management

Demetra Bastas-Bratkic, Penny Weismuller and Margaret Brady

Southern California CSU DNP Consortium

Author Note

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Demetra Bastas-Bratkic was the primary author. Co-authors were Penny Weismuller and Margaret Brady.

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Abstract
Supportive clinician roles are positively correlated with higher patient activation (PA) in their own health care. Few studies have examined the impact of training on the beliefs of primary care providers (PCP) in their role to enhance PA. This pilot study determined the impact of a tailored PCP training on PA and participants’ adoption of roles supporting PA following training. A PA training was developed and delivered to PCPs after they completed the CS-PAM™, a test measuring clinician belief in patient activation (Hibbard, Collins, Mahoney, & Baker, 2009.) Prior to training, as measured by the CS-PAM™, 55% of participants endorsed PA, the importance of patient knowledge and involvement in his/her care. In contrast, one month following training, over 85% of clinicians agreed they were confident in recognizing the value of PA and recognized PA characteristics, and 71 % reported modifying their practice to increase PA. Higher scoring CS-PAM™ clinicians were more likely to be early adopters of PA strategies. Clinician focused multi-method training sessions on PA offers an effective way to improve the PCP’s ability to impact PA and the engagement of patients in their own healthcare.

Key words: Patient activation; Clinician-patient interactions; Primary care providers; Behavior change
The management of chronic conditions in the U.S. requires new strategies to more efficiently mobilize patients to be active partners in their health. As the nation moves from a fee-for-service reimbursement model to a pay-for-performance model, payment will be associated with improved patient outcomes, improved quality, and restrained cost, rather than quantity of services provided (Epstein, 2013; Sommers & Bindman, 2012). The concept of empowering patients to have ownership in the management of their health and disease states is not new, yet the challenge with how to enhance patient activation remains.

Patient activation occurs when the patient believes he or she has an important role in his/her health and has the knowledge, skills, confidence, and emotional commitment to execute this role (Hibbard, Stockard, Mahoney, & Tusler, 2004). In 2004, the Patient Activation Measure (PAM™) was validated as a tool with positive predictive value for improved healthcare outcomes (Hibbard, Stockard, Mahoney, & Tusler, 2004; Hibbard, Greene, & Daniel, 2010; Harvey, Fowles, Xi, & Terry, 2012). The importance of assessing a patient’s level of activation has been reported in the research, positively demonstrating that informed, skilled and self-assured patients are more likely to demonstrate actual behavior changes that promote their own health (Hibbard et.al., 2007; Mosen et al., 2007; Remmers et al., 2009). In fact, less activated patients are more likely to be hospitalized, use the emergency department, and nearly twice as likely to be readmitted to the hospital within 30 days of discharge (Begum, Donald, Ozolins, & Dower, 2011; Greene, Hibbard, Sacks, Overton, & Parrotta, 2015; Mitchell et al., 2014; Remmers et al., 2009; Sheikh et al., 2016).
Higher patient activation has been correlated with departures from the traditional patient-clinician role, but the success of this dynamic is dependent on initial clinician motivation for patient engagement (Alexander, Hearld, Mittler, & Harvey, 2012). Primary Care Providers (PCPs) have a crucial role in supporting patient self-management and therefore activation, yet traditional training does not incorporate these beliefs or strategies for partnering with patients in the curriculum (Alvarez, Greene, Hibbard, & Overton, 2016). The Clinician Support for Patient Activation Measure (CS-PAM™) is a relatively new and reliable measure to assess to what degree a clinician believes and supports the role of patient activation (Hibbard, Collins, Mahoney, & Baker, 2009).

The clinical use of PAM™ is well supported in the research, but there are gaps in the research literature to demonstrate that clinicians can reliably assess patient activation and then engage the patient within the time constraints of a clinical visit. Furthermore, there have been minimal published reports on CS-PAM™ and a tailored clinician training assessing if the training impacted clinician belief in patient activation.

The purpose of this pilot study was to develop, deliver and evaluate a tailored PAM™ educational teaching module(s) for PCPs practicing in internal and family medicine. The teaching module was based upon the strategies of motivational interviewing best suited to a patient’s PAM™ score. The primary objective was to promote behavior change in participating clinicians that would in turn promote patient activation in their patients. A secondary objective was to assess if there were specific provider characteristics that were correlated with a greater acceptance of patient activation.
Methods

This pilot study incorporated a pre-intervention CS-PAM™ and 1-month post training survey of participating PCPs in a large multi-specialty medical group, serving patients in Southern California. Participants completed a one-hour in person training on patient activation with strategies aimed at tailoring the delivery of the message to a patient’s level of activation.

Participants and Setting

Participants were 42 PCPs from one of four geographical regions. Eligibility criteria included physicians, nurse practitioners, or physician assistants who currently practice in family or internal medicine in a primary care setting, are employed by the company, and care for patients at least 18 years or older with known DMT2 and/or COPD. All eligible PCPs were asked to participate and were free to decline or discontinue participation at any time. All participants were provided informed consent and implied consent was achieved when the confidential on-line surveys were completed. No financial incentives were provided to participants. Randomization of clinicians was unfeasible due to the small convenience sample. Permission to conduct this study at a large multi-specialty medical group was granted by the Clinical Chief Officer for the California Market and IRB approval was obtained from California State University Fullerton, HSR-16-0286.

Training Intervention

An educational session was developed and conducted for participating PCPs by the primary author. Two content experts and an educational specialist conducted the initial review of the teaching materials. Their approval was obtained for the training
module material, mode of delivery and proposed length of time for the training session. Subsequently, two demonstration training sessions were conducted with seven actively practicing PCPs (4 MDs, 3 NPs) at two primary care settings and adjustments were further made to the training content and handouts based on their feedback. Handouts and case studies were created by the primary author and reviewed and approved by Insignia (developers of CS-PAM™).

An electronic survey package was sent to study participants, that included (a) cover letter with implied consent and (b) direct link to the pre-training demographics survey and CS-PAM™. The educational session was held in a conference room at the participants’ place of work. Each 60-minute session included 3-8 participants. The session started with a short introduction to the methods of motivational interviewing and PAM™, followed by group discussions of case studies that included the patient’s diagnosis and PAM score. Discussion focused on specific skills needed for tailoring interventions for the specific patient. A follow-up survey was sent to participants one month following training.

**Instruments**

**Demographic survey.** An on-line seven-question survey was administered to collect information on provider variables that might influence PAM™ adoption, such as professional status, years in practice, specialty, age, sex and ethnicity (Alvarez et al., 2016; Hibbard et al., 2009; Stoilkova-Hartmann, Janssen, Franssen, Spruit, & Wouters, 2015).

**Clinician Support-Patient Activation Measure (CS-PAM™).** A pre-intervention online survey was administered to assess clinicians’ patient activation
readiness through the CS-PAM™. The CS-PAM™ was adopted from the PAM™, a psychometrically validated instrument that reflects a developmental model of activation of patients (Hibbard et al., 2004; Hibbard, Mahoney, Stockard, & Tusler, 2005.) Evidence supports the construct validity of PAM™, with scores of higher activation reporting better health (r = .38, p < .001) and lower rates of office visits, emergency room visits and hospital nights (r = .07, p < .01) (Hibbard et al., 2004). CS-PAM™ utilized the same Rasch analysis as PAM™ and demonstrated overall sound psychometric properties, with a Cronbach’s alpha of 0.86, person reliability 0.80, in- and out-fit scores within acceptable range, and the 14 items calibrated between 34 and 68 (Hibbard et al., 2009). The CS-PAM 13™ is a shorter version of the original 14-item CS-PAM™ demonstrating similar psychometric properties as its parent (Hibbard et al., 2005; Hibbard et al., 2009).

Clinicians’ attitude toward patient activation was scored on a 5-point scale (1 = not important, 4 = extremely important, 5 = not applicable), and a raw score was calculated by summing the responses. Items with no response or with a “not applicable” response were scored as “missing.” A sum score was calculated with a potential range from 1-100, with higher scores indicating more positive beliefs about the importance of a patient’s role in their health care, and thus a more engaged clinician for patient activation. The raw scores were converted into three activation levels: Level 1 ( ≤ 58.6) implies that a clinician believes a patient should follow medical advice; Level 2 (58.6 and 69.9) indicates that a clinician believes that a patient can make independent judgments and actions related to the management of their health; and Level 3 ( ≥ 70.00) means the clinician believes that a patient can function as part of the care team and seek information
independently (Insignia Health Inc., 2010). The developer, Insignia Health, University of Oregon, United States, granted license for use of the CS-PAM 13™.

Post-training survey. A 10-question survey, developed by the primary author, was administered at one month following the training to assess the clinicians’ understanding of patient activation and the level of adoption into their clinical practice. Expert reviewers and the PCPs who approved the educational training confirmed face validity. To provide additional information on three of the Likert scale questions, three open-ended questions were included. Conventional content analysis was used to identify themes in the open-ended responses.

Results

Of the 42 PCPs invited to participate in the pre-survey, 40 completed the demographics survey, for a response rate of 95%. In the final analysis, nine questionnaires were further omitted: three because the participants did not participate in the training and six because all the scores on the one-month post training survey items were missing or skipped. Thus, the final sample size of the study was 31, for a response rate of 73.8%. Study participants were predominately female (61.29%) under the age of 50 (63.31%) and identified as physicians (87.06%) practicing in internal medicine (58.06%) with English as their primary language (77.42%) (Table 1). Participants were 25.81% Asian American, 19.35% White, 19.35% Hispanic, 6.45% as African American and 29.04% elected not to disclose (Table 1). Participant demographic characteristics remained statistically unchanged when comparing the original 40 to the 31 participants who completed the one-month post intervention survey (Table 1).
Of the 31 PCPs who completed the CS-PAM™ and the 1-month post-intervention survey, 14 scored below 61.90 (Level 1 CS-PAM™), five scored between 67.67 and 75.20, (Level 2 CS-PAM™), and 12 scored between 83.10 and 100.0 (Level 3 CS-PAM™). PCPs belonging to Level 3 were more likely to acknowledge the importance of patient knowledge and involvement in his/her care, compared to those in Levels 1 and 2. There was no statistically significant association found among PCP characteristics and CS-PAM™ scores (Table 2). Consistent with the literature, PCPs who are female reported higher CS-PAM™ scores (Alvarez et al., 2016; Stoilkova-Hartmann et al., 2015).

Statistically significant correlation was found between one-month follow up status and Level 1 CS-PAM™ scores ($r_s = -0.31560$, $p < 0.05$; $Z = 1.9543$, $p < .0507$) (Table 3). Thus, PCPs who scored the lowest on CS-PAM™ had a higher percentage of completion of the one-month post intervention survey when compared to the highest scoring PCPs. This finding might demonstrate a greater level of engagement of lower-scoring CS-PAM™ participants with the training material. Participants who were able to recognize the value of patient activation did reported modifying their behaviors after the training (Table 4). An interesting finding was that while it appeared that the lower activated participants found the training more beneficial during the quantitative analysis, it was the higher scoring CS-PAM™ clinicians who were more likely to report being early adopters of the strategies presented in the training.

Results from the one-month post intervention survey demonstrated a positive response to the training by participants: 85% of participants agreed/strongly agreed with being confident in recognizing the value of patient activation (Q2), 89% were able to
recognize distinctive PAM characteristic in their patients (Q4) and 71% reported they modified their practice since training (Q6) (Table 5). The percentage of PCPs reporting they saw a connection between their practice style and their patient’s PAM improving (Q8) was 63%. Time was reported by 79% of participants as the limiting factor for implementing strategies for patient activation (Table 5).

Participants were asked three open-ended questions specific to assessing the impact of training in the one-month post training survey. Fifteen (48%) of the 31 respondents provided written answers to at least one of the three questions, with a total of 34 of a possible 45 responses. Three prevailing themes were identified through conventional content analysis: 1) ways training modified practice, 2) challenges to adopting intervention strategies, and 3) need for additional training (Table 6). The most frequent theme was the need for additional trainings to improve confidence in enhancing patient activation into practice. Selected participant comments illustrating the identified themes are represented in Table 7.

Discussion

The literature supports that more activated patients have better health outcomes and lower health care costs than those who are less activated (Greene et al., 2012; Hibbard et al., 2013) but is less robust in exploring clinician beliefs and behaviors that activate patients (Alvarez et al., 2016). This pilot study explored whether there is a clinician profile for patient activation and if patient activation training was helpful in promoting behavior change in PCPs. The findings showed that PCP’s support for patient activation reported in this study were slightly higher than those documented in the literature (Alvarez et al., 2016; Rademakers, Jansen, Van der Hoek, & Heijmans, 2015;
Rademakers, Nijman, van der Hoek, Heijmans, & Rijken, 2012; Stoilkova-Hartmann et al., 2015). Qualitative statements reinforced the need for additional training to further promote the adoption of the recognized association between their delivery of messaging and the movement of their patient’s level of activation.

Through self-reported surveys, participants identified the training to be helpful in setting a foundation for different patient activation strategies to use in daily clinical practice. Positive clinician behavior modifications were also self-reported for improving patient-clinician partnership, such as listening to patients and gauging PAM™ level with tailored messages. However, challenges to its adoption and maintenance were attributed to lack of subsequent trainings and to insufficient time with patients to initiate/enhance new skills learned in training. These results coincide with findings from well-designed studies on this topic (Alegría et al., 2008; Blakeman, Macdonald, Bower, Gately, & Chew-Graham, 2006; Macdonald, Rogers, Blakeman, & Bower, 2008).

How clinicians learn, adopt and adhere to educational interventions is complex. Successful trainings focus on behavioral objectives and utilize multicomponent interventions: 1) variety of media for presentation, 2) practice enablers, 3) clinical scenarios and vignette (Dave Davis, Davis, & Davis, 2010). This study successfully incorporated all three components, yet in the follow-up survey participants indicated that more trainings, including more vignettes for self-learning and more practice enablers, such as patient handouts, would be of value. It can take up to a year to integrate new strategies around motivational interviewing into daily clinical practice (Rubak, Sandbaek, Lauritzen, Borch-Johnsen, & Christensen, 2006) and offering targeted trainings about
communication and coaching skills with case studies is beneficial when provided over a period of time (Rademakers et al., 2012).

**Strengths and Limitations**

Validation of all training material by content experts is a key strength of this project. Additionally, it was well accepted by participants and has organizational desire for continuation. The generalizability of the project's findings is however limited due to the project’s small convenience sample from a single healthcare organization. Furthermore, as the theoretical underpinning of this project is that beliefs precede behaviors, the data analysis through rank correlation decreases the ability to state with certainty that one variable caused a change in another variable. In addition, all data were obtained through self-reports, which leans towards a social desirability bias. Attempts to decrease this bias of discrepancy between what is expected of a clinician and what is the clinician’s actual behavior were done by administering confidential initial and follow-up on-line surveys.

Although statistical significance was found with some variables, it is not generalizable due to the small group size and low power of the study. Future studies with larger samples need to be designed to continue examining the relationship between PCPs’ belief in the significance of patient engagement and the actual changes in both clinician behavior and patient engagement. Additionally, due to the short study time, it is unknown if changes would be sustained and would lead to a positive difference in both provider and patient health care behaviors over time.
Conclusion

Within the primary care setting, the patient-provider relationship is a delicate one, either promoting or hindering a patient’s ability to self-manage their chronic disease(s). For PCPs who are low scoring on the CS-PAM™, a clinician focused series of multimethod training sessions focused on patient activation offers a low-cost but effective way to improve the PCP’s impact on the quality of their patient’s healthcare.

The paradigm shift of healthcare and its management of chronic diseases requires a shift in the clinician’s role, understanding that part of their responsibility is in supporting patients to be activated leaders of their own care. Patients with chronic conditions want to be more active in their care and receive support for skill building by their clinicians (Shonce, Marsolo, Margolis, & Opipari-Arrigan, 2014). To comply with the emerging trends, codes and standards for clinician performance in healthcare, educating and training clinicians on the ways to support patient activation through self-management are imperative.

The CS-PAM™ is a viable tool that healthcare organizations can utilize to primarily assess their clinicians and then implement a series of trainings to help low scoring clinicians gain the knowledge and skills in supporting the patient’s role. Creating a uniformly and consistent training module that is multi-disciplinary for PCPs offers a strategic competitive edge in our changing healthcare system. It is the belief of the authors that a singular training, as utilized in this study, serves to lay the groundwork, but a series of training are needed to achieve the intended goal of significantly improving the clinicians’ belief and thus adoption of patient activation strategies that then impact the patient’s health outcomes.
References


<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>n (%) Pre-intervention N = 40</th>
<th>n (%) Post-intervention^ N = 31</th>
</tr>
</thead>
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<tr>
<td>Professional Status</td>
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<td></td>
</tr>
<tr>
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<td>27 (87.10)</td>
</tr>
<tr>
<td>APC^a</td>
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<td>4 (12.90)</td>
</tr>
<tr>
<td>Years in Practice^b</td>
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<td></td>
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<td>5 (16.66)</td>
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<td>5 (16.66)</td>
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<td>15-19</td>
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<td>3 (9.99)</td>
</tr>
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</tr>
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<td>25+</td>
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<td>7 (20.33)</td>
</tr>
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<td></td>
</tr>
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<tr>
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<td>12 (38.71)</td>
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<td>9 (29.99)</td>
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<td>11 (28.95)</td>
<td>10 (33.33)</td>
</tr>
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<td>&gt;50</td>
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<td>11 (27.50)</td>
<td></td>
</tr>
</tbody>
</table>

^a Advance Practice Clinicians (NPs and PAs). b Frequency missing = 1. c Frequency missing = 2.
^ Nine omitted: 3 did not take training and 6 did not complete any post training survey answers. ^ between those participants who completed both the pre and post intervention survey and those who completed the pre intervention survey but did not complete the post intervention survey per subgroup: Professional Status: 1.000; Years in Practice: 0.8183; Specialty: 0.4369; Age: 0.4777; Sex: 1.000; Ethnicity: 0.2129; Primary Language: 0.2268
Table 2. Primary Care Provider Characteristics and CS-PAM™

<table>
<thead>
<tr>
<th>PCP Characteristics</th>
<th>Sample demographics (%) N = 31&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Average CS-PAM™ score Mean (SD)</th>
</tr>
</thead>
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<tr>
<td><strong>Professional Status</strong></td>
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<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>27 (87.10)</td>
<td>69.73 (23.33)</td>
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<tr>
<td>APC&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4 (12.90)</td>
<td>67.87 (28.67)</td>
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<tr>
<td><strong>Years in Practice&lt;sup&gt;c&lt;/sup&gt;</strong></td>
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</tr>
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<td>&lt;4</td>
<td>5 (16.67)</td>
<td>70.36 (29.16)</td>
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<tr>
<td>5-9</td>
<td>5 (16.67)</td>
<td>81.18 (25.91)</td>
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<td>10-14</td>
<td>7 (23.33)</td>
<td>64.93 (19.90)</td>
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<td>3 (10.00)</td>
<td>58.07 (36.32)</td>
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<td>7 (23.33)</td>
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<td>Family Medicine</td>
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<td>73.99 (23.55)</td>
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<td><strong>Ethnicity</strong></td>
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<td>24 (77.42)</td>
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<td>7 (22.58)</td>
<td>78.66 (23.25)</td>
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</table>

<sup>Note. PCP = Primary Care Provider; CS-PAM™ = Clinician Support Patient Activation Measure™</sup>

<sup>a</sup>Sample who completed one-month post training survey. <sup>b</sup>Advance Practice Clinicians (NPs and PAs). <sup>c</sup>Frequency missing = 1
Table 3. CS-PAM™ Level to Completion of One-Month Post Intervention Survey

<table>
<thead>
<tr>
<th>CS-PAM™ Level</th>
<th>1-month post intervention survey completion</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>Completed</td>
<td>14 (87.50)^|</td>
</tr>
<tr>
<td></td>
<td>Not completed</td>
<td>2 (12.50)</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Completed</td>
<td>5 (100.00)</td>
</tr>
<tr>
<td></td>
<td>Not completed</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>HIGH</td>
<td>Completed</td>
<td>12 (63.16)</td>
</tr>
<tr>
<td></td>
<td>Not completed</td>
<td>7 (36.84)</td>
</tr>
</tbody>
</table>

^Note: Wilcoxon Two-Sample Test, Z = 1.9543, p = 0.0507. Spearman Correlation, r_s = -0.31560, p = 0.0473

Table 4: One-Month Post Training Survey Results: PAM™ Recognition and Clinician Outcomes

<table>
<thead>
<tr>
<th>Clinician Outcomes</th>
<th>Correlation Coefficient(^1)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2: I am confident in recognizing the value of my patient’s activation?(^a)</td>
<td>Q4: I am able to recognize distinctive PAM level characteristics in my patient?(^a)</td>
<td>0.60246</td>
</tr>
<tr>
<td>Q2: I am confident in recognizing the value of my patient’s activation?(^a)</td>
<td>Q6: I have modified my practice since receiving the Patient Activation-What is Our Role as Clinicians?(^b)</td>
<td>0.69194</td>
</tr>
<tr>
<td>Q4: I am able to recognize distinctive PAM level characteristics in my patient?(^a)</td>
<td>Q6: I have modified my practice since receiving the Patient Activation-What is Our Role as Clinicians?(^b)</td>
<td>0.62642</td>
</tr>
</tbody>
</table>

\(^a^\)Note. PAM™ = Patient Activation Measure™

\(^1\)Spearman Correlation Coefficients, r_s; \(^a^\) Frequency missing = four; \(^b^\) Frequency missing = three

*** p < .001
Table 5. One-Month Post Training Survey Responses

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree or Strongly disagree</th>
<th>Neither agree or disagree</th>
<th>Somewhat or Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2: I am confident in recognizing the value of my patient’s activation?a</td>
<td>1 (4%)</td>
<td>3 (11%)</td>
<td>23 (85%)</td>
</tr>
<tr>
<td>Q4: I am able to recognize distinctive PAM level characteristics in my patient?a</td>
<td>1 (4%)</td>
<td>2 (7%)</td>
<td>24 (89%)</td>
</tr>
<tr>
<td>Q6: I have modified my practice since receiving the Patient Activation-What is Our Role as Clinicians?b</td>
<td>2 (7%)</td>
<td>6 (21%)</td>
<td>20 (71%)</td>
</tr>
<tr>
<td>Q8: I see the connection between my practice style and my patient’s PAM score improving?a</td>
<td>0 (0%)</td>
<td>10 (37%)</td>
<td>17 (63%)</td>
</tr>
<tr>
<td>Q9: There is not enough time during my visit to address disease management based on my patient’s activation measure?b</td>
<td>7 (25%)</td>
<td>6 (21%)</td>
<td>15 (54%)</td>
</tr>
</tbody>
</table>

Note. PAM™ = Patient Activation Measure™

* Frequency missing = four; †Frequency missing = three
Table 6. Qualitative Themes by Category

<table>
<thead>
<tr>
<th>Thematic Categories</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ways training modified practice:</td>
<td></td>
</tr>
<tr>
<td>-PAM™ understanding that prompted tailoring visits</td>
<td>3</td>
</tr>
<tr>
<td>-Enhanced awareness of ways to improve patient-provider interactions</td>
<td>7</td>
</tr>
<tr>
<td>Challenges to adopting strategies after training:</td>
<td></td>
</tr>
<tr>
<td>-Insufficient time allocated for visit</td>
<td>5</td>
</tr>
<tr>
<td>-Complexity of patients’ disease and their demands</td>
<td>4</td>
</tr>
<tr>
<td>Need for additional training/practice</td>
<td>15</td>
</tr>
</tbody>
</table>

Note. PAM™ = Patient Activation Measure™

Table 7. Select Participant Statements from Qualitative Themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Comments</th>
</tr>
</thead>
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<tr>
<td>Ways training modified practice:</td>
<td>“Have tried to provide recommendations with activation in mind, trying to use the appropriate techniques taught in training.” “I am learning to utilize in my practice. The training laid the foundation now I feel like to sustain that knowledge, more trainings or e-learning tools are made available.”</td>
</tr>
<tr>
<td>Challenges to adopting strategies:</td>
<td>“Major focus of my company is on clinical aspects of care, hard to shift mindset to PAM.” “Sometimes just forgetting to pay attention to patient’s PAM level due to multiple issues that need to be addressed during the visit, and not because I don’t see its value.”</td>
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<tr>
<td>Need for additional training:</td>
<td>“Single lectures rarely modifies behaviors, need follow up sessions to reinforce learning.” “I have not been mindful yet about applying patient activation in my practice. More trainings would be beneficial.”</td>
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</table>
“This is new to me, need more trainings on how to recognize, more case studies would help.”

Note. PAM™ = Patient Activation Measure™
APPENDIX K

ACCEPTANCE LETTER FOR POSTER PRESENTATION AT UPSILON BETA RESEARCH CONFERENCE & ANNUAL INDUCTION

Sigma Theta Tau International
Honor Society of Nursing

Upsilon Beta Chapter

February 27, 2017

Dear Demetra Bastas-Bratkic:

Congratulations!  Your abstract has been accepted for a poster presentation at Upsilon Beta Research Conference & Annual Induction being held at the Knott’s Berry Farm Hotel, 7675 Crescent Avenue, Buena Park, CA 90620 on Saturday, April 8, 2017.

Below are Poster Board Guidelines and the Poster Presentation Schedule.  This information will ensure that your poster is prepared optimally for your presentation.  Please note the times you are requested to stand by your poster to receive comments and questions as well as the scheduled break down time for poster removal.

Poster Number:  18
Poster Title:  Assessing Clinicians' Endorsement of Patient Activation in Health Management

In order for you to present your poster, you must be a registered attendee of the Conference.  If you need registration information, please visit our website by clicking here. Registration and payment must be received by March 17, 2017 for your poster to be published in the conference program.

On behalf of the Abstract Review Committee, thank you for submitting your material to Upsilon Beta Research Conference/ CSU Fullerton chapter of Sigma Theta Tau International.  We hope you will continue to submit your work to our future meetings.  We look forward to seeing you in Buena Park on Saturday, April 8, 2017.

Sincerely,
Asma A. Taha, RN, PhD, CPNP
Chair Research Committee
California State University Fullerton
Upsilon Beta Chapter
Sigma Theta Tau International
APPENDIX L

ACCEPTANCE LETTER FOR POSTER PRESENTATION AT WESTERN INSTITUTE OF NURSING'S 50TH ANNUAL COMMUNICATING NURSING RESEARCH CONFERENCE

Dear Demetra Bastas-Bratkic,

Congratulations! Your abstract, "Assessing Clinicians' Endorsement of Patient Activation in Health Management," has been accepted for presentation at the Western Institute of Nursing's 50th Annual Communicating Nursing Research Conference to be held April 19-22, 2017 at the Colorado Convention Center in Denver. Your abstract has been accepted for a Poster presentation.

Your poster session is scheduled for Friday, April 21, 2017 from 8:00 AM - 12:00 PM.

Please notify any additional authors on your paper of this good news. Conference registration and the conference program will be available on the WIN website at www.winursing.org in the upcoming weeks.

Poster presentations are less formal, but not less rigorous or substantive, than podium presentations. Poster authors present their work interactively to groups of interested individuals with the aid of a visual display that summarizes research findings or project outcomes. Posters are displayed in a central location for four-hour blocks of time so attendees can peruse the visual displays and talk with the authors. The WIN Program Committee has set aside one hour of time during each poster session solely for attendees to view posters. We ask that presenters stand by their posters during this hour. Poster boards are 4' x 8'. Please visit the Presenter's Corner on the WIN website for valuable tips on presenting your poster.

As the Presenting Author, we ask that you log into the "Presenter Information Center" (link is below) to provide the following information by the stated deadline:

1. Give your consent to present (see the "Consent to Participate" module);
2. Complete any missing information on the CE bioform (via the disclosure form) and/or the Content Objectives Grid

Your place on the conference schedule will not be considered as final until all of these responses are completed and received no later than 5:00 PM Pacific Time on FRIDAY, JANUARY 13, 2017. By giving your consent to participate, the Program Committee is asking that you make a commitment to present your poster on the date and at the time assigned. As indicated in the Call for Abstracts, all presenters are required to pay the applicable registration fee and to cover their own travel expenses.

If, for any reason, you are unable to attend due to last minute matters, you are asked to send a representative to present your poster. If you do not present or have someone present for you, and you do not notify WIN in time to have your abstract pulled from the proceedings, you will be charged $60. In addition, an errata sheet will be circulated with the proceedings.

The link to the Presenter Information Center is: http://win.confex.com/win/2017/posters/extra/index.cgi?username=11587&password=631731&EntryType=Paper

We look forward to an excellent conference and to your participation. If you have any questions, please contact Bo Perry by email at perrybo@ohsu.edu.

Sincerely,

Anthony McGuire, PhD, CCRN, ACNP-BC, FAHA
Chair, WIN Program Committee
Congratulations, Demetra Bastas-Bratkic, FNP-BC, RN! The abstract you submitted for 44th Biennial Convention (28 October - 01 November 2017), "Assessing clinicians’ endorsement of patient activation in health management," has been selected for a Poster presentation. The abstracts submitted were exceptional! The presentations selected are an excellent reflection of current nursing trends and timely issues. We look forward to your participation in this prestigious event. The opportunity to collaborate with nursing scholars from around the world who are involved in the advancement of nursing science promises to be rewarding and stimulating.

YOUR ABSTRACT
- Poster Presentation Title: Assessing clinicians’ endorsement of patient activation in health management
- ID#: 86376

The primary presenting author is required to complete the intent-to-present form for each presentation accepted. If accepted for multiple presentations, an intent-to-present form must be completed for each presentation. If the intent-to-present form is not completed by the deadline of 29 March 2017, the presentation will be removed from the program.

To submit the intent-to-present form, please go to http://stti.confex.com/stti/bc17/popclinic/extra/index.cgi?EntryType=Paper&username=86376&password=454439.

Submissions will not be scheduled until after the intent-to-present deadline, to ensure that all available presentation slots are filled. Information on the 44th Biennial Convention (28 October - 01 November 2017) can be found on our website at http://convention.nursingsociety.org.

If you have any other questions, please contact abstracts@stti.org, 888.634.7575 (US/Canada toll-free), or +1.317.634.8171 (International).

Thank you,
Matthew S. Howard, MSN, RN, CEN, CPEN, CPN
Director, Educational Resources Honor Society of Nursing, Sigma Theta Tau International