University of Missouri, St. Louis IRL @ UMSL

UMSL Graduate Works Dissertations

8-5-2016

Improving Veteran access to heart failure specialty care: a change model project

Mark Bird Whelchel University of Missouri-St. Louis, mark.whelchel@icloud.com

Follow this and additional works at: https://irl.umsl.edu/dissertation



Part of the Nursing Commons

Recommended Citation

Whelchel, Mark Bird, "Improving Veteran access to heart failure specialty care: a change model project" (2016). Dissertations. 82. https://irl.umsl.edu/dissertation/82

This Dissertation is brought to you for free and open access by the UMSL Graduate Works at IRL @ UMSL. It has been accepted for inclusion in Dissertations by an authorized administrator of IRL @ UMSL. For more information, please contact marvinh@umsl.edu.

Improving Veteran access to heart failure specialty care: a change model project

Mark Bird Whelchel

M.S.N, Saint Louis University – Saint Louis, 2011
 B.S.N, St. Petersburg College – St. Petersburg, 2008
 A.D.N, Quinsigamond Community College – Worcester, 1997

A Doctor of Nursing Practice Project submitted to the Graduate School at the

University of Missouri – St. Louis in partial fulfillment of the requirements for the degree

Doctor of Nursing Practice

August 2016

Advisory Committee

Roberta Proffitt Lavin, PhD, FNP-BC

Chairperson

Wilma Calvert, PhD, RN

Elise Hartranft, RN, MSN, ACNP-BC

Rick Yakimo, PhD, RN, PMHCNS-BC, N-NAP

Abstract

Background: Many Veterans Health Administration (VHA) facilities have cardiac services, but not all VHA centers offer heart failure care. Viable alternative models exist to traditional outpatient treatment by physicians, such as Tele-medicine consultations, the use of nurse practitioner run clinics, and the use of models such as Specialty Care Access Network-Extension for Community (SCAN-ECHO) and site specific contracted physician services models. These have the potential to improve Veteran access to care.

Objective: The purpose of this change project was to conduct a needs assessment survey, in joint effort with the Hershey Medical Center Heart and Vascular Institute, to identify barriers and improve service and communication for veterans receiving heart failure care via a contracted provider services model of the Penn State Hershey Medical Center.

Methods: A two round modified Delphi process was implemented to identify the major issues that present barriers to specialty care for veterans and their providers. The questionnaire was sent to physicians and nurse practitioners. Surveys included analogous questions for all parties in order to compare and contrast responses and see how they differed.

Results: The majority of respondents agreed that timeliness of procedures is questionable secondary to the VHA dictating where those procedures are to be done, i.e. cardiac catheterizations, or electrophysiology studies in Philadelphia. The VHA clinic has less support staff and longer wait times, often resulting in decreased Veteran access to care. The inability to access electronic medical records outside of the VHA institution (remote access) can often lead to further delays in care to Veterans. Reliable remote access to the Veterans Administration electronic medical record would improve the treatment experience for Veterans. The respondents also agreed that a nurse practitioner on site at the VHA to coordinate care and provide follow-up and liaison service would be beneficial.

Conclusions: There is a communication gap that exists for providers when seeing patients at the VHA. The addition of a Nurse Practitioner on-site could help to close communication gaps, provide follow up and maintain a consistent presence for the Veterans receiving heart failure care via a contracted provider model.

Key Words: Quality Improvement, Delphi Technique, Veterans, Heart failure, Health Services Accessibility

Introduction

The Patient Protection and Affordable Care Act (PPACA), passed in 2010, has spurred organizations and institutions to find new ways to improve access to care, and ultimately, improve patient self-care. The Veterans Administration changed their care delivery model to meet the needs of veterans and align themselves with the Patient Centered Medical Home (PCMH); the new model is referred to as the Patient Aligned Care Team (PACT). According to Fix, et. al (2014) "PACT is premised on seven principles, specifying that care be: patient-driven, team-based, efficient, comprehensive, continuous, and emphasize good communication and coordination" (p. S695). Despite efforts to improve care there is still a perceived lack of communication and coordination by the heart failure providers at Hershey Medical Center – Heart and Vascular Institute (HMC-HVI) when providing services to the Lebanon Veterans Administration (VA) patients. The lack of communication has been well documented in the media and efforts have been made to further expand Veteran's options for care.

While many Veterans Health Administration (VHA) facilities have cardiac services, not all VHA centers offer heart failure care. The coordination of care and communication between patients, families and providers is critical. Access to specialty care and the ability of veterans to coordinate care with all members of the healthcare team, from primary care to specialty care, helps promote self-directed care among veterans (Fix, et al. 2014). Fix, et al. report "With the reorganization of primary care into Patient Aligned Care Teams (PACT) teams, the Veteran Affairs Health System (VHA) aims to ensure all patients receive care based on patient-centered medical home (PCMH) principles. However, some patients receive the preponderance of care from specialty

rather than primary care clinics because of the special nature of their clinical conditions" (p. S695).

The purpose of this change project was to conduct a survey as part of a needs assessment, conducted by the Hershey Medical Center Heart and Vascular Institute, to improve service and communication for veterans receiving heart failure care via contracted services of the Penn State Hershey Medical Center. The survey served to find common issues among the providers to identify main barriers in providing heart failure specialty care to local veterans. Once the problems were identified and prioritized, they could then become part of the institution's needs assessment. The needs assessment will then serve to assess the extent of needs, differentiate between perceived and actual needs, prioritize those needs that need to be addressed, and determine which route for management would be best to address those needs.

A survey of current medical providers, in this case the physicians and nurse practitioners at Hershey Medical Center –Heart and Vascular Institute, was conducted. It was important to identify what was missing or desired in the care of heart failure patients between the two organizations. Was access to care for the veterans a problem i.e. proximity to clinic setting? Was having heart failure clinic at the VA and the presence of HMC-HVI specialists and fellows in clinic once a week enough? A survey of medical providers could help to identify gaps in provider coverage. Surveys are a way of gathering input from stakeholders who may be difficult to engage in an individual or group setting (Preskill and Jones, 2009).

Background

According to the Centers for Disease Control and Prevention (CDC), Heart Failure (HF) is diagnosed in 670,000 new persons annually. The VHA delivers care to more than 5 million veterans annually. Cumulative care visits total over 16.4 million encounters annually (Rosland, 2013). Heart failure (HF) rates are high in the VA population. Currently, in the Veterans Health Administration versus the general population (VHA), the 30-day rehospitalization rate for HF is about 16% (Wang, L., Porter, B., Maynard, C., Bryson, C., Sun, H., Lowy, E., Fihn, S. D. 2012).

In May 2001, the Joint Commission announced four initial core measurement areas for hospitals, which included acute myocardial infarction (AMI) and HF. Along with other targeted high resource utilization areas (e.g. stroke, pneumonia, surgical care improvement, and more) the goal was to improve care of the hospitalized patient, decrease costs and utilization, and strengthen patient safety (The Joint Commission, 2016). According to the Robert Wood Foundation (RWJF, 2011) preventable readmissions cost Medicare about \$12 billion a year. Rehospitalization is often associated with gaps in follow-up care. It is estimated that three-fourths of chronically ill patients who leave the hospital would not be rehospitalized if they had a plan for follow-up care (RWJF, 2011).

The medical home was introduced as a framework of care by the American Academy of Pediatrics in 1967 (American Academy of Family Physicians, 2008). The concept was adopted and further developed by The American Academy of Family Physicians (AAFP) and the American College of Physicians (ACP). Each entity developed their own models for improving patient care called the "medical home". The

American Medical Association (AMA) and several medical specialty associations, including the American College of Cardiology, have endorsed the model (Patient-Centered Primary Care Collaborative, 2014).

Timely access to health care and specialty care has recently been addressed by the Institute of Medicine (IOM) in their 2015 report; Transforming Health Care Scheduling and Access – Getting to now (Kaplan, Lopez, & McGinnis, 2015.). The Veterans Health Administration requested the IOM's committee on optimizing scheduling in healthcare to review the literature and make recommendation to improve scheduling and access to care for their consumers. The committee found that evidence is limited and thus does not provide the guidance needed for systems to implement best practices (2015). While the evidence is lacking, there are some efforts being made within various healthcare systems that are producing evidence and providing solutions. Reframing of care delivery models to meet the need of consumers is one such solution. Providing alternate means in which patients can be seen, such as Tele-medicine consultations and the use of nurse practitioner run clinics, were both positive findings of the committee (2015).

Research Questions

The purpose of a modified Delphi method in a needs assessment is to gain expert input for defining needs, to identify desired results, to prioritize causes, or to recommend solutions (Watkins, West-Meiers, & Visser, 2012). The following research questions were used to guide the needs assessment: 1) how do veterans currently access specialty care? 2) What system changes can be implemented to better facilitate self-directed care among veterans utilizing specialty care services? 3) How can access to care be enhanced between the VA and local hospital(s) for complex cardiac patients? The aim of this

program was to identify barriers with access to care for veterans seeking heart failure specialty care and gaps in communication and follow-up when utilizing a contracted services model with Hershey Medical Center staff. McDavid, et. al (2013) state "Needs assessments are about defining the needs, developing strategies for assessing the extent of needs, prioritizing the needs to be addressed, and determining the way forward" (p. 227). Surveying the providers that provide heart failure services to the Veterans can help gain an understanding of what the primary issues are in providing such contracted services.

Methods

An email survey of the key stakeholders including physicians, nurse practitioners and fellows was used. The eight survey questions were based on domains of veteran access to care as proposed by Fortney et. al., in their article A Re-conceptualization of Access for 21st Century Healthcare (Fortney, J. C., Burgess, J. F., Bosworth, H. B., Booth, B. M., & Kaboli, P. J. 2011).

The goal was to identify barriers to effective heart failure care and coordination between the VA and HMC specialty care providers. The questions focused on barriers and communication to effective care coordination. The questionnaire, as part of a needs assessment, was geared to physicians, fellows and nurse practitioners. Surveys included analogous questions for all parties in order to compare and contrast responses and see how they differed. A two round modified Delphi process was implemented to seek consensus of the major issues that present barriers to specialty care for veterans and their providers. The major limitation of this study was that it was a single center focus. The study looked only at one specialty care service providing contracted services to a local VHA hospital.

Sample

Subject matter experts from Hershey Medical Center included attending physicians, cardiology fellows, and nurse practitioners specializing in heart failure. Participants were not asked if they completed the survey, rewarded for completion, or otherwise disadvantaged for not completing the survey. A survey link was sent to clinician's work email via Qualtrics. The email distribution list that was used consisted of clinical experts from Hershey Medical Center Heart Failure Program. The HMC Heart Failure providers utilized for this project remained anonymous. Participation was only the time participants spent in completing the Qualtrics questionnaire, which averaged seven minutes per round of questions either on paper or electronic format. IRB approval from Hershey Medical Center and The University of Missouri – St. Louis were obtained.

Results

A series of eight questions was distributed via email with a link to the Qulatrics survey. The results were analyzed for major themes and issues from the initial survey. Once those themes and issues were extracted they were formulated into questions for a second round survey to verify that the extracted themes and issues had been correctly stated.

An expert in the field served as the second reader. Each survey was read by the principal PI and the Second Reader, and sections relevant to the research questions were identified. Themes, patterns, similar words and issues were identified and noted.

Following the initial reading, a coding system for major topics was developed independently by the PI and Second Reader. The PI and Second Reader then compared findings and validated the categories each of them derived. An audit trail constructed

during these steps provided confirmability and credibility. The data was then tabulated according to categories and a narrative summary was written to highlight the main points and give continuity to the tabulated data (Sandelowski, M., 1995).

Findings

The survey was sent out to a mixture of physicians (17) and nurse practitioners (3). Of the twenty providers that were emailed surveys, ten responded for a response rate of 50% and nine out of the ten completed the survey for a completion rate of 90%. Round one was to identify the main barriers in providing heart failure specialty care to veterans. Round two contained questions with themes and elements from all responses to each of the original survey questions. Data was analyzed for themes and synthesized into consensus type questions/statements. The survey was designed around domains of veteran access to care as proposed by Fortney et. al., in their article A Reconceptualization of Access for 21st Century Healthcare (2011). Questions were created that identified potential problem areas in the following domains; Geographical (travel distance/ time), Temporal (time constraints, waiting times), Financial (eligibility, bundles), Cultural (language, Veterans), and Digital (connectivity, information exchange/integration). The survey questions were intended to gain expert input for defining needs, identifying desired results, prioritizing causes, and to recommend solutions.

Round One

The geographical domain had responses that steered mostly towards the travel aspect. One respondent stated "I think some veterans find it inconvenient to travel

between the two institutions despite efforts by the administration in availing transport to those who do not drive". Another respondent stated "Many veterans have disabilities, making extra transit and travel difficult. This is compounded by a higher level of poverty and dependence on public transportation". The concern for getting Veterans to the right place to get the right care was evident throughout the responses.

In considering access to care and time to care, the temporal domain, it was generally stated that patients are seen within the two-week time frame allotted by the VHA for heart failure referrals. However, some respondents were unsure if this goal was being met and/or how it was tracked. One respondent stated "It may be possible to be seen within two weeks especially with the Heart Failure NP's". A common theme amongst respondents was that procedures that happen at the VA happen in a timely manner; however, other procedures such as catheterizations were not since they must be referred to the Philadelphia VHA.

The most confused and varied responses amongst the respondents were in the financial domain, where the question asked in part "after initial diagnosis and treatment, is heart failure patients' care maintained by the Veterans Health Administration primary care physician or the Hershey Medical Center heart failure provider?" Responses varied from "Not sure" to detailed responses such as "That's a great question and one that is fully unclear to us. We do schedule patients for a 7 day f/u clinic appointment after a HF discharge but do not know if this is paid for by the VA system-especially for patients that solely are connected ONLY to the VA for insurance coverage".

When asked about cultural differences between Veterans and the general public, in the cultural domain, responses ranged from "No difference" to "At times it can seem

that the veterans have less access to care". Here again, there were responses surrounding the issue of Veterans having to go elsewhere for certain procedures in addition to lack of access to medications secondary to pre-approval constraints. Capturing the essence of the question, one respondent stated "Veterans typically seek care later in disease course and tend to be more stoic in their description of symptoms and severity". In respect to cultural competency, the purpose was not to assess if there was a basic understanding of cultural competency, but in fact, whether or not it was being considered and/or utilized when providing care to veterans. Through open ended questions it was clear that a general understanding of cultural competency was lacking in many respondent's answers.

The last few questions fell into the digital domain. It was this domain that the respondents had the most cohesive responses. The common theme that was extracted throughout the three questions was that the VHA Electronic Medical Record (EMR) was disorganized, difficult to use, and inefficient. The second major theme was that a lack of remote access to the EMR hindered care. As one respondent stated "Not being able to access outside of the institution - therefore patients will call and we may not be there for 2-3 weeks minimum between clinics". There were in fact a few responses that stated the EMR was no better or worse than others as well as "nothing that can't be overcome". In one response, a respondent gave feedback with suggestions to help alleviate the EMR issues. In the response it was stated that "If appropriate staffing (NP or PA for cardiology) was present at the VA to do patient follow up this would provide better patient care and negate many concerns about accessing the EMR". And finally, one respondent reported issues with the physical equipment and states "The computers at the

cardiology clinic are old and do not function well. This typically leads to lag time in processing and seeing patients".

Round Two

Once the round one data was analyzed for themes, those themes were broken down into categories and sorted by significance. A round two survey was developed utilizing the same domains and a summary composition of the responses. It contained five agree/disagree questions, two rank order questions, and one multiple choice question.

The majority of respondents replied "agreed" to the following questions; timeliness of procedures is questionable secondary to the VHA dictating where those procedures are to be done, i.e. cardiac catheterizations, or electrophysiology studies in Philadelphia; the VHA clinic has less support staff and longer wait times lending itself to Veterans having less access to care; not being able to access electronic medical records outside of the VHA institution (remote access) can often lead to delayed care to Veterans; and reliable remote access would improve your experience using the Veterans Administration electronic medical record.

When asked to rank a set of statements regarding functionality the VHA EMR the majority of respondents chose 'cannot easily find information'. When asked to rank a set of statements regarding Veterans travel to clinic to receive care, most respondents replied 'Veterans find it inconvenient to travel to the Lebanon VHA'.

Concerns for timely access to care secondary to low staffing and/or resources were identified in round one. When asked, "Which of the following might provide a

solution to this problem, most providers chose 'Nurse practitioner, on site at the Lebanon VHA, to coordinate care and provide follow-up and liaison service."

Finally, in the domain of culture, the question was asked 'training and/or education on providing culturally competent care to Veterans would be helpful to my practice'. The majority of respondents replied agreed, with one respondent choosing disagree.

Discussion

The care and management of heart failure patients is multifaceted and requires input from a multidisciplinary team (Henry, Hull, Litwinovich, and Doxakis, 2013). While the physicians, nurses, nurse practitioners, and care coordinators make up the interdisciplinary team for the care of these patients, there are others that contribute to the larger picture. Associations, providers, and hospital systems are the base stakeholders in the concerted efforts to reduce hospital re-admissions for heart failure (Bradley, et. al. 2013). The Heart Failure Society of America (HFSA) and the American Association of Heart Failure Nurses (AAHFN) have published a joint position statement addressing the need for the two organizations to work collaboratively. In their joint position statement both associations state a commitment "to optimize health outcomes among persons living with heart failure, the HFSA and AAHFN strongly advocate for the removal of scope-ofpractice barriers for nurses to allow advanced practice nurses to practice to the full extent of their educational training" (Lee et. al., 2012). Collaboration between providers is key. A joint position statement as detailed above is a key step to ensuring that collaboration is met with acceptance and that all parties trying to collaborate are supported. Members in a collaborative team to provide heart failure care services include, but are not limited to;

nurse practitioner, cardiac rehab services, dietician, case manager, bedside/charge nurse, and nurse clinician (Henry, Hull, Litwinovich, & Doxakis, 2013).

There are barriers to successful discharge from specialty care to primary care. Most notably are poor inter-provider communication and limited provider-patient communication (Tuot, et. al. 2014). While many VHA facilities have specialty services such as cardiology, heart failure and electrophysiology, infectious disease, nephrology or oncology, not all VA centers offer these services. The coordination of care and communication between patients, families and providers is critical. Access to specialty care and the ability of veterans to coordinate care with all members of the healthcare team, from primary care to specialty care, helps promote self-directed care among veterans. Fix, et.al. (2014) report "with the reorganization of primary care into Patient Aligned Care Teams (PACT) teams, the Veteran Affairs Health System (VHA) aims to ensure all patients receive care based on patient-centered medical home (PCMH) principles" (pp. S695). Many patients, however, are often followed exclusively outside of their medical home in a specialist office (Casalino, Rittenhouse, Gillies, & Shortell, 2010). The majority of survey respondents agreed that a nurse practitioner on site at the VHA to coordinate care and provide follow-up and liaison service would be beneficial.

The PCMH model has been implemented in many organizations, practices, and healthcare systems across the U.S. While the adoption of this model has increased over the years, it is not without issues. There is mixed evidence that questions whether or not the PCMH model improves care, facilitates care coordination or even saves healthcare dollars (Werner, Canamucio, Shea, and True, 2014; Yano, Bair, Carrasquillo, Krein, and Rubenstein, 2014). The need for a primary care/specialty care interface continues to grow

despite strong evidence that the medical home model is superior to other, earlier models, such as the chronic care model (Tuot, Sewell, Day, Leeds and Chen, 2014). The majority of respondents agreed that timeliness of procedures is questionable secondary to the VHA dictating where those procedures are to be done, i.e. cardiac catheterizations, or electrophysiology studies in Philadelphia. The VHA clinic has less support staff and longer wait times lending itself to Veterans having less access to care. Not being able to access electronic medical records outside of the VHA institution (remote access) can often lead to delayed care for Veterans and that reliable remote access would improve the experience using the Veterans Administration electronic medical record. The respondents also agreed that a nurse practitioner on site at the VHA to coordinate care and provide follow-up and liaison service would be beneficial.

The ultimate goal of improved access to care can be realized by evaluating the expected outcomes. Expected outcomes include: 1) better preventative care, 2) better coordinated care, 3) improved patient experience, and 4) decreased travel time to appropriate specialty care providers. The stated expected outcomes can be measured by realizing fewer missed appointments, patient reports of better access/coordination, improved provider satisfaction as noted by survey, and improved specialist initial patient visit and follow-up. These outcomes lend themselves to the overall goal of improved transitions between care settings for veterans with complex cardiac conditions and improved health outcomes (Albert, Barnason, Deswal, Hernandez, Kociol, & Lee, 2015).

Conclusions

Based on the survey findings, the leadership team can conduct small focus groups, as part of the departmental needs assessment, to further explore what was learned from

the survey. The intent was to have key stakeholders interact with each other and discuss the problems that have been identified and steps that can be taken to correct them.

Utilizing a needs assessment can help define the priorities of both parties, develop strategies for assessing the extent of the needs and determining how to move forward once needs have been identified. Perhaps the next step for this institution would be to focus on the addition of a nurse practitioner on-site to help close communication gaps, provide follow up, and maintain a consistent presence for the Veterans receiving heart failure care via a contracted provider model.

In an effort to improve the system physicians and nurse practitioners need to assist veterans in navigation the healthcare system; regardless of the care model being utilized. Many patients receive the preponderance of their care from specialty providers rather than primary care providers (Fix et al., 2014). What, if any, part of PACT principled care can be delivered in the specialty care arena? Studies that focus on outliers such as chronic conditions and specialty care can help elucidate how all patients can receive PCMH principled care in a constantly changing healthcare environment. While there are many care delivery models to provide specialty care, no one model has been identified as superior to the other. A contracted services model for providing heart failure specialty care may be the next vital step for improving Veteran access to care. Both the Lebanon VHA and the providers from Hershey Medical Center are working collaboratively to improve communication. However, much could be done by policy makers to make referrals, payments, and the EMR more efficient. Future research should focus on specialty care and the interaction between the PCMH and specialty care providers.

References

- American Academy of Family Physicians. (2008). Joint principles of the patient-centered medical home. *Delaware Medical Journal*, 80(1), 21.
- Bidassie, B., Davies, M. L., Stark, R., & Boushon, B. (2014). VA experience in implementing Patient-Centered Medical Home using a breakthrough series collaborative. *Journal of General Internal Medicine*, 29 supplement 2, S563-S57. doi:10.1007/s11606-014-2773-5
- Bradley, E., Krumholz, H., Curry, L., Horwitz, L., Sipsma, H., Wang, Y., & Piña, I. L. (2013). Hospital strategies associated with 30-day readmission rates for patients with heart failure. *Circulation. Cardiovascular Quality and Outcomes*, 6(4), 444-450. doi: 10.1161/CIRCOUTCOMES.111.000101
- Casalino, L. P., Rittenhouse, D. R., Gillies, R. R., & Shortell, S. M. (2010). Specialist physician practices as patient-centered medical homes. *New England Journal of Medicine*, `362(17), 1555-1558. doi:10.1056/NEJMp1001232
- Fix, G., Asch, S., Saifu, H., Fletcher, M., Gifford, A., & Bokhour, B. (2014). Delivering PACT-Principled Care: Are Specialty Care Patients Being Left Behind? *Journal of General Internal Medicine*, 29(2), 695-702. doi:10.1007/s11606-013-2677-9

- Fortney, J. C., Burgess, J. F., Bosworth, H. B., Booth, B. M., & Kaboli, P. J. (2011). A Re-conceptualization of Access for 21st Century Healthcare. *Journal of General Internal Medicine*, 26(Suppl 2), 639-647. doi:10.1007/s11606-011-1806-6
- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, 32(4), 1008-1015.
- Henry, L., Hull, R., Litwinovich, A., & Doxakis, L. (2013). Outcomes on Heart Failure

 Readmissions Utilizing a Nurse Practitioner and Multidisciplinary Collaborative

 Team. *Heart & Lung: The Journal of Acute and Critical Care*, 42(6), e5-e6.

 http://dx.doi.org/10.1016/j.hrtlng.2013.10.005
- Hsu, C., & Sanford, B. A. (2007). The Delphi technique: Making sense of consensus.

 *Practical Assessment, Research & Evaluation, 12(10).
- The Joint Commission (2016). Core measure sets. Retrieved from: http://www.jointcommission.org/core_measure_sets.aspx
- Kaplan, G., Lopez, M. H., & McGinnis, J. M. (n.d.). Transforming health care scheduling and access: Getting to now.
- Key Features of the Affordable Care Act (n.d.). http://www.hhs.gov/healthcare/facts-and-features/key-features-of-aca/index.html#
- Lebrun-Harris, L. A., Shi, L., Zhu, J., Burke, M. T., Sripipatana, A., & Ngo-Metzger, Q. (2013). Effects of Patient-Centered Medical Home Attributes on Patients'

 Perceptions of Quality in Federally Supported Health Centers. *Annals of Family Medicine*, 11(6), 508-516. doi:10.1370/afm.1544
- Lowery, J., Hopp, F., Subramanian, U., Wiitala, W., Welsh, D. E., Larkin, A., & Vaitkevicius, P. (2012). Evaluation of a Nurse Practitioner Disease Management

- Model for Chronic Heart Failure: A Multi-Site Implementation Study. *Congestive Heart Failure*, 18(1), 64-71. doi:10.1111/j.1751-7133.2011.00228.x
- MacDavid, J. C., Huse, I., & Hawthorn, L. R. (2013). *Program evaluation and performance measurement: an introduction to practice*. Thousand Oaks, Calif.; London: SAGE.
- Patient-Centered Primary Care Collaborative. (2014). Defining the Medical Home:

 A patient-centered philosophy that drives primary care excellence Retrieved from:

 https://www.pcpcc.org/
- Preskill H, & Jones N. (2009). A Practical Guide for Engaging Stakeholders in Developing Evaluation Questions: Robert Wood Johnson Foundation
- Rosland, A.-M., Nelson, K., Sun, H., Dolan, E. D., Maynard, C., Bryson, C., & Schectman, G. (2013). The Patient-Centered Medical Home in the Veterans Health Administration. *American Journal of Managed Care*, 19(7), e263-272.
- Robert Wood Johnson Foundation (2011). Medicare Hospital Readmissions Reduction

 Program. Accessed July 14, 2015 from:

 http://www.rwjf.org/en/library/research/2011/10/medicare-hospital-readmissions-reduction-program.html
- Sandelowski, M. (1995). Qualitative analysis: What it is and how to begin. Research in Nursing and Health, 18, 371-375.
- Tuot, D. S., Sewell, J. L., Day, L., Leeds, K., & Chen, A. H. (2014). Increasing access to

- specialty care: patient discharges from a gastroenterology clinic. *The American* journal of managed care, 20(10), 812.
- Yano, E., Bair, M., Carrasquillo, O., Krein, S., & Rubenstein, L. (2014). Patient Aligned Care Teams (PACT): VA's Journey to Implement Patient-Centered Medical Homes. *Journal of General Internal Medicine*, 29(2), 547-549. doi:10.1007/s11606-014-2835-8
- Wang, L., Porter, B., Maynard, C., Bryson, C., Sun, H., Lowy, E., & Fihn, S. D. (2012).
 Predicting risk of hospitalization or death among patients with heart failure in the veterans' health administration. *The American Journal of Cardiology*, 110(9), 1342-1349. doi:http://dx.doi.org/10.1016/j.amjcard.2012.06.038
- Watkins, R., West-Meiers, M., & Visser, Y. L. (2012). A guide to assessing needs:

 Essential tools for collecting information, making decisions, and achieving development results. Washington, DC: World Bank.
- Werner, R. M., Canamucio, A., Shea, J. A., & True, G. (2014). The medical home transformation in the Veterans Health Administration: an evaluation of early changes in primary care delivery. *Health Services Research*, 49(4), 1329-1347. doi:10.1111/1475-6773.12155