A Team-Based Approach to Increase Initiation of Self-Management Goals in Adult Patients Diagnosed with Hypertension With the Use of a Self-Management Goal Toolkit

A Scholarly Project

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

Of Doctor of Nursing Practice

By

Kristel Ramsay

Liberty University

Lynchburg, VA

March, 2023

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Scholarly Project Chair Approval:

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Abstract

Due to the high risk of cardiovascular disease and other negative complications, it is imperative that patients in the primary care clinic diagnosed with hypertension control blood pressure levels. The purpose of this scholarly project was to increase the initiation of self-management goals (SMGs) among adult males and females age 30 to 60 diagnosed with hypertension. These patients were active duty military, reservists, and dependent beneficiaries who receive care at the Navy Medicine Readiness Training Unit–Memphis. The practice change took the onus of introduction and education about SMGs off the provider and added key responsibilities to support staff, who provided handouts and education to patients via a SMG toolkit. The goal was to minimize time needed for providers to focus on SMGs and to increase the initiation of SMGs through the utilization of support staff. Through patient education about SMGs and lifestyle goal setting, the hope was to improve clinical outcomes and improve the participating patients' health. Navy Medicine Readiness Training Unit–Memphis did not have a SMG process, and had not been in compliance with Joint Commission mandates for the initiation and documentation of SMGs for patients with chronic conditions. Through staff education, training, delivery of proper educational materials via a SMG toolkit, and the attainment of information from the electronic medical record Genesis, initiation and documentation of SMGs among adult patients diagnosed with hypertension improved to 62.5% from the current baseline.

        Keywords: self-management goals, hypertension, team approach, education, toolkit, primary care.

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Dedication

This project is dedicated to my husband, Mickel, and children, Olivia and Christian, for their unyielding support and sacrifice so I could follow my dreams.

Acknowledgments

A Team-Based Approach to Increase Initiation of Self-Management Goals in Adult

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Cardiovascular disease is the leading cause of death among adults globally. Key

behavioral risk factors include sodium intake, poor diet, alcohol use, lack of physical activity,

sleep deprivation, and tobacco use. Other modifiable risk factors for cardiovascular disease

include abdominal obesity, non-high-density lipoprotein cholesterol, and hypertension (HTN;

Yusuf et al., 2020). Hypertension is considered the most important reversible risk factor for

worldwide morbidity and mortality in regard to cardiovascular disease (Constanti et al., 2021).

According to the Centers for Disease Control and Prevention (n.d.), in the year 2020, only 25%

of adults with HTN had their blood pressure controlled, and almost 700,000 deaths in the United

States listed HTN as a contributing factor. High blood pressure costs Americans over 130 billion

dollars a year (CDC, n.d.). Adjusting behaviors to positively affect blood pressure levels through

the establishment and support of self-management goals (SMGs) may be beneficial to overall

health. Prior to the implementation of this project, Navy Medicine Readiness Unit–Memphis

(NMRTU-Memphis) did not have a standardized process to initiate SMGs for HTN. The

responsibility for initiating and supporting this program cannot sit solely upon the shoulders of

providers. The goal of this project is to initiate a team-based approach to a SMG program in

support of patients in need of initiating goal setting to assist in the control of blood pressure

levels.

Background

Self-Management Goals are evidence-based tools to assist patients in developing action

plans and realistic goals to improve clinical outcomes, and their adoption has been encouraged

by major healthcare entities. The Joint Commission (2022) has identified SMGs as an element of

performance to combat chronic conditions that must be implemented for at least one chronic

condition to comply with accreditation standards. SMG requirements, per the Joint Commission

(2022), must meet three separate elements of performance. In the Provision of Care chapter,

element of performance 44 deems SMGs as identified and agreed upon goals incorporated into

the patient's treatment plan. Self-management goals are developed in partnership with patients

based on criteria established by the organization. The clinic has deemed each patient who

initiates SMGs use Specific, Measurable, Achievable, Relevant, and Timely (SMART) guidance

when creating SMGs. Provision of Care element of performance 28 identifies the primary care

clinician and the interdisciplinary team educate the patient on SMGs and techniques based on the

patient's individual needs. Lastly, in the Record of Care Treatment and Services chapter element

of performance 28 mandates the clinical record includes the patient's SMGs and the patient's

progress toward achieving those goals.

The purpose of this project is to implement a new process to increase the initiation of

SMGs for adult patients age 30-60. The practice change took the onus of introduction and

education regarding SMGs off the provider and added key responsibilities to support staff, who

provided handouts and education, maintained documentation, and conducted follow-up for

SMGs. These changes were intended to minimize the time providers need to focus on SMGs and

to increase the initiation of SMGs by pioneering new options of establishment and

implementation (Reiland et al., 2019). The chronic condition selected was HTN. Prior to the

onset of this project, NMRTU-Memphis was not in compliance with the initiation of SMGs for

patients with chronic conditions based on the clinic's 2021 Joint Commission survey.

Problem Statement

Prior to the implementation of this project, NMRTU-Memphis did not have a successful

standardized process to enhance the initiation of SMGs for adults diagnosed with HTN. The compliance rate for initiation of SMGs ranged from 20% to 47%, which resulted in the clinic's failure to meet Joint Commission standards related to adult outpatient beneficiaries and the initiation of SMGs for an organizationally identified chronic condition.

Purpose of the Project

The purpose of this project is to increase the initiation of SMGs for adults with HTN from baseline to 80% through a team approach by offering a toolkit and staff and patient education.

Clinical Question

Would education and a toolkit make staff feel more equipped to assist patients with SMGs, and would adult outpatient beneficiaries ages 30–60 diagnosed with HTN show improvement in initiating SMGs from baseline to 80% over a 30-day period due to the application of a team approach in comparison to usual care and education?

Section Two: Literature Review

Levels of evidence from research studies are used to assess the potency of a proposal for a particular test or treatment. The potency of a recommendation indicates the projected level of influence of a newly introduced practice guideline and the likelihood of its impact and longevity in care. In the researcher's quest to find evidence of the impact of education and toolkits on staff and SMG initiation, several research articles were explored concerning the topic. Suitable research on this topic included 25 peer-reviewed articles which were separated based on their different levels of evidence according to Melnyk's hierarchy (Melnyk & Fineout-Overholt, 2019).

Search Strategy

The Liberty University Jerry Falwell Library was utilized as a resource for conducting research regarding SMGs. This library utilizes databases such as the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Nursing & Allied Health database (ProQuest). The terms "self-management goals," "self-management goals hypertension," "PCMH self-management," and "self-management care community" were placed in the search engine, which resulted in 133,828 sources found. The results were narrowed down by limiting the source type to peer reviewed, journal article, and full text. 27,811 articles were left to peruse. Further, the search was modified to include only articles published within the last five years to ensure the most up-to-date information was used. There was also a reduction of article options due to the use of English language-only research. Twenty-five articles were pulled to compare information regarding SMG initiation, compliance, team approach, barriers and community-based support (Murphy et al., 2018).

Critical Appraisal

The Scholarly article "Effectiveness of A Nurse-Led Multidisciplinary Self-Management Program for Patients With Coronary Heart Disease in Communities: A Randomized Controlled Trial" (Jiang et al., 2020) appraised the efficiency of nurse-led multidisciplinary management on self-management activities. The article assessed a recruited sample of 144 adult patients who had a diagnosis of coronary artery disease. Recruitment lasted from September 2016 through June 2017, and participants were randomly assigned to either an intervention or control group. The intervention group received six months of education, consultations, individual assessment, and follow-up. The control group received standard care. The results of the study suggest a multidisciplinary approach to improving self-management behaviors ultimately reduced

emergent and urgent care visits. Limitations to this study include a small sample size and no

long-term follow-up for chronic disease (Jiang et al., 2020).

The article "Development and Evaluation of a Nurse-Led Hypertension Management

Model: A Randomized Controlled Trial" (Zhu et al., 2018) described a study conducted to

determine if a nurse-led management model to tackle HTN in the community would be fruitful

for patients. This study was conducted between August 2012 and September 2013 in China. A

total of 134 participants were recruited from a local community center. The participants were

given education, annual assessments, in-home follow-ups, and educational handouts. To properly

carry out interventions, nurses were trained for 36 hours prior to participant care. The outcomes

of this study were positive, as they showed the importance of properly educating patients in HTN

management. The study also showed that participants had blood pressure reduction, increased

self-management skills, and increased patient satisfaction with overall health. Limitations of this

study include a lack of generalizability due to the small sample size and location. The location of

the study was urban so it is not known if this process would work in a more rural area (Zhu et al.,

2018).

The article "Impact of Multidisciplinary Chronic Disease Collaboration Management on

Self-Management of Hypertension Patients: A Cohort Study" (J. Huang et al., 2022) described a

prospective cohort study that aimed to assess the ability of a multidisciplinary team to manage

patients with HTN. The sample consisted of patients diagnosed with HTN who received medical

care in an inpatient unit for cardiovascular care from December 2018 to December 2019. The

facility was located in China. The recruitment happened over a span of 8 months, and ultimately,

750 patients received treatment at the hospital. The control group and intervention group both

consisted of patients 18 years of age and older. The groups were evenly divided by sex and age

range. All participants were at least high school educated and promised to comply with the

conditions of the study. All participants were educated on blood pressure measurement and self-

management, and all completed an assessment of self-management ability based on a 5-point

Likert scale. The control group was given HTN oral medication and education on the importance

of lifestyle modification before discharge, and when discharged, were given educational

handouts. The intervention group received the support of a multidisciplinary collaborative team

who guided the group and provided diet education and plans, blood pressure monitoring, and

other individualized and group interventions. The study concluded that the interventions

positively impacted blood pressure control in hypertensive patients and enhanced the quality of

life and the satisfaction level of the hypertensive patients. A limitation of this study included that

the self-management assessment was conducted at a single center instead of a multicentered

assessment (J. Huang et al., 2022).

The journal article "Self-Care Management for Hypertension in Southeast Asia: A

Scoping Review" (Irwan et al., 2022) aimed to analyze and chart evidence of self-care

management of hypertensive individuals residing in Southeast Asian countries. The sample

consisted of 1,667 studies based in Southeast Asia from 2006 to 2021. There were 57 studies that

met the inclusion criteria and were reviewed via Systematic Reviews and Meta-Analyses

Extension for Scoping Reviews. The five stages of the scoping review framework were

completed to ensure proper reporting and fidelity. This systematic review concluded that

increasing self-care management of HTN in Southeast Asia could necessitate a multifaceted

approach including targeting individual choice and external factors. Limitations to this study

include the use of only English and Bahasa material for analysis, which may exclude additional

information that would be beneficial to further understanding the importance of multifaceted

SMG support (Irwan et al., 2022).

In the article "Do Patients Actually Do What We Ask," (Schwartz et al., 2018) aimed to report the fidelity of high-risk patients to the self-management algorithm set by the Targets and Self-Management for the Control of Blood Pressure in Stroke and At-Risk Groups (TASMIN-SR). Targets and Self-Management for the Control of Blood Pressure in Stroke and At-Risk Groups (TASMIN-SR) is a randomized control trial that compares self-management with usual care in the control of hypertension in patients with history of stroke and other comorbidities. The sample consisted of participants with HTN age 35 or older who had one or more comorbidities. Participants were recruited by 56 general practice clinics. Intervention patients were twice trained and were asked to conduct self-management of blood pressure at home via self-monitoring with self-titration of medication the first week of each month. Control patients had usual care. Follow-up readings were conducted at months six and 12. Patients in the intervention group were successfully trained to monitor their blood pressure and make appropriate management decisions. Self-management caused patients' blood pressure to be significantly lowered. This randomized control trial had limitations, as it only included patients who were willing and able to follow a self-titrating algorithm. Only 65% remained self-monitoring at 12 months (Schwartz et al., 2018).

The goal of the study documented in the article "Self-Care of Hypertension of Older Adults During COVID-19 Lockdown Period: A Randomized Controlled Trial" (Alsaqer & Bebis, 2022) was to assess the effects of a public health nursing intervention plus mobile health applications for HTN management on enhancing self-care, quality of life, and blood pressure during the pandemic. The sample consisted of 120 patients aged 55 and above diagnosed with HTN who were on HTN medication and had access to the internet and a smartphone. This

single-blind randomized control trial design was carried out between June and September 2020

in King Abdullah University Hospital in Jordan. Participants were randomly assigned to one of

three groups. Group 1 and 2 were the intervention groups, Groups 3 was the control group.

Intervention Group 1 received nursing interventions including HTN education based on World

Health Organization guidelines and four free mobile applications to assist with lifestyle, health,

and blood pressure. They also received a weekly phone call concerning self-management and

blood pressure over a three-month period. Group 2 was only given four free HTN mobile phone

applications to assist with lifestyle, health, and blood pressure, and Group 3 received usual care.

Results of the study revealed that at three months post-intervention, Group 1 patients had a

significant reduction in blood pressure. Limitations of the study included only three months of

follow-up instead of six to properly assess the quality of life and self-management of chronic

disease (Alsaqer & Bebis, 2022).

The purpose of the quasi-experimental control trial described in the article "Effectiveness

of a Self-Care Education Program on Hypertension Management in Older Adults Discharged

From Cardiac-Internal Wards" (Farahmand et al., 2019) was to evaluate the effectiveness of a

self-care education discharge program with telephone follow-ups in managing HTN in older

patients. The sample consisted of 56 patients age 60-79 who had a diagnosis of HTN and were

recently discharged from internal medicine and cardiac inpatient units located in Isfahan, Iran.

The patients were randomly assigned to an intervention or control group. The intervention group

received a 60-minute self-care education discharge program and four telephone follow-ups

biweekly. The intervention patients also received educational materials. Blood pressure was

measured at baseline and at 8 and 12 weeks after discharge. The control group received care as

usual. The results of the study showed that mean blood pressure levels were reduced in the group

that received the intervention and were significantly more controlled at 12 weeks than in the control group. Limitations of this study include lack of long-term follow-up as well as polypharmacy, other comorbidities, and lack of permanent access to some patients (Farahmand et al., 2019).

The systematic review and meta-analysis article "Self-Management of Non-communicable Diseases in Low- and Middle-Income Countries: A Scoping Review" (Hearn et al., 2019) summarized the nature and effectiveness of past interventions that have enabled the self-management of non-communicable diseases in low- and middle-income countries. The sample consisted of 568 articles; 133 were reviewed, and only 36 were used for research. The articles were from three continents and 21 countries and focused on the effects of self-management on HTN, diabetes, and heart failure. The researchers pulled information from articles published between January 2007 and December 2018. Search terms used were "self-management," "non-communicable diseases," and "low-income countries" and "middle-income countries." The results of the study revealed self-management led to improved health outcomes and quality of life in low- and middle-income countries. Limitations of this study include a lack of analysis on what types of interventions were most likely to result in positive patient outcomes and there were no research articles that were not in English (Hearn et al., 2019).

The quasi-experimental study "Examining the Effect of the Training Program by Using the Health Belief Model in Performing Self-Care Behaviors of Rural Patients Having High Blood Pressure" (Afshari et al., 2022) was conducted to determine the impact of an educational program on self-care behaviors of rural patients diagnosed with HTN. The sample included 100 hypertensive patients recruited from four health centers in rural areas in Tuyserkan, Iran, in 2019. Mean age was 64, most participants were women, and most participants were illiterate. A

random sampling of patients from four health centers was used. Participants from the

intervention group received three educational sessions, and those in the control group did not.

Three-part questionnaires were used to evaluate the patients' understanding of HTN and barriers

to self-care. Results of the study revealed the group that received the intervention had better

attitudes and better performance of self-care. Limitations of this study include self-reporting and

the short time between intervention and final evaluation (Afshari et al., 2022).

In the randomized control trial "Examining Elevated Blood Pressure and the Effects of

Diabetes Self-Management Education (DSME) on Blood Pressure among a Sample of

Marshallese with Type 2 Diabetes in Arkansas" (McElfish et al., 2021), researchers reviewed the

reference point frequency of those diagnosed with HTN and those with undiagnosed high blood

pressure and inequalities in health care access between the two. The sample in this study

included 221 Marshallese adults located in Northwest Arkansas who had a diagnosis of Type 2

diabetes. The method examined the effects of diabetes self-management education interventions

on participants' blood pressure, comparing an adapted-family and standard diabetes self-

management education. The results revealed diabetes self-management teaching resulted in

improvement of clinical outcomes, including reduction of blood pressure. Limitations to this

study included all participants were Marshallese and located in Arkansas, and all participants had

blood pressure interpretations suggestive of HTN at baseline (McElfish et al., 2021).

The aim of the study described in the article "Effects of Self-Management Programs on

Behavioral Modification Among Individuals With Chronic Disease: A Systematic Review and

Meta-Analysis of Randomized Trials" (Kim et al., 2021) was to analyze the extent of the

combined effects of self-management on behavioral modification. Twenty-five randomized

control trial articles published from 2000 to 2020 were pulled from PubMed, CINAHL,

ScienceDirect, SCOPUS, Web of Science, Embase, Cochrane Library, DBpia, and KISS that

focused on the utilization of self-management programs for chronic diseases such as HTN,

diabetes mellitus, hyperlipidemia and obesity. The results of this study specify self-management

programs can significantly improve diet, physical activity, and overall health in those

participants with chronic diseases. The limitation of this analysis was that the effects were

assessed immediately after interventions with no ongoing follow-up (Kim et al., 2021).

This article "Self-Management of Postnatal Hypertension: The SNAP-HT Trial" (Cairns

et al., 2018) evaluated the effects of self-management on blood pressure on postpartum women.

The sample included women age 18 years of age and older with the diagnosis of gestational HTN

or preeclampsia that necessitated treatment. The sample of patients were recruited from hospital

sites in England from 2015 to 2016. One hundred fifty-four patients were eligible to participate

and 101 consented, but only 82 participated. Postpartum women were randomized at a baseline

visit postdelivery. They were placed in self-management or usual postnatal care by computer

randomization, with 45 assigned to self-management and 46 to usual care. Participants in the

intervention group attended five follow-up visits over a six-month period. The randomized

control trial resulted in lower blood pressure in the group that received self-management

interventions. Limitations of this study included that the randomization rate fell over time and

that the majority of patients were Caucasian and middle class, which did not represent the total

population (Cairns et al., 2018).

The purpose of the article "The Effect of Self-Management Support on Knowledge

Level, Treatment Compliance and Self-Care Management in Patients with Hypertension" (Kurt

& Gurdogan, 2022) was to determine if self-management support given to patients with HTN

increased knowledge level, treatment adherence, and self-care management. The study also

assessed changes in patients' blood pressure post-self-management support. Patients with

diagnosis of HTN ages 18–65 were recruited from internal medicine and cardiology clinics in

Turkey. Patients who had a change in HTN medications within the last 30 days were not

recruited. A total of 137 participants were included. Of these patients, 69 received the

intervention, and 68 were placed in the control group. Data were obtained utilizing the Patient

Information Form 11, "Hypertension Knowledge-Level Scale," "Hill-Bone Compliance to High

Blood Pressure Therapy Scale" and "Self-Care Management Process in Chronic Illness Scale."

Two interviews were completed three months apart, and the intervention group was given self-

management support including education and blood pressure measurement skills. The study was

conducted from 2017 to 2018. This randomized control trial resulted in increased HTN

knowledge, adherence to HTN treatment and self-care management, as well as significant

decreased blood pressure levels in the intervention group. There are no limitations discussed in

the study (Kurt & Gurdogan, 2022).

The article "The Effectiveness of Electronic Health Interventions on Blood Pressure

Control, Self-Care Behavioral Outcomes and Psychosocial Well-Being in Patients With

Hypertension: A Systematic Review and Meta-analysis" (Ma et al., 2019) aimed to identify the

delivery mode and tactics used by current e-health interventions and scrutinize the effectiveness

of e-health on blood pressure control and self-care behavioral outcomes. Fifteen articles were

chosen that met established inclusion criteria from 10 English and two Chinese databases. The

databases were searched over a three year period. Databases used included Cochrane Database of

Systematic Reviews, Cochrane Central Register of Controlled Trials, Embase, Joanna Briggs

Institute EBP Database, MEDLINE, CINAHL Plus, PsycINFO, SCOPUS, Web of Science and

INSPEC, China Journal Net, and WanFang Data. Two reviewers autonomously chose potential

articles. Results of the study revealed an e-health intervention assisted in the reduction of systolic blood pressure and weight and improved diet. There were no limitations noted in the study (Ma et al., 2019).

The purpose of the article "Does Self-Monitoring and Self-Management of Blood Pressure After Stroke or Transient Ischemic Attack Improve Control? TEST-BP, a Randomized Controlled Trial" (Davidson et al., 2018) was to determine whether guided self-management of blood pressure treatment would result in lower blood pressure levels and better control, as opposed to usual care in hypertensive patients with a recent stroke or transient ischemic attack. Patients were adults with a recent mild/moderate stroke or transient ischemic attack which required blood pressure medications for secondary prevention. Patients with life expectancy of less than six months or with a cognitive impairment were excluded. At enrollment, participants were randomized via a concealed web-based system to either a control group, a self-monitoring group, or a treatment and self-monitoring group. Results of the study revealed reductions in blood pressure were clinically significant in both groups who participated in self-monitoring. The limits of this randomized control trial included that home monitors may have introduced measurement bias and that participants' medications may have masked the other interventions implemented (Davidson et al., 2018).

The scholarly journal article "Disentangling Self-Management Goal Setting and Action Planning: A Scoping Review" (Lenzen et al., 2017) presents a qualitative systematic review of setting SMGs and action planning. The goal of the review was to attain a better understanding of the various classifications of SMGs through a review of 58 articles pulled from 9,115 retrieved literature items. The researchers recommended the use of action plans to formulate goals. The research content analyzed was drawn from PubMed, CINAHL, PsychINFO, and Cochrane. The

articles pulled met the inclusion criteria of focusing on chronically ill patients age 19 and older

who set SMGs in collaboration with health care providers or independently. Terms used to locate

research material were "goal setting" and/or "action planning" or pertinent synonyms. Exclusion

criteria included studies focusing on adolescents and research done in settings not participating

in ambulatory medicine. The limitations of this study included the use of concepts that varied in

terminology, which may have resulted in pertinent articles being missed. Strengths of the article

included the use of search engines without date restrictions so there was a large number of

articles that met the criteria. The research articles were also reviewed by two researchers to

enhance trustworthiness (Lenzen et al., 2017).

The study titled "Exploring Interventions to Increase Primary Care Providers' Use of

Self-Management Goals" (Reiland et al., 2019) was conducted with the goal of increasing the

knowledge and skills of providers working in a primary care medical home clinic to better assist

in the construction and documentation of SMGs. The providers selected worked in a primary

care medical home clinic and cared for patients diagnosed with HTN and diabetes. Provider

motivational interview education was conducted online and face-to-face. A non-randomized

control trial was used to evaluate electronic medical records for SMG documentation after

training. Unfortunately, four weeks after completion of the intervention, there was no change in

documentation. The providers cited not having enough time to devote to setting SMGs with

patients due to lack of resources and workload. Limitations of this study included a short time

from implementation and evaluation. Strengths of this study included findings that the use of

nursing and other support staff may be a viable possibility to support SMGs, which has been

demonstrated in the literature (Reiland et al., 2019).

The goal of the article "Effectiveness of Self-Management on Adherence to Self-Care

and on Health Status Among Elderly People With Hypertension" (Putri et al., 2021) was to

determine the proficiency and outcome of adherence to SMGs in elderly participants diagnosed

with HTN. The sample consisted of 134 elderly patients ages 60–74 diagnosed with HTN living

in Pekanbaru, Indonesia. This study was quasi-experimental, and a pre- and post-assessment

were conducted on an intervention group with usual care for the control group. The intervention

group received self-management support via home visits. The results of this study concluded that

nurse and family support coupled with SMGs for elderly patients living with HTN resulted in

improved outcomes. Limitations of this study included the participants' level of education, which

negatively affected their health literacy (Putri et al., 2021).

      The research article "Supporting Self-Management for People With Hypertension: A

Meta-review of Quantitative and Qualitative Systematic Reviews" (Shahaj et al., 2019) was

designed to obtain information on participants diagnosed with HTN and their health literacy in

regard to self-management of blood pressure and elements of patient support. The sample

included 29 quantitative and six qualitative studies that produced information from 544 studies

of self-management support for HTN. These studies were selected from randomized control

trials utilizing Practical systematic Review of Self- Management Support for long-term

conditions (PRISM) and electronic databases which included Medline, Embase, CINAHL,

PsychINFO, Cochrane, Allied and Complementary Medicine Database, and British Nursing

Index. The results of this study concluded that multifaceted self-management can assist with the

reduction of blood pressure. Limitations of this study included the use of search terms such as

"supported self-management" that were not widely used, which may have resulted in missed

opportunities to obtain important research articles. Strengths of the research conducted were

team training, quality check, and an interprofessional approach that decreased the potential

subjectivity when obtaining research articles. This method was utilized to decrease bias and

errors in the collection of research (Shahaj et al., 2019).

The next research article, "Communicating With Older Adults With Long-Term

Conditions About Self-Management Goals: A Systematic Review and Thematic Synthesis"

(Lawless et al., 2021) was designed to assess communication between health care providers,

elderly patients, and caregivers regarding self-management. The sample consisted of 898 records

on patients with a mean age of 60 from eight different studies. This systematic qualitative review

searched nine electronic databases. Two independent reviewers used a two-stage process to

review discrepancies in results. The results of the study suggested that health care providers must

prepare the older population to engage in goal-setting by employing patient-centered resources to

assist in implementing realistic and meaningful goals. The limitations of this study were that

research was collected from studies conducted in high-income Western countries that did not

adequately represent all patients. An additional limitation was none of the studies included

patient outcomes or additional patient demographics (Lawless et al., 2021).

The article "Impact of Mother-Daughter Relationship on Hypertension Self-Management

and Quality of Life: Testing Dyadic Dynamics Using the Actor-Partner Interdependence Model"

(Shawler et al., 2018) examined the effects of a good mother-daughter relationship on self-

management of HTN. The sample consisted of 51 senior mothers age 65 and older who have a

diagnosis of HTN and also have an adult daughter who gives support to the mother. The study

required that the participants be English-speaking. This longitudinal predictive research study

utilized either Lawton Instrumental Activities of Daily Living Scale and/or assistance with

Activities of Daily Living on the Katz Activities of Daily Living Scale to assess support of

mother from daughter. This cohort study concluded that relationship quality between female

children and their mothers positively affected mother's and daughter's blood pressure self-management. This suggests the importance of flexible interactive styles of approach to goal-setting. A limitation identified was that less than 50% of daughters had HTN. For a better picture of the impact on HTN of daughters, 100% of daughters participating should have a HTN diagnosis (Shawler et al., 2018).

The purpose of the article "Hypertension Self-Management in Socially Disadvantaged African Americans: The Achieving Blood Pressure Control Together (ACT) Randomized Comparative Effectiveness Trial" (Boulware et al., 2020) was to appraise the influence of self-management interventions among socially disadvantaged African American adults diagnosed with HTN. The sample consisted of adult African Americans diagnosed with HTN who were beneficiaries of care at an urban ambulatory care clinic in Baltimore, Maryland. One hundred fifty-nine patients, all of whom were English-speaking, were randomly assigned to intervention groups. This cohort study consisted of a 12-month long randomized comparative effectiveness trial that assessed blood pressure control. The results of the study showed a 16% improvement in systolic blood pressure in all participants from baseline to 12 months. Study limitations included that the anticipated recruitment number of 402 was not met. This study concluded that different types of interventions, including SMGs, can have a positive impact on blood pressure levels among African Americans (Boulware et al., 2020).

The goal of the article "Effectiveness of Self-Management Support Interventions for People With Comorbid Diabetes and Chronic Kidney Disease: A Systematic Review and Meta-analysis" (Zimbudzi et al., 2018) was to investigate the effectiveness of self-management support intervention in improving patient outcomes. Information was obtained via a systematic review of randomized control trials found in an electronic database from January 1, 1994, to December 19,

2017, that had been conducted on adult patients with diabetes and chronic kidney disease.

Outcomes of the study concluded a reduction in blood pressure levels and glomerular filtration

rates. A limitation of this article was the exclusion of studies that were not published in English.

The article concluded that the use of patient education, health care provider and patient

interaction, and reminders of SMGs were associated with improved patient outcomes (Zimbudzi

et al., 2018).

The article "Effects of Self-Management Programs on Blood Pressure, Self-Efficacy,

Medication Adherence, and Body Mass Index in Older Adults With Hypertension: Meta-analysis

of Randomized Controlled Trials" (Van Truong et al., 2021) described a research study

conducted with the goal of evaluating self-management interventions and their impact on HTN.

A systematic review of randomized control trials pulled articles published from 1999 to 2019

from CINAHL, Cochrane, Library, Embase, Ovid-Medline, PubMed, Scopus, and Web of

Science. These studies focused on adults diagnosed with HTN and other comorbidities age 60–

79. Study limitations included a large number of interventions that would produce severe bias in

results and the sample of only elderly patients. Results of this study concluded that self-

management is beneficial in improving blood pressure levels (Van Truong et al., 2021).

The goal of the article "Effectiveness of Self-Management Support In Maintenance

Hemodialysis Patients With Hypertension: A Pilot Cluster Randomized Controlled Trial" (B.

Huang et al., 2018) was to evaluate the impact of self-management on patient health and HTN.

This randomized control trial used a sample of patients who were actively on hemodialysis and

received one of two options of support: a self-management support group to include motivational

interviewing, or routine education and care. The participants suffered from HTN and received

hemodialysis over a 12-month period. The participants were age 18 and older and received care

at Peking Union Medical College in China. Excluded from the study were those with a life

expectancy of six months or less or those who could not provide consent. Limitations of the

study included that patients received care at only one hospital and that the intervention lasted

only five weeks. The results of this study concluded that those with hemodialysis and other

comorbidities would benefit from self-management interventions (B. Huang et al., 2018).

Synthesis

Research has suggested that SMGs can have a positive impact on the health of the patient

if support, guidance, and education are aligned (Zimbudzi et al., 2018). Research also suggests

that it is important to be innovative with SMGs, and the burden of patient initiation and support

should not be placed solely on the provider. Nurses, support staff, and family can benefit from

education and positively impact patient outcomes regarding SMGs (Putri et al., 2021).

Technological support such as smart phone applications and follow-up phone calls have a

positive effect on patient outcome in regard to SMG compliance and reduction of blood pressure

(Alsaqer & Bebis, 2022).

Conceptual Framework/Model

The conceptual framework applied in this scholarly project is the Iowa Model. The Iowa

Model was utilized due to the alignment of mechanisms used to pinpoint evidence-based needs.

The SMG for HTN project was triggered because of a Joint Commission accreditation mandate

shortfall and the upturn in beneficiaries diagnosed with HTN. This trigger was identified as an

opportunity to expand the clinical practice in hopes of improving patient outcomes. Triggers

develop due to health initiatives, clinical alarms, patient concerns, and organizational and state

influences. Due to this trigger, an opportunity to contemplate further impact or change arose.

Although multiple topics of impact were discussed, SMGs were prioritized due to their impact

on accreditation, priority as an organizational initiative, patient outcomes because of the increased rate of adult patients diagnosed with HTN, and nonimpact on budget (Melnyk & Fineout-Overholt, 2019).

Summary

In summary, a significant amount of information was found that supports the use of SMGs and their positive impact on chronic conditions. Findings supported the importance of ancillary staff in the process of initiation, support, and evaluation of SMGs in pursuit of clinical goals. This responsibility must not fully fall upon the provider but be shared by the patient, their family, and support staff (Reiland et al., 2019). Gaps in research included non-specificity of which process is best (Putri et al., 2021). This project provided a team approach to offer participatory opportunity, staff and patient education, and delivery of instruments to increase staff knowledge and confidence in the SMG process and the initiation of SMGs for adults with HTN from baseline to 62.5%.

Section Three: Methodology

This quasi-experimental, evidence-based practice project gathered quantitative data. This study is classified as a Level 3 study according to the Melnyk framework. The study assessed the effectiveness of education and a toolkit.

Design

A quasi-experimental study is utilized to identify a cause and effect between a dependent and independent variable. The utilization of this design assisted in identifying if team-based SMG education and toolkit education helped staff feel more equipped to assist patients with SMGs, and if the team-based approach combined with the SMG toolkit increased the initiation of SMGs for patients with HTN. Outcomes were assessed via pre- and post-Likert scale assessment

(Murphy et al., 2018).

Measurable Outcomes

Data were analyzed from the staff Likert scale assessments pre- and post-intervention. The initial Likert scale assessment was administered after consent was collected. After the SMG staff education was conducted, the post-intervention Likert scale was administered to assess if the staff felt more equipped to assist patients with SMGs. The following measurable outcomes were assessed using a Likert-style scale :

1. Can properly describe the impact of uncontrolled HTN

2. List criteria for SMART goals

3. Discuss the importance of implementation and compliance with SMGs

4. Feel appropriately educated about the SMG education toolkit

5. Have proper tools to support SMGs for HTN

Population

The data attained from measurable outcome one and measurable outcome two was the data gathered for my DNP project.

Setting

This study was conducted at NMRTU-Memphis, a small military branch health clinic located in Millington, Tennessee. This clinic is a part of a larger military medical facility, Navy Medicine Readiness Training Command-Pensacola. This conglomerate of military treatment facilities consists of a large super clinic located in Pensacola, Florida, and 11 branch clinics located across five states. NMRTU-Memphis is accredited by the Joint Commission and cares for beneficiaries that are active duty, reservists under orders, retirees, and their family members that are insured under Tricare Prime. Beneficiaries must live within a 50-mile radius of the

clinic. The primary care clinic is open Monday through Friday 0700–1600 and averages over 20,000 appointments, 45,000 telephone consults, and 9,600 referrals annually. Currently, there are 5,100 patients embedded in a panel of three physicians, one physician assistant, and two nurse practitioners. The clinic also employs three registered nurses, two licensed practical nurses, four clerks, 15 corpsmen, and one medical assistant. There is an embedded psychologist who assists with mild behavioral health needs. The clinic has x-ray capabilities and limited lab capabilities. There are both secure messaging capabilities and on-site pharmacy services. Stakeholders for this project included the department head/senior nurse, senior medical officer, and support staff. Leadership and team members were supportive of this evidence-based project and were instrumental in moving the project forward through leadership, clinical guidance, patient care, and support.

Figure 1

Organizational Structure
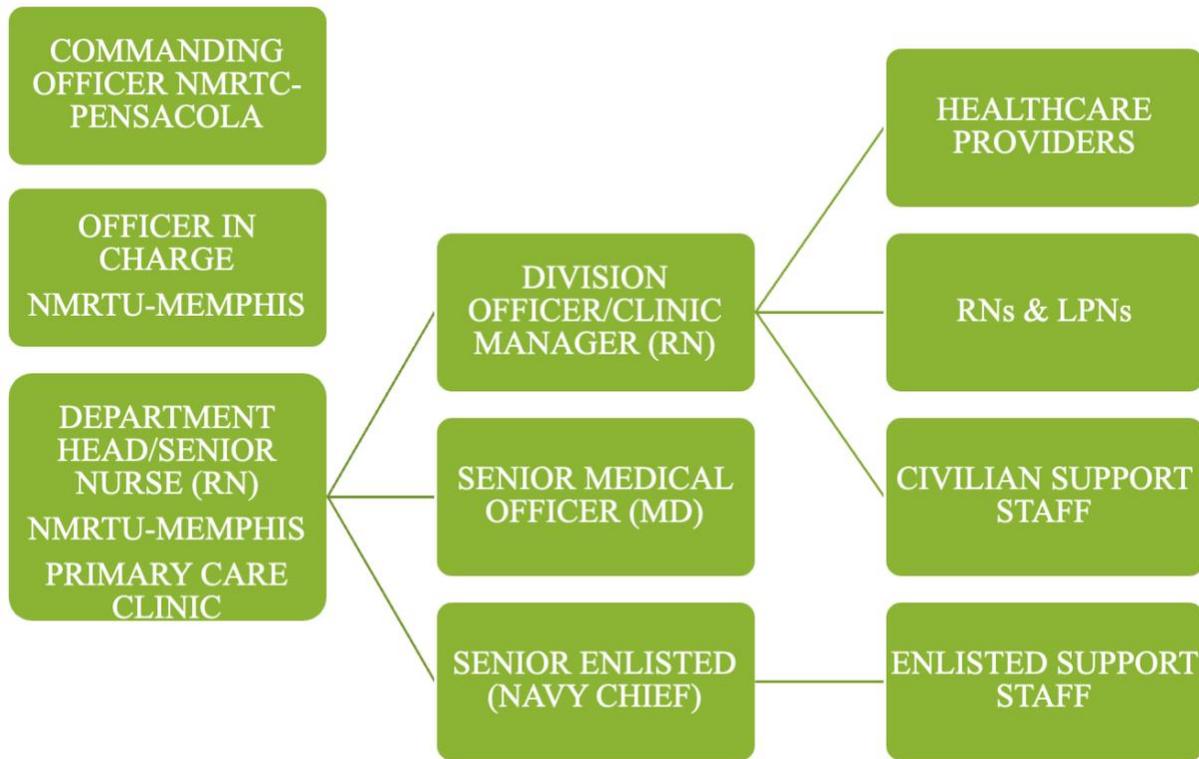
The mission and values of NMRTU-Memphis are to "provide compassionate, top quality

primary care, delivered in a highly efficient manner. We are committed to operational readiness,

outstanding customer service, and always delivering world-class health care" (Health.mil, 2022,

para.1). The SMGs project aligns with the mission and values of NMRTU-Memphis because it

supports the commitment of the medical team to assist active-duty service members, retirees,

reservists, and their families with evidence-based care. Evidence-based care is top-quality care

that supports overall health. Evidence-based practice is necessary in health care and consists of a

culmination of best research evidence, clinical expertise, patient preference, and the use of

available resources with the goal of improving patient outcomes while reducing costs (Lloyd et al., 2016). Self-Management Goals can improve patient outcomes and overall health, which can positively impact overall operational readiness.

Population

The patient population included in this study consisted of 372 male and female beneficiaries age 30 years to 60 years of age with a medical diagnosis of HTN who received care at NMRTU-Memphis. This population age range was selected due to HTN being the most common chronic condition affecting this population as evidenced by a data pull of the current patient population via the electronic medical record (EMR). The military base Naval Support Activity Midsouth comprises of very senior in-rank military members within its active-duty population. There were 5,100 patients total, with 4,583 patients between the age of 30 and 60. The personnel on base consists of 2,800 patients on active duty with many military families rotating in and out of the clinic for care every three years. Patients embedded in the clinic range in age from 2 to 64. All patients are insured under Tricare Prime with referral support conducted by Humana to civilian providers when specialty care is needed. The clinical team population consists of 15 corpsmen, one medical assistant, three registered nurses, two licensed practical nurses, six primary care providers, and one psychologist. All employees are Basic Life Support certified, have completed clinical competencies, and work at NMRTU-Memphis Primary Care clinic.

Ethical Considerations

Initiation, participation, compliance, and follow-up survey questions for SMG were totally voluntary for all participants. Participants could discontinue SMGs without any obligation to continue. All participants have the right to privacy, so personal information is safeguarded.

Privacy protocols were followed, and no personally identifiable information was taken out of

clinical spaces. All handling of personal information via EMR was password- and token card-

protected. Consent and Likert scale questionnaire results were safeguarded in a locked drawer

and via a token card-protected computer (Murphy et al., 2018).

Staff were reminded that the patient load is much more than just a physical assignment; it

is a spiritual mission placed in their midst to allow them to share love and healing. This can be

done through kind words and encouragement. If there was a specific need for spiritual support,

staff were encouraged to align the patient with chaplain support. The Bible encourages each of us

to take care of ourselves in a godly manner: "So whether you eat or drink or whatever you do, do

it all for the glory of God" (New International Version, 2018, 1 Corinthians 10:31). Self-

Management Goals can be an intricate part of caring for our bodies and overall health.

The DNP project team (the DNP student and chair) completed research ethics training via

the Collaborative Institutional Training Initiative, which included protection of human subjects'

modules. This scholarly project was submitted and approved via Liberty University's

Institutional Review Board. The project site does not have an Institutional Review Board

process, but the project was approved and supported by site clinical and administrative

leadership.

Data Collection

Quantitative data were collected. Initially, the records of 327 adults ages 30–60

diagnosed with HTN were pulled from the EMR utilizing the ICD code I10 "essential

hypertension." This search was conducted by the health promotion nurse and took four business

days to receive. Quantitative data gathered via a pre- and post-SMG education Likert scale

questionnaire were analyzed to determine if the team-based education and toolkit helped staff

feel more equipped to assist patients with SMGs. The post-education Likert scale questionnaire

was conducted after education and before the initiation of tool use. The pre- and post-assessment

data were collected by the researcher who is also an Advanced Practice Registered Nurse and

DNP student.

A retrospective data collection was conducted one month after staff SMG training.

Quantitative data were collected between 20 January and 18 February 2023. First, the EMRs of

the patients who were seen in the primary care clinic for an appointment with ICD 10 code I10

"essential HTN" were pulled by enlisted clinic staff. The records pulled were reviewed to

identify patients between ages 30 and 60. Then, the EMRs pulled were evaluated to identify

those who initiated SMG with SMART guidance and those who declined participation in SMG.

These evaluations were conducted by the researcher. Documentation must have clearly shown

that the patient had initiated SMGs utilizing Specific, Measurable, Achievable, Relevant, and

Timely (SMART) guidance to be credited one point as an initiated SMG. If the patient was

offered SMG education/opportunity but declined participation or there was no documentation or

incomplete documentation of SMG offer/initiation, then credit was not given for SMG initiation.

This information was evaluated by the researcher.

Figure 2

SMG Process
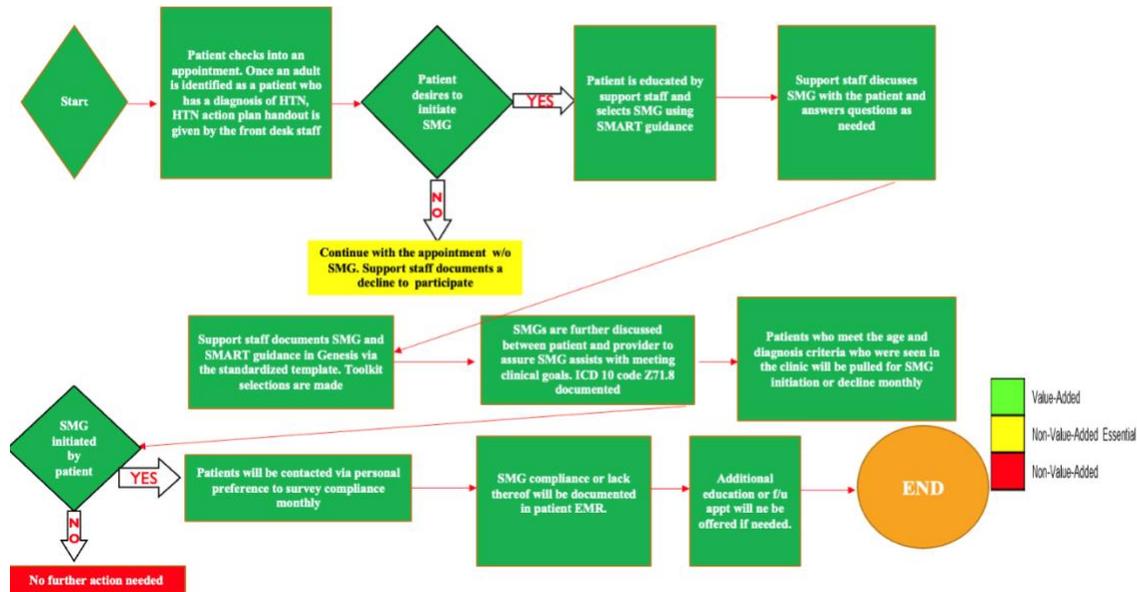
Note. This is the SMG process from check-in to follow-up.

Tools

The Likert scale assessment was used to assist in evaluating the staff members' perceived

benefits and experience with the toolkit and education. The Likert scale utilized a 5-item visual

management scale that allowed the researcher to assess to what degree respondents agreed with a

statement. These scales are easily recognized and understood. The Likert scale is permitted to be

used for wellness and can be used by the general public. This scale was employed because it was

utilized in previous research studies by means of similar questions to evaluate staff experience

regarding SMG training among military primary care clinics (Reiland et al., 2019). Likert scale

pre and post questions are as follows.

- Can properly describe the impact of uncontrolled HTN

- List the criteria for SMART goals

- Discuss the importance of implementation and compliance of self-management goals

- Feel appropriately educated about self-management goal toolkit

- Have proper tools to support self-management goals for HTN

Intervention

The team was educated about the SMG toolkit training opportunity over a six-week period starting 15 December 2022 during Monday morning huddles. Important information such as the significance of why and how to meet Joint Commission standards were discussed. SMG project recruitment flyers were posted in the clinic training room on 16 January 2023, four days before the official training opportunity was presented. Clinic leadership was provided a recruitment letter for dissemination to the clinic team via email. On 17 January 2023, three days before the SMG toolkit training, a verbal script was used during morning huddle to educate staff about the project to include consent, SMG toolkit training opportunity, and pre- and post-Likert scales. Consent forms were given to the team to read, and an opportunity to ask questions was offered.

At 0700 on 19 January 2023, the day of SMG toolkit training, team members were given consent forms to fill out during the morning huddle. Staff were instructed to bring in consent forms to the training evolution held in the training room at 1315 to participate in the training. The team arrived and was told to place their consent in the folder provided on the table. If anyone arrived who did not have a completed consent form, they were provided one and privately asked if they had questions. No questions were asked. All staff consented before starting the pre-intervention Likert scale assessment. The pre-intervention Likert scale assessed for staff understanding of the impact of uncontrolled HTN, SMART guidance, the importance of implementation of and compliance with SMGs, current understanding of SMG toolkit, and

proper tools to support SMG for HTN. The pre-intervention Likert scale assessment was

conducted in paper form and took approximately 5 minutes. Once they completed the

assessment, staff placed their job description on the lower right corner of the paper and placed

the sheets in the folder provided. After the pre-intervention Likert scale questionnaire was

completed, it was imperative the team was educated. The education of staff was conducted over

a 45-minute session via PowerPoint and question-and-answer session. The PowerPoint was

provided for use to all clinical staff after the training opportunity as a resource as needed.

     The toolkit for this Evidenced Based Project consisted of links embedded in the EMR

SMG documentation page. The embedded links were selected from a list approved and offered

by the Office of Quality Management within the U.S. Army Medical Department. The resources

offered include guidelines for clinical practice, patient safety, population health, and risk

management. These resources were created by approved national leaders in science and health

such as the American Heart Association, the National Institute for Heart Blood and Lungs, and

the U.S. Department of Health and Human Services. Some resources were specifically provided

by the Department of Veterans Affairs, which provides general and specialty health services and

support for medical disorders. These embedded tools in the EMR were already approved and

available if selected for medical staff to use for patient education. The tools selected for this

scholarly project were vetted and approved by the senior medical officer and senior nurse of the

clinic.

     The embedded links can be selected by staff based on the needs and desires of the patient.

Only the materials selected are printed with the discharge summary or available to be accessed

via the secure patient portal. Several tools/links were listed in the discharge summary and patient

portal. A link was provided to educate patients about a smartphone application called Samsung

Heartwise Blood Pressure Tracker, which is used to track and export blood pressure data by

email in a fully formatted report or spreadsheet format. A link to education from the American

Heart Association (2022) provided access to healthy living tips, information on the importance of

exercise, and heart-healthy recipes. The Blood Pressure Companion app allows the user to enter

blood pressure measurements easily, review blood pressure data graphically, and download

information for analysis. The 64-page booklet "Guide to Lowering Your Blood Pressure With

DASH" provides information about low-sodium eating, an eating plan, and recipes (U.S.

Department of Health and Human Services, 2006). The link "Your Guide to Lowering Blood

Pressure" is a 19-page electronic booklet about target weight, body mass index, diet, exercise,

and how to read food labels (National Heart, Lung, and Blood Institute, 2003b). The "VA/DoD

Clinical Practice Guideline for the Diagnosis and Management of Hypertension in the Primary

Care Setting" is a four-page document with information about HTN, risk factors for HTN, and

additional testing for patients with HTN (Department of Veterans Affairs, 2020). The "My Blood

Pressure Wallet Card" is a card utilized for pen-and-paper tracking of blood pressure. This card

can be brought to doctor's appointments to discuss blood pressure control or lack thereof

(National Heart, Lung, and Blood Institute, 2003a). The "To control blood pressure, DASH to

the Diet" handout consists of two educational pages that summarize the importance of the DASH

diet and provide a sample daily DASH diet (National Dairy Council, 2020). The final embedded

tool the team was educated about was titled "What Is High Blood Pressure (Hypertension)." This

information consisted of a video that educates about blood pressure and different classifications

of blood pressure and HTN (National Heart, Lung, and Blood Institute, 2022). Providers were

also educated on ICD 10 code Z71.8 "Other Specified Counseling" use and the importance of

verifying all SMGs properly support the clinical goal. The Genesis EMR was used to document

SMGs or declined participation, SMG compliance, and all patient interactions. Training to

ensure staff understood what to document and where to document before the start of the project

was imperative to the success of the project.

A post-assessment Likert scale questionnaire was administered in a paper format after

staff education. Staff were asked to place their job description in the lower right corner of the

questionnaires and place the questionnaires in the post-intervention Likert scale folder provided.

The SMG project was recapped to the team in daily huddles. During huddles, staff received

another small in-service about patients who would benefit from SMG opportunities and were

provided time to ask questions. Figure 2 shows the SMG process. Over the next 30 days, each

patient with a diagnosis of HTN who had a face-to-face appointment was given an SMG action

plan worksheet (Figure 4) by the front desk clerk to assess their willingness to participate in the

SMG process. Once the patient met with clinical support staff, the worksheet was reviewed. If

the patient established a SMG, then the selected SMG with SMART guidance was documented

in the EMR and verified by a provider. Once the SMG is agreed upon by both the provider and

patient that the SMG supports the clinical goal, then the provider would place ICD 10 code

Z71.8 "Other Specified Counseling." A copy of the selected toolkit information was given to the

patient with the discharge summary and made available via the secure patient portal. If the

patient declined to participate in SMGs, the decision was documented as "patient declined to

participate in SMG."

Figure 3

Timeline

Note. This is the SMG timeline process from beginning to completion.

Feasibility Analysis

A meeting was conducted on 13 October 2022 with the senior nurse, senior medical officer, and myself to discuss the mission of the evidence-based project and expectations such as training requirements and end goals. There was also a discussion of the type of support needed, budget, identification of workspace, and barriers or limitations to the project. On 4 November 2022, the senior nurse and senior medical officer were presented with the SMG training materials and Likert scale for approval. After a few small changes, approval was received from both the senior nurse and senior medical officer. Due to the implementation of a new EMR, possible information technology challenges were discussed, and the goal of 80% SMG

attainment was solidified by leadership. The initial request to pull records of patients age 30–60

diagnosed with HTN was completed.

Figure 4

SMG Worksheet

Patient Self-Management Goals and Action Plan Worksheet

Almost everyone could make a change in lifestyle to improve his/her physical and mental health. What is the *one thing* that you would like to do? Some examples, to name a few:

Eat healthier   Take meds properly   Quit tobacco   Exercise more   Decrease alcohol   Reduce stress

Reduce salt   Lose weight   Volunteer   Drink more water   Cut back on "busy-ness"

   1. Goal (something YOU want to do)_____
   2. Describe
       a. When: _____
       b. Where: _____
       c. How often: _____
       d. How will you do it: _____
   3. Barriers to achieving this goal: _____
   4. Plan to overcome barriers: _____
   5. On a scale of 1 to 10, how important is making this change to you? _____
   6. On a scale of 1 to 10, how confident are you that you can achieve this goal? _____
   7. Follow-up to check progress: _____

Data Analysis

The data from a self-administered, five-question, pre- and post-intervention Likert-type

scale assessment were analyzed. This scale assessed staff's personal assessment of their

knowledge regarding HTN, SMGs and toolkits. The scale ranged from 1 (*not at all*) to 5 (*great*

extent). Although there were 28 clinical staff, only 13 staff participated in the Likert scale

questionnaires and SMG education. Those who participated included one family physician

(civilian), one family nurse practitioner (civilian), one registered nurse (military), two licensed

practical nurses (civilian), and eight corpsmen (military).

Descriptive statistics were used to quantitatively evaluate results from the Likert scale

questionnaires. The initial Likert scale was administered after consent was obtained to evaluate

staff understanding of SMGs, toolkits, HTN, and SMART goals. After the SMG staff education

was conducted, the post-intervention Likert scale was administered to assess if the staff felt more

equipped to assist patients with SMGs. The post-intervention scale presented the same questions

as the pre-intervention Likert questionnaire.

Data analysis and interpretation of the results are as follows. The primary data were

collected from a total of 13 respondents. The data were coded and analyzed by a statistician with

appropriate statistical analysis using SPSS version 26. A paired *t* test were performed for this

study. This test was utilized because testing was conducted on matched pairs of smaller groups

(Sullivan, 2018).

The variables were coded in the following manner:

- Uncontrollable HTN: Can properly describe the impact of uncontrolled HTN

- Smart Goals: List the criteria for SMART goals

- SMG: Discuss the importance of implementation and compliance of self-management
  goals

- SMG Toolkit: Feel appropriately educated about self-management goal toolkit

- SMG for HTN: Have proper tools to support self-management goals for HTN

Section Four: Results

Measurable Outcome 1

A paired sample t test was used to compare the means of variables between pre-test

(uncontrollable HTN) and post-test (uncontrollable HTN) measures. The t test was statistically

significant, as uncontrollable HTN of the posttest group (M = 4.85, SD = 0.555) was

significantly higher than the pretest group (M = 3.77, SD = 1.013, t(12) = -4.503, p < .001, two-

tailed). Therefore, the null hypothesis that there is no difference between pre uncontrollable HTN

and post uncontrollable HTN of the population groups is rejected. The t test was statistically

significant, as smart goals for the posttest group (M = 4.69, SD = 0.630) was significantly higher

than the pretest group (M = 3.15, SD=1.625, t(12) = -3.554, p < .05, two-tailed). Therefore, the

null hypothesis that there is no difference between pre smart goals and post smart goals of the

population groups is rejected. The t test was statistically significant, as SMG of the posttest

group (M = 4.85, SD = 0.376) was significantly higher than the pretest group (M = 3.69, SD =

1.377, t(12) = -3.094, p < .05, two-tailed). Therefore, the null hypothesis that there is no

difference between pre SMG and post SMG of the population groups is rejected. The t test was

statistically significant, as SMG toolkit of the posttest group (M = 4.92, SD = 0.277) was

significantly higher than the pretest group (M = 3.46, SD = 1.266, t(12) = -4.398, p < .001, two-

tailed). Therefore, the null hypothesis that there is no difference between pre SMG toolkit and

post SMG toolkit of the population groups is rejected. The t test was statistically significant, as

SMG for HTN of the posttest group (M = 4.85, SD = 0.376) was significantly higher than the

pretest group (M = 3.54, SD = 1.266, t(12) = -4.250, p < .001, two-tailed). Therefore, the null

hypothesis that there is no difference between pre SMG for HTN and post SMG for HTN of the

population groups is rejected.

Measurable Outcome 2

Data was pulled to assess the number of adult patients ages 30–60 currently enrolled in

the clinic who have a diagnosis of HTN. A total of 327 patients were identified. This age range

was recommended by clinic leadership because it captured the most patients enrolled in the clinic

and the largest amount of patients with the diagnosis of HTN. This information was pulled from

Genesis EMRs via age range and ICD 10 code I10, "essential HTN." Once preliminary data were

gathered, the number of adult patients ages 30–60 with a diagnosis of HTN who received patient

care via a face-to-face medical appointment at NMRTU-Memphis primary care clinic was

compared to the number of adult patients ages 30–60 with a diagnosis of HTN who received

patient care via face-to-face a medical appointment at NMRTU-Memphis primary care clinic and

initiated SMGs. The total amount of patients who fit age range and diagnosis during the 30-day

period was 8. Information extrapolated from these 8 records included documentation of 1 patient

who declined to participate in SMG initiation, 2 patients who had incomplete documentation of

SMGs, and 5 patients who initiated SMGs with appropriately documented SMART guidance.

The final result of SMG initiation among patients age 30 to 60 with HTN diagnosis who had face

to face encounters at the clinic over a 30 day period was 62.5%. The results fell short by 17.5%

of the project goal, but increased by 15% from baseline. Further data will be pulled by nursing

staff via Genesis EMR on a monthly basis to assess patient SMG compliance. The results of

these findings will be associated with the third phase of the SMG process and will not be

included in the DNP project.

Section Five: Discussion

Implication for Practice

NMRTU-Memphis is certified by the Joint Commission as a primary care medical home

clinic. The primary care medical home clinic is not compliant with Joint Commission standards

related to adult outpatient beneficiaries and the use of SMGs for an organizationally identified

chronic condition (HTN). Certification requires the primary care medical home to educate

patients on SMGs, identify and document their goals, and document patient progress toward

meeting their goals (The Joint Commission, 2022). There are several interventions that can aid in

the reduction of blood pressure levels, including observance of antihypertensive treatments such

as a low sodium diet, exercise, weight loss, and pharmacological treatments. Assuring adherence

to antihypertensive therapies will combat poor outcomes such as stroke, kidney disease, heart attack, and premature death. Compliance with SMGs will aid in attaining clinical outcome goals, reducing of blood pressure, and reducing premature complications from HTN (Unger et al., 2020). A team-based SMG process incorporating a toolkit with the use of SMART guidance can help facilitate lifestyle modifications and treatment adherence for embedded patients.

Sustainability

To ensure sustainability for this current process, buy-in from both staff and patients is necessary. Standard assessments of documentation and ongoing training are needed (Johnson & Sollecito, 2020). As seen in other literature, the sustainability of the practice change is dependent on the staff, who have competing priorities (Reiland et al., 2019). Due to 71% of staff being on active duty and rotating every two to three years, it will be challenging to maintain staff knowledge of the process. Placing this training in the onboarding of new personnel and adding it to the clinic competencies as a Personnel Qualification Standard may be necessary. It may also be beneficial to add training on SMGs and proper documentation to the biannual training cycle.

This study had several limitations. The implementation of a new EMR (Genesis) made the assessment and placement of toolkit options cumbersome. Not having IT support in the clinic made even the smallest technological shortfalls a large obstacle. The inability to align current printers to the new EMR system made the option of printing toolkit information via discharge summary non-attainable until two weeks before the SMG training evolution. Although findings related to the SMG toolkit and SMART guidance education were positive, unfortunately, only 46% of staff participated in the training. A limited time frame may have also impacted the overall outcomes of the program.

Dissemination Plan

NMRTU-Memphis is part of a larger corporation of military treatment facilities. A strong primary care medical home clinic team and quality management team meet monthly. The process and findings can be presented at one or both of these meetings, to include training tools and the evidence-based project in its entirety to all team leads for external dissemination. Data related to the attainment of SMGs or lack thereof can be accessed via the command dashboard and followed as a quality management measure for Joint Commission accreditation. Monthly results should be shared with the board of directors to give all senior leadership the opportunity to review SMG statistics across all 11 clinics and parent command. During external quality management care round visits, this process must be assessed in its entirety to ensure adherence to Joint Commission requirements. Monthly evaluation of the SMG process via EMR review is necessary. Placing this training in the onboarding of new personnel and adding it to the clinic competencies as a Personnel Qualification Standard may be necessary for proper internal dissemination and sustainment.

<div align="center">

Conclusion

</div>

Self-Management Goal processes must be in place to meet Joint Commission mandates and positively impact patients with chronic disease. Staff education and toolkits can have positive impacts on staff knowledge concerning SMGs and HTN, and positive impacts on patient initiation of SMGs (J. Huang et al., 2022). Staff must be fully equipped with both education and tools to appropriately impact patients with HTN. The responsibility of SMGs should be shared among the patient, support staff, and providers (Reiland et al., 2019).

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Appendix A: Evidence Table

Author (year)	Study Purpose/ Objective(s)	Design, Sampling Method, & Subjects	LOE	Intervention & Outcomes	Results	Study Strengths & Limitations
Afshari, M., Gholamaliee, B., Kangavari, M., Partoi, N., & Nazari, M. (2022). Examining the effect of the training program by using the health belief model in performing self-care behaviors of rural patients having high blood pressure. *Community Health Equity Research & Policy, 43*(1), 21–29. https://doi.org/10.1177/0272684X211004951	This study was conducted to determine the impact of educational program on self-care behaviors of rural patients diagnosed with hypertension.	100 hypertensive patients recruited from four health centers in rural areas in Toyserkan city in 2019. Mean age was 64, most participant were women and most participant were illiterate.	Level 3: Quasi-experimental	Participants from the intervention group received three educational sessions and those in the control group did not. Three-part questionnaires were used to evaluate the understanding of HTN and barriers to self-care.	In the group that received the intervention there was better attitudes and better performance of self-care.	Limitations of this study include self-reporting and short time between intervention and final evaluation.
Alsaqer, K., & Bebis, H. (2022). Self-care of hypertension of older adults during COVID-19 lockdown period: A randomized controlled trial. *Clinical Hypertension, 28*(1), Article 21. https://doi.org/10.1186	The goal of this study was to assess the effects of a public health nursing intervention plus m-Health applications for hypertension management on	120 patients age 55 and above diagnosed with HTN, on HTN medication, has access to internet and smart phone. The participants were located in Jordan.	Level 1: Randomized controlled clinical trial	The intervention group received nursing interventions including HTN education based on the WHO and 4 four free mobile applications to assist with	3 months post intervention patients who received interventions had a significant reduction in blood pressure.	Limitations of this study include only 3 months of follow up instead of 6 to properly assess quality of life and self-management of chronic disease.

/s40885-022-00204-7	enhancing self-care, quality of life, and blood pressure during pandemic.			lifestyle, health and blood pressure. They also received a phone call weekly concerning self-management and blood pressure over a three-month period. Group two was given 4 free hypertension mobile phone applications to assist with lifestyle, health, and blood pressure only and group three received usual care.		
Boulware, L. E., Ephraim, P. L., Hill-Briggs, F., Roter, D. L., Bone, L. R., Wolff, J. L., Lewis-Boyer, L., Levine, D. M., Greer, R. C., Crews, D. C., Gudzune, K. A., Albert, M. C., Ramamurthi, H. C., Ameling, J. M., Davenport, C. A., Lee, H., Pendergast, J. F., Wang, N., Carson, K.	The purpose of this study is to evaluate the impact on self-management interventions among socially disadvantaged African American Adults with HTN.	159 English speaking self-identified African Americans age 18 years of age and older diagnosed with HTN in receipt of care at an urban primary care clinic located in East Baltimore MD. Each were randomly assigned to an	Level 4: Cohort study	Community health worker, home health BP monitor, training for self-management problem solving	SBP control improved overall by 16% in all groups from baseline to 12 months.	Recruitment of participants fell short of researchers projected estimate due to time restrictions and elongated stakeholder engagement. Of 402 eligible participants only 159 were recruited.

A., & Cooper, L. A. (2020). Hypertension self-management in socially disadvantaged African Americans: The achieving blood pressure control together (ACT) randomized comparative effectiveness trial. *Journal of General Internal Medicine, 35*(1), 142–152. https://doi.org/10.1007/s11606-019-05396-7		intervention group.				Unfortunately, this only yielded 80% power to detect a statistically significant difference.
Cairns, A. E., Tucker, K. L., Leeson, P., Mackillop, L. H., Santos, M., Velardo, C., Salvi, D., Mort, S., Mollison, J., Tarassenko, L., McManus, R. J., Crawford, C., Edwards, C., Baker, N., Selinger, M., Lloyd, S., Tebbutt, J., Ashworth, F., & Pullon, R., on behalf of the SNAP-HT Investigators. (2018). Self-management of	This study evaluated the effects of self-management of blood pressure on post-partum women.	Sample included women age 18 years of age and older with the diagnosis of gestational hypertension or preeclampsia that necessitate treatment. The sample of patients were recruited from hospital sites in England. From 2015-2016 154 were eligible to participate and	Level 1: Randomized controlled trial	Pregnant women were randomized at a baseline visit post-delivery. They were placed in a self-management or usual postnatal care by computer randomization. 45 to self-management, 46 to usual care. Participants attended 5 follow up visits over a 6 month period.	BP was lower in the group that received self-management interventions.	Limitations of this study include randomization rate fell over time, majority of patients were Caucasian and middle class which does not represent the total population.

		101 consented. Overall only 82 participated.					
postnatal hypertension: The SNAP-HT trial. *Hypertension, 72*(2), 425–432. https://doi.org/10.1161/HYPERTENSIONAHA.118.10911							
Davison, W. J., Myint, P. K., Clark, A. B., Kim, L. G., Wilson, E. C., Langley, M., & Potter, J. F. (2018). Does self-monitoring and self-management of blood pressure after stroke or transient ischemic attack improve control? TEST-BP, a randomized controlled trial. *The American Heart Journal, 203,* 105–108. https://doi.org/10.1016/j.ahj.2018.06.002	Determine whether Blood Pressure with or without guided self-management of BP treatment resulted in lower BP levels and better control than usual care in hypertensive patients with a recent stroke or transient ischemic attack (TIA).	Patient characteristics for this study were adults with a recent mild/moderate stroke or TIA which requires blood pressure medications for secondary prevention. Patients with life expectancy less than 6 months or cognitive impairment were excluded.	Level 1: Randomized, blinded end-point, parallel-group controlled trial	At enrollment, participants were randomized via a concealed web-based system to either a control group, a self-monitoring group, or a treatment and self-monitoring group.	It was identified that minor reductions in BP may still be clinically significant and warrant further investigation to identify potential subgroups where such therapy may be clinically beneficial.	Limitations of this study includes home monitors may have introduced measurement bias, and because all participants were on medications that may have masked the other interventions implemented.
Farahmand, F., Khorasani, P., & Shahriari, M. (2019). Effectiveness of a self-care education program on hypertension	The purpose of this study is to evaluate the effectiveness of a self-care education discharge	56 patients age 60-79 who had a diagnosis of HTN and recently discharged from internal medicine and cardiac	Level 3: Quasi experimental control trials	56 patients randomly allocated to intervention or control group. The intervention group received a 60-minute self-care	The results of the study were mean BP levels were reduced in the group who received the intervention and was significantly more	Limitations in this study include lack of long term follow up in chronic disease as well as polypharmacy,

management in older adults discharged from cardiac-internal wards. *ARYA Atherosclerosis, 15*(2), 44–52. https://doi.org/10.22122/arya.v15i2.1787	program with telephone follow-ups in managing hypertension (HTN) in older patients.	inpatient units located in Isfahan, Iran.		education discharge program and 4 telephone follow ups biweekly. The intervention patients also received educational materials. BP was measured at baseline, and 8 and 12 weeks after discharge.	controlled at 12 weeks than the control participant.	other comorbidities, and lack of permanent access to some patients.
Hearn, J., Ssinabulya, I., Schwartz, J. I., Akiteng, A. R., Ross, H. J., & Cafazzo, J. A. (2019). Self-management of non-communicable diseases in low- and middle-income countries: A scoping review. *PloS One, 14*(7), Article e0219141. https://doi.org/10.1371/journal.pone.0219141	This review summarized the nature and effectiveness of past interventions that have enabled the self-management of non-communicable diseases in low- and middle-income countries (LMIC).	36 research articles from 3 continents and 21 countries that focused on non-communicable diseases hypertension, diabetes, and heart failure and the effects of self-management.	Level 1: Systematic reviews and meta-analyses	This is a twelve-year period ranging from January 2007 to December 2018 with search words self-management, NCDs and LMICs. 568 articles were found, 133 were reviewed and only 36 were used for review.	Self-management is successful in improving health outcomes and quality of life in LMICs.	Limitations of this study include lack of determination what types of interventions most likely resulted in positive patient outcome and there was no research articles that were not in English.
Huang, B., Li, Z., Wang, Y., Xia, J., Shi, T., Jiang, J., Nolan, M. T., Li, X., Nigwekar,	The focus of this study is to evaluate the effectiveness of	Adults age 18 and older who receive hemodialysis over a span of three	Level 2: Randomized control trial	A cluster randomized controlled trial conducted that	Self-management support displayed success in BP control, salt restriction, and	Limitations within the study include only enrolling participants from

S. U., & Chen, L. (2018). Effectiveness of self-management support in maintenance hemodialysis patients with hypertension: A pilot cluster randomized controlled trial. *Nephrology, 23*(8), 755–763. https://doi.org/10.1111/nep.13098	self-management support for HTN and health behaviors.	months and a diagnosis of HTN between September 2011 and August 2012 at the Peking Union Medical College Hospital. Exclusion criteria were patients who were unable to provide informed consent or had a life expectancy less than 6 months.		consisted of 90 adults who were actively on hemodialysis and assigned to either Self-Management Support (SMS) or common intervention (CI) group. The SMS group were able to partake in the intervention of self-management education and motivational interviewing. The CI group was only given typical care and routine health education.	medication	one dialysis center in Beijing which reduced the size and geographical location of those
Huang, J., Xu, Y., Cao, G., He, Q., & Yu, P. (2022). Impact of multidisciplinary chronic disease collaboration management on self-management of hypertension patients: A cohort study. *Medicine, 101*(28), Article e29797.	Investigate the outcome of the interdisciplinary chronic disease management model on patients with hypertension.	This study comprised of 750 patients previously diagnosed with hypertension and received treatment at the Cardiovascular Medicine inpatient unit of the Union	Level 4: Prospective cohort study	The control group and intervention group consisted of patients 18 years of age and older. Participants placed in each group was of the same sex and same age range. All participants were at least high school	The study concluded that interventions positively impacted blood pressure control in hypertensive patients and enhanced the quality of life and the satisfaction level of the hypertensive patients.	Limitations to this study which included the self-management assessment performed and compared once, only one-year follow-up for chronic conditions, and finally, the study

https://doi.org/10.1097/MD.0000000000029797		Hospital (Wuhan, China) from December 2018 to December 2019.		educated and promised to comply with the conditions of the study. All participants were educated on blood pressure measurement and self-management, and all received an assessment of self-management ability based on a 5-point Likert scale. The control group was given HTN oral medication, education on the importance of lifestyle modification before discharge, and when discharged were given educational handouts. The intervention group received the support of a multidisciplinary collaborative team		is a single center instead of a multicentered assessment

				who guided the group and provided diet education and plans, blood pressure monitoring, and other individualized and group interventions. The study concluded that interventions positively impacted blood pressure control in hypertensive patients, and enhanced the quality of life and the satisfaction level of the hypertensive patients.		
Irwan, A. M., Potempa, K., Abikusno, N., & Syahrul, S. (2022). Self-care management for hypertension in southeast Asia: A scoping review. *Journal of Interdisciplinary*	The focus of this review was to scrutinize and chart evidence of self-care management of hypertensive individuals residing in Southeast Asian	1667 studies based in SEA from 2006 – 2021 were reviewed and 57 studies met criteria and were included in this review.	Level 1: Reviews and meta-analyses	The five stages of Scoping Review Frameworks were conducted to assure proper reporting and fidelity. This systematic review concluded increasing self-care	Increasing self-care management of hypertension in SEA could necessitate a multi-focused approach including targeting individual choice and external factors.	Limitations to this study include only the use of English and Bahasa material for analysis which may exclude additional information that would be

Health, 15, 2015–2032. https://doi.org/10.2147/JMDH.S367638	(SEA) countries.			management of hypertension in SEA could necessitate a multi-focused approach including targeting individual choice and external factors.		beneficial to further understanding the importance of multi-focused self-management goal support
Jiang, W., Zhang, Y., Yan, F., Liu, H., & Gao, R. (2020). Effectiveness of a nurse-led multidisciplinary self-management program for patients with coronary heart disease in communities: A randomized controlled trial. *Patient Education and Counseling, 103*(4), 854-863. https://doi.org/10.1016/j.pec.2019.11.001	This study appraises the efficiency of a nurse-led multidisciplinary self-management program (NMSP) on self-management activities, self-efficacy, health-related quality of life.	144 patients diagnosed with coronary heart disease age 18 years of age and older who were recruited via a community health care center.	Level 1: Randomized control trial	The intervention group received 6 months of education, consultations, individual assessment, and follow-up. The control group received standard care. The results of the study suggest a multidisciplinary approach to improving self-management behaviors ultimately reduced emergent and urgent care visits.	This multidisciplinary self-management program significantly improved in self-management behaviors, self-efficacy, and quality of life for participants, as well as reducing urgent and emergent service utilization among patients with CHD.	Limitations of this study include convenience sampling from small community, some self-reporting measurements were used, and long term follow up for chronic disease was not done.
Kim, S., Park, M., & Song, R. (2021). Effects of self-management programs	The aim of this study was to analyze the extent of the	RCT articles were pulled from PubMed, CINAHL,	Systematic reviews and Meta-Analyses of	The search for articles was conducted via an international	The results of this study specify Self-management Programs can significantly	Limitations of this analysis was assessing the effects

on behavioral modification among individuals with chronic disease: A systematic review and meta-analysis of randomized trials. *PloS One, 16*(7), Article e0254995. https://doi.org/10.1371/journal.pone.0254995	combined effects of self-management on behavioral modification	ScienceDirect, SCOPUS, Web of Science, Embase, Cochrane Library, DBpia, and KISS with a focus on chronic disease such as HTN, DM, hyperlipidemia and obesity and lifestyle, interventions conducted utilizing self-management programs.	Level 1: Randomized control trial	database for RCT articles from 2000 to 2020. with a focus on chronic diseases such as HTN, DM, HLD, obesity, and lifestyle interventions utilizing self-management programs.	improve diet, physical activity, and overall health in those participants with chronic disease.	immediately after interventions with no ongoing follow up.
Kurt, D., & Gurdogan, E. P. (2022). The effect of self-management support on knowledge level, treatment compliance and self-care management in patients with hypertension. *Australian Journal of Advanced Nursing, 39*(3), 14–23. https://doi.org/10.37464/2020.393.543	The purpose of this study was to define if the effect of self-management support given to patients with hypertension increase knowledge level, treatment adherence and self-care management. The study also wanted to assess	Patients with diagnosis of HTN were recruited from Internal medicine and Cardiology clinics in Turkey. Age 18-65. Patients who has a change in HTN medications within the last 30 days were not recruited	Level 1: Randomized control trial	Data was attained utilizing the Patient Information Form 11, "Hypertension Knowledge-Level Scale," "Hill-Bone Compliance to High Blood Pressure Therapy Scale" and "Self-Care Management Process in Chronic Illness Scale." Two interviews were done three months apart, and the	Study resulted in increased HTN knowledge, adherence to HTN treatment, self-care management and SIGNIFICANT decreased BP in intervention group.	There no limitations discussed in the study.

	changes in patients' blood pressure post self-management support.				intervention group was given self-management support including education and BP measurement skills. The study was conducted from 2017-2018.		
Lawless, M. T., Drioli-Phillips, P., Archibald, M. M., Ambagtsheer, R. C., & Kitson, A. L. (2021). Communicating with older adults with long-term conditions about self-management goals: A systematic review and thematic synthesis. *Patient Education and Counseling, 104*(10), 2439–2452. https://doi.org/10.1016/j.pec.2021.02.035	Conduct research on communication between healthcare professionals, older adults, and caregivers regarding self-management goals and actions.	898 records were retrieved, and eight studies were included in the review. The research data pulled was conducted on adult patients with a mean age of 60.	Level 5: Systematic review of qualitative studies	A systematic review which searched nine electronic databases Two reviewers were independently selected following a two-stage process and studies and discrepancies were resolved through consultation with the review team.	Despite an increasing emphasis on the importance of person-centered integrated care, and emerging evidence indicating the effectiveness of collaborative goal setting techniques for older patients. HCPs did not consistently practice this approach. This finding is consistent with a substantial body of evidence suggesting that traditional medical care models can impede the implementation of person-centered care for older patients	Research information was collected from studies that were only conducted in high-income Western countries. This would not entirely represent all such interactions with all healthcare beneficiaries. There was also an inadequate reporting of participant demographics within the studies.

Lenzen, S. A., Daniels, R., van Bokhoven, M. A., van der Weijden, T., & Beurskens, A. (2017). Disentangling self-management goal setting and action planning: A scoping review. *PLoS One, 12*(11), Article e0188822. https://doi.org/10.1371/journal.pone.0188822	The study aimed to achieve a better understanding of the various types of goal setting and action planning in the context of self-management	58 articles utilized from 9115 retrieved articles	Level 6 qualitative study	A qualitative content analysis of PubMed, Cinahl, PsychINFO and Cochrane. Inclusion and exclusion criteria were formulated to ensure the focus on goal setting/action planning and self-management.	The overall research encourage health care professionals to become more aware of the importance of possibilities to support patients in working at goal setting by applying strategies focusing on patients' self-reflection (e.g., logbooks, questions about values for health, visual methods)	When pulling research articles the terms self-management, goal setting and action planning were identified as concepts that greatly varied in regards to terminology so many articles may have been inadvertently missed.
Ma, Y., Cheng, H. Y., Cheng, L., & Sit, J. W. H. (2019). The effectiveness of electronic health interventions on blood pressure control, self-care behavioral outcomes and psychosocial well-being in patients with hypertension: A systematic review and meta-analysis. *International Journal of Nursing Studies, 92,* 27–46. https://doi.org/10.1016	This review aims to recognize the delivery mode and tactics used by current eHealth interventions and scrutinize the effectiveness of eHealth on blood pressure control, self-care behavioral outcomes.	15 articles chosen via inclusion criteria. From 10 English and two Chinese data basis.	Level 1: Systematic review and meta-analysis	The Systematic Reviews and Meta-Analysis with two reviewers autonomously chose potential articles.	Results of the study shared eHealth intervention assisted in the reduction of systolic blood pressure, weight and improved diet.	There were no limitations found in the study.

/j.ijnurstu.2018.11.007						
McElfish, P. A., Long, C. R., Bursac, Z., Scott, A. J., Chatrathi, H. E., Sinclair, K. A., Nagarsheth, N., Calcagni, M., Patolia, J., & Narcisse, M. (2021). Examining elevated blood pressure and the effects of diabetes self-management education on blood pressure among a sample of Marshallese with Type 2 diabetes in Arkansas. *PLoS One, 16*(4), Article e0250489. https://doi.org/10.1371/journal.pone.0250489	The study reviewed the baseline frequency of diagnosed hypertension and undiagnosed high blood pressure and disparities in health care access between those with diagnosed hypertension versus undiagnosed high blood pressure	The sample in this study entailed 221 Marshallese adults with T2DM located in Northwest Arkansas.	Level 1: Randomized control trial	The study reviewed the reference point frequency of those diagnosed with hypertension and those with undiagnosed high blood pressure and inequalities in health care access between the two. The method examined the effects of DSME interventions on participants' blood pressure, comparing an Adapted-Family DSME with a standard DSME.	Diabetes self-management teaching resulted in improvement of clinical outcomes to include reduction of blood pressure	Limitations to this study is all participates were centralized to Marshallese Arkansas and limited to participants who had blood pressure interpretations suggestive of hypertension at baseline
Putri, S. E., Rekawati, E., & Wati, D. N. K. (2021). Effectiveness of self-management on adherence to self-care and on health status among elderly people with hypertension. *Journal of Public Health*	This research article determines the efficiency and outcome of adherence to self-management care in elderly people diagnosed with	134 elderly people mostly age 60-74 living with hypertension in Pekanbaru city.	Level 3: Controlled trial (no randomization)	Patient and family education, physical activity, and nutrition management via home health visits. Pre and post test	Nursing interventions coupled with self-management for elderly patients living with hypertension has better outcomes.	Limitations include the participants' level of education (only elementary school education) which negatively affected health literacy.

Research, 10(Suppl. 1), Article 2406. https://doi.org/10.4081/jphr.2021.2406	hypertension					
Reiland, N., Fitzgerald, K., & Maragos, M. E. (2019). Exploring interventions to increase primary care providers' use of self-management goals. *Patient Experience Journal, 6*(1), Article 5. https://pxjournal.org/cgi/viewcontent.cgi?article=1330&context=journal	The goal was to increase providers' motivational interviewing knowledge and skills to better construct and document SMGs.	Providers who worked at a primary care medical home clinic who care for patients with DM or HTN.	Level 3: Control trial	Staff education and evaluation of electronic medical records for SMG documentation after training.	Four weeks after the program completion, no change (6%) was noted in providers' (N= 86) SMG documentation. Challenges were identified such as too little time with patients, health literacy, and lack of resources.	Limited time frame for implementation and evaluation—sixteen weeks.
Schwartz, C. L., Seyed-Safi, A., Haque, S., Bray, E. P., Greenfield, S., Hobbs, F. R., Little, P., Mant, J., Williams, B., & Mcmanus, R. J. (2018). Do patients actually do what we ask. *Journal of Hypertension, 36*(8), 1753–1761. https://doi.org/10.1097/HJH.0000000000001	This study reports fidelity of high-risk patients to the self-management algorithm set by the Targets and Self-Management for the Control of Blood Pressure in Stroke and at-Risk Groups trial.	Patient with HTN age 35 or older and one or more comorbidities who were recruited by 56 general practice clinics.	Level 1: Randomized control trial	Intervention patients were twice trained and were asked to conduct self-management of BP at home via self-monitoring with self-titration of medication the first week of each month. Control patients had usual care. Follow-up readings were	Patients in the intervention group were successfully trained to monitor their BP and make appropriate management decisions. Self-management caused patients' BP to be significantly lowered.	Limitations of this study included only patients willing and able to follow a self-titrating algorithm, but only 65% remained self-monitoring at 12 months.

738				conducted at months six and month 12		
Shahaj, O., Denneny, D., Schwappach, A., Pearce, G., Epiphaniou, E., Parke, H. L., Taylor, S. J. C., & Pinnock, H. (2019). Supporting self-management for people with hypertension: A meta-review of quantitative and qualitative systematic reviews. *Journal of Hypertension, 37*(2), 264–279. https://doi.org/10.1097/HJH.0000000000001867	The focus of this research study was to explore how participant with hypertension understand their condition, to evaluate the efficiency of supported self-management of blood pressure, and identify elements of patient support.	A systematic review and meta-analysis of six qualitative and 29 quantitative reviews provided data from 544 studies of hypertension Self-management support.	Level 5 and Level 1: Level 5 consists of systematic review and meta-analysis of qualitative studies and Level 1 consists of systematic reviews of randomized control trials.	A systematic review and meta-analysis of qualitative studies and systematic reviews of randomizer control trials utilizing PRISMS and electronic data bases MEDLINE, EMBASE, CINAHL, PsychINFO, AMED, BNI, and Cochrane	Staff and family support of self-management can improve blood pressure control. Interventions are multifaceted and include a comprehensive range of strategies.	Limitations of this study conducted noted that the term 'supported self-management' is not widely utilized which may have caused the omission of, some self-management hypertension articles
Shawler, C., Edward, J., Ling, J., Crawford, T. N., & Rayens, M. K. (2018). Impact of mother-daughter relationship on hypertension self-management and quality of life: Testing dyadic dynamics using the actor-partner	The focus of this research is to examine the effects of a good mother-daughter relationship, and its impact on self-management of hypertension and health-related quality of	51 senior mothers age 65 and older who have a diagnosis of hypertension and also has an adult daughter who gives support to mother. Must be English speaking.	Level 4: Longitudinal cohort study	Longitudinal predictive research study that utilized either Lawton Instrumental Activities of Daily Living Scale and/or assistance with Activities of Daily Living on the Katz ADL	Relationship quality with female children and their mothers positively affected self-management of mother's self-management for blood pressure and HRQOL. 52% of participants' Blood pressure is controlled.	Limitations found were less than 50% of daughters had hypertension. For a better summation of results and impact on hypertension of daughters 100% of daughters

interdependence model. *The Journal of Cardiovascular Nursing, 33*(3), 232–238. https://doi.org/10.1097/JCN.00000000000000448	life (HRQOL) for participants.			Scale to assess support of mother from daughter.		participating should have hypertension diagnosis.
Van Truong, P., Wulan Apriliyasari, R., Lin, M., Chiu, H., & Tsai, P. (2021). Effects of self-management programs on blood pressure, self-efficacy, medication adherence and body mass index in older adults with hypertension: Meta-analysis of randomized controlled trials. *International Journal of Nursing Practice, 27*(2), Article e12920. https://doi.org/10.1111/ijn.12920	The focus of this study is to evaluate self-management interventions in regards to HTN, self-efficacy, adherence to medication use and body mass index in older adults with high blood pressure.	A systematic review and meta-analysis reviewed data from CINAHL, Cochrane Library, Embase, Ovid-Medline, PubMed, Scopus, Web of Science and other sources from 1999 to October 2019. Only studies that enrolled adults over the age of 60 with a diagnosis of hypertension or other chronic conditions with comorbid hypertension. Twelve randomized controlled trials	Level 1: Systematic review of randomized control trials	A systematic review and meta-analysis. Data was evaluated using Comprehensive Meta-Analysis 2.0 and quality assessment using ROB 2.0.	Self-management interventions considerably reduced blood pressure and improved self-efficacy and medication adherence in older adult patients with hypertension. Unfortunately, there was, no significant impact on body mass index.	Limitations include a significant amount of assessment types and interventions which produced significant bias. The sample size was limited to older adults with HTN.

		met research inclusion criteria. Mean age range of participants was 60-79 years old.				
Zhu, X., Wong, F. K. Y., & Wu, C. L. H. (2018). Development and evaluation of a nurse-led hypertension management model: A randomized controlled trial. *International Journal of Nursing Studies, 77,* 171–178. https://doi.org/10.1016 /j.ijnurstu.2017.10.006	Our aim was to determine a nurse-led hypertension management model and to test its efficiency at the community level.	The study was conducted during August 2012 and September 2013 in a community health center in Guangzhou, China. Totally, 134 eligible residents were recruited with diagnosis of HTN or uncontrolled blood pressure.	Level 1: Randomized control trial	The participants were given education, annual assessments, in-home follow-ups, and educational handouts. To properly carry out interventions' nurses were trained for 36 hours prior to participant care. The outcomes of this study were positive as they showed the importance of properly educating patients in hypertension management. The study also showed that participants had blood pressure reduction, increased self-management skills	The results of this study concluded that nurse-led hypertension management model is effective in improving the outcomes of patients with uncontrolled blood pressure. .	Limitations to this study include nurse-led hypertension management was tested in a single community health center.

				and increased patient satisfaction.		
Zimbudzi, E., Lo, C., Misso, M. L., Ranasinha, S., Kerr, P. G., Teede, H. J., & Zoungas, S. (2018). Effectiveness of self-management support interventions for people with comorbid diabetes and chronic kidney disease: a systematic review and meta-analysis. *Systematic Reviews, 7*(1), Article 84. https://doi.org/10.1186/s13643-018-0748-z	This article investigated the effectiveness of current self-management support interventions and their specific components and elements in improving patient outcomes	The search of randomized controlled trials on self-management via electronic databases from January 1, 1994, to December 19, 2017.	Level 1: Systematic review of randomized control trials	Meta-Analysis, Systematic Review, data was Electronic databases were systematically searched from January 1, 1994, to December 19, 2017. Eligible studies were randomized controlled trials on self-management support interventions for adults with comorbid diabetes and chronic kidney disease.	Primary outcomes were reduction of systolic blood pressure, diastolic blood pressure, estimated glomerular filtration rate, and glycated hemoglobin.	The research excluded studies published in languages other than English and relied heavily on subjective judgment to include or exclude studies when self-management support interventions were not explicitly expressed.

Appendix B: IRB Approval Documentation

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

December 15, 2022

Kristel Ramsay
Heather Vasioutovitch

Re: IRB Application - IRB-FY22-23-710 A team-based approach to increase initiation of self-management goals in adult patients (ages 30-60) diagnosed with hypertension with the use of a self-management goal tool kit

Dear Kristel Ramsay and Heather Vasioutovitch,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds that your study does not meet the definition of human subjects research. This means you may begin your project with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your project is not considered human subjects research because evidence-based practice projects are considered quality improvement activities, which are not "designed to develop or contribute to generalizable knowledge" according to 45 CFR 46.102(l).

Please note that this decision only applies to your current application. Any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

Also, although you are welcome to use our recruitment and consent templates, you are not required to do so. **If you choose to use our documents, please replace the word** *research* **with the word** *project* **throughout both documents.**

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,
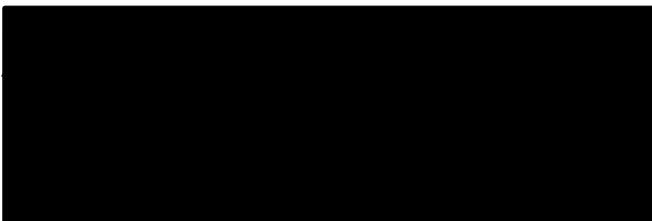
Appendix C: CITI Certificate

CITI PROGRAM

Completion Date 27-Sep-2022
Expiration Date 26-Sep-2025
Record ID 51746254

This is to certify that:

Kristel Ramsay

Has completed the following CITI Program course:

Biomedical Research - Basic/Refresher
(Curriculum Group)
Biomedical & Health Science Researchers
(Course Learner Group)
1 - Basic Course
(Stage)

Not valid for renewal of
certification through CME.

Under requirements set by:

Liberty University

CITI
Collaborative Institutional Training Initiative

Appendix D: Letter of Support From the Organization

5 October 2022

To Whom it may concern,

I am writing this letter of support for Kristel Ramsay, DNP student at Liberty University, for initiating "A team-based approach to increase initiation of self-management goals in adult patients (ages 30-60) diagnosed with hypertension with the use of a self-management goal tool kit". I understand the purpose of this project is to provide a team approach to offer participatory opportunity, patient education, and delivery of instruments to increase the initiation of Self-Management Goals for adults with Hypertension from baseline to 80%.

In conclusion, I deeply support the efforts of Kristel. I understand activities that will be conducted on-site at NMRTU-Memphis Primary Care Medical Homeport Clinic include staff education, implementation of standardized use of patient educational materials, and documentation. Baseline and post-intervention data will be collected. The clinic is prepared to support and provide space to conduct project activities, education, and data collection.

Appendix E: Permission Letters to Use Tools and Models

Permission to Use The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care

K Kimberly Jordan - University of Iowa Hospitals and Clinics <survey-bounce@survey.uiowa.edu>

To: Ramsay, Kristel Danette

Sat 8/27/2022 2:44 PM

You have permission, as requested today, to review and/or reproduce *The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care*. Click the link below to open.

The Iowa Model Revised (2015)

Copyright is retained by University of Iowa Hospitals and Clinics. **Permission is not granted for placing on the internet.**

Reference: Iowa Model Collaborative. (2017). Iowa model of evidence-based practice: Revisions and validation. *Worldviews on Evidence-Based Nursing, 14(3), 175-182. doi:10.1111/wvn.12223*

In written material, please add the following statement:
Used/reprinted with permission from the University of Iowa Hospitals and Clinics, copyright 2015. For permission to use or reproduce, please contact the University of Iowa Hospitals and Clinics at 319-384-9098.

Please contact UIHCNursingResearchandEBP@uiowa.edu or 319-384-9098 with questions.

Appendix F: Participant Consent Form

Consent

Title of the Project: A team-based approach to increase initiation of self-management goals in adult patients (ages 30-60) diagnosed with hypertension with the use of a self-management goal tool kit.

Principal Investigator: Kristel Ramsay, Doctoral Candidate, School of Nursing, Liberty University.

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 years of age and older and staff of NMRTU-Memphis Primary Care Clinic. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to provide a team approach to offer participatory opportunity, education, and delivery of instruments to increase staff preparation and initiation of Self-Management Goals for adults with HTN from baseline to 80%.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:
1. Participate in an in person pre-educational Likert Scale paper questionnaire that will take no more than 5 minutes.
2. Participate in an educational session via PowerPoint and interactive question and answer session about Self-Management Goals and Tool kit that will take no longer than 45 minutes.
3. Participate in an in person post-educational Likert Scale paper questionnaire that will take no more than 5 minutes.

How could you or others benefit from this study?

The direct benefits participants should expect to receive from taking part in this study include education of the positive impact of patient initiated Self-Management Goals, education of how to properly document Self-Management Goals within Electronic Medical Records, and toolkit education provided to assist with Self-management Goal education.
Benefits to society include proper education, opportunity and tools to support patient initiated Self-Management Goals in adults diagnosed with Hypertension.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses to Likert questionnaire will be confidential.
- Data will be in a locked drawer and stored on a password-locked computer. After three years, all electronic records will be deleted and all hardcopy records will be shredded.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or NMRTU-Memphis Primary Care Clinic. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please inform the researcher that you wish to discontinue your participation, and do not submit your study materials. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Kristel Ramsay. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at ████████████. ████████████ You may also contact the researcher's faculty sponsor, Dr. Odedina, at

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You will be given a copy of this document for your records If you have any questions about the study later, you can contact the researcher using the information provided above.
By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

_____

Printed Subject Name

_____

Signature & Date

Appendix G: Likert Scale Pre and Post-Assessment Questionnaires

PRE ASSESSMENT

1. Can properly describe the impact of uncontrolled hypertension

Not at all   1   2   3   4   5   Great Extent

2. List the criteria for SMART goals

Not at all   1   2   3   4   5   Great Extent

3. Discuss the importance of implementation and compliance of Self-Management Goals.

Not at all   1   2   3   4   5   Great Extent

4. Feel Appropriately educated about Self-Management Educational toolkit

Not at all   1   2   3   4   5   Great Extent

5. Have proper tools to support Self-Management Goals for Hypertension

Not at all   1   2   3   4   5   Great Extent

POST ASSESSMENT

1. Can properly describe the impact of uncontrolled hypertension

Not at all   1   2   3   4   5   Great Extent

2. List the criteria for SMART goals

Not at all   1   2   3   4   5   Great Extent

3. Discuss the importance of implementation and compliance of Self-Management Goals.

Not at all   1   2   3   4   5   Great Extent

4. Feel Appropriately educated about Self-Management Educational toolkit

Not at all   1   2   3   4   5   Great Extent

5. Have proper tools to support Self-Management Goals for Hypertension

Not at all   1   2   3   4   5   Great Extent

Appendix H: List of Figures