

CREATING AND EVALUATING A TOOLKIT FOR SHARED MEDICAL
APPOINTMENTS FOR HYPERTENSION MANAGEMENT IN A JAIL SETTING

Erin A. Flitt

A project submitted to the faculty at the University of North Carolina at Chapel Hill in
partial fulfillment of the requirements for the degree of Doctor of Nursing Practice in the
School of Nursing.

Chapel Hill
2015

Approved by:

Debra J. Barksdale

Mary E. Schuler

Alan G. Cloninger

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ABSTRACT

Erin A. Flitt: Creating and Evaluating a Toolkit for Shared Medical Appointments for Hypertension Management in a Jail Setting
(Under the direction of Debra J. Barksdale)

There is a higher prevalence of hypertension in jail inmates than in the general population and it has been estimated that up to 50% of inmates have hypertension (Binswanger, Krueger, & Steiner, 2011). This project describes the creation of an evidence-based toolkit for clinicians that will assist in implementing the shared medical appointment approach for the treatment of hypertension in a jail in North Carolina. The toolkit prototype was created based upon the standards of the National Commission on Correctional Health Care and evidenced based literature. Two focus groups comprised of medical and correctional staff were held to discuss the feasibility and appropriateness of the toolkit for a jail setting. Some of the concerns expressed by the focus group participants included volume of participants in need of assistance to manage their hypertension versus volume the approach could serve, length of the assessment tool, and the series/number of encounters required of the shared medical appointment approach. Based on the focus group input, it is not feasible at this time to implement the shared medical appointment approach for treatment of hypertension in this jail setting. Thus, the feedback was used to revise the toolkit to create a more practical one-time clinical education model for this specific setting. The resulting product better fits the needs of the jail and its constituents at this time.

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CHAPTER 1: CREATING AND EVALUATING A TOOLKIT FOR SHARED MEDICAL APPOINTMENTS FOR HYPERTENSION MANAGEMENT IN A JAIL SETTING

Hypertension is one of the most common chronic conditions seen in primary care with a prevalence of roughly 30% in the general population (Egan, Huchinson, & Ferdinand, 2014). If not detected and appropriately treated, hypertension can lead to renal failure, myocardial infarction, stroke, and death (Egan et. al., 2014). Medication therapies are effective in lowering blood pressure, but it is estimated that non-adherence rates are roughly 57% (Alhalaiqa, Deane, Nawafleh, Clark, & Gray, 2012).

In the United States, jail inmates have a higher prevalence of chronic illness than the general population. In inmates between the ages of 50 and 60 years, the rate of hypertension is as high as 50% (Binswanger, Krueger, & Steiner, 2011). It is well documented that African American adults in the general population are disproportionately affected by hypertension compared with White or Hispanic adults (Egan et. al, 2014). Given the overrepresentation of African American males in the correctional system, the overall prevalence rates of hypertension among the incarcerated are skewed higher (Dumont, Allen, Brockman, Alexander, & Rich, 2013). Nevertheless, even when prevalence data is adjusted for race, inmates consistently have higher rates of hypertension than non-institutionalized adults (Binswanger et. al., 2009; Arries & Maposa, 2013). A history of incarceration is associated with disparities in chronic disease and access to health care as the correctional environment itself contributes to depression, stress, and other cardiovascular risk factors (Arries & Maposa, 2013).

One intervention that has proven successful in the management of certain chronic conditions is the shared medical appointment. Shared medical appointments are group visits defined by condition where practitioners utilize social integration, interactive education, and medication management to achieve improved disease outcomes (Edelman et. al., 2012). Shared medical appointments are typical 90-120 minutes long and can accommodate 6-20 participants (Edelman et. al., 2012). Techniques such as motivational interviewing and guided discussion are used to facilitate participant skill building to reduce ambivalence and progress to self-efficacy and formulating an action plan (USVA, 2008; Matulich, 2013). Applying this intervention to the jail setting will allow care to occur earlier in the intake process and more frequently than traditional chronic care visits, as well as provide support to decrease barriers to treatment adherence. This approach increases the likelihood of reaching inmates with shorter lengths of stay prior to their return to the community, resulting in a positive effect on community health and the entire local health care system. Shared medical appointments meet National Commission on Correctional Health Care (NCCHC) accreditation standards pertaining to health promotion, self-care, medical diets, tobacco use, discharge planning, continuity and coordination of care during incarceration, and chronic disease services (NCCHC, 2014). In socioeconomic groups where health literacy may be low but peer support is high, the shared medical appointment may be the optimal model to augment the traditional one-on-one visits (Egger et. al., 2014).

Problem Statement

There is a problem in treatment adherence in jail inmates with the diagnosis of hypertension. Despite availability of medications, written and verbal education, and

traditional chronic care clinics, inmates do not consistently follow treatment regimens. The literature suggests racial and ethnic disparities, dietary preferences, chronic stress, smoking, low socioeconomic status, lack of self-efficacy, lack of health insurance and poor access to care as barriers to adherence to hypertension treatment regimes in this population (Binswanger et. al., 2011; Hicken, Lee, Morenoff, House, & Williams, 2014; Travis, Western, & Redburn, 2013; Marks & Turner, 2014; Kinner & Wang, 2014; Dumont et. al., 2013). A potential solution to this problem is the implementation of the shared medical appointment.

Purpose

The purpose of this project is to create and evaluate the feasibility of an evidence-based toolkit for clinicians to use to implement the shared medical appointments approach for the treatment of hypertension in a jail in North Carolina.

Conceptual and Theoretical Framework

The toolkit for implementing the shared medical appointment approach is based on the chronic care model. The chronic care model is a conceptual framework that identifies six fundamental areas for change in routine chronic disease management in the ambulatory setting. The chronic care model views management of ongoing conditions as multifactorial, complex, and flexible, with goals to increase individual outcomes and community health as a whole (Coleman, Austin, Brach, & Wagner, 2009). These six areas form an interconnected system to make evidence-based care more patient-centered while improving health outcomes (Coleman, Austin, Brach, & Wagner, 2009). To conform to the chronic care model an intervention must integrate changes in the six systems of self-management support, decision support, delivery system design, clinical

information systems, health care organization, and community resources to strengthen the provider-patient relationship (Coleman et. al., 2009).

In the planned shared medical appointment, self-management support is addressed in the focused content and interactive education of visits and includes basic information about hypertension, self-management, skill building, emphasis on patient empowerment, and development of problem solving skills. Decision support for the shared medical appointment involves treatment decisions and recommendations for hypertension from the guidelines by the Eighth Joint National Committee (JNC-8) and the American Heart Association (James et. al., 2014; American Heart Association, 2015). In the jail setting, the clinical information system component of this model is the electronic medical record, which has the ability to track medication adherence, query populations, and store individual patient information to track plan of care and treatment. Information regarding community resources, reinforcing evidence-based approaches, adherence to a low-sodium diet and medication regimens, formulation of an individual participant's release plan, and procedures for providing transitional medication upon release are all addressed in the toolkit. The chronic care model framework goals are to transition care from reactive treatment to proactive treatment (Coleman et. al., 2009). Shared medical appointments are perfectly aligned with the chronic care model in that they address these six areas of care delivery and the toolkit was designed to capitalize on all of these areas.

Review of Literature

Correctional health encompasses care of two unique populations: prison inmates and jail inmates. Prisons hold convicted individuals with sentences of a year or more, and are generally run by the state or federal government (Binswanger et. al., 2009). Jails are

usually operated by counties or municipalities and jail inmates are incarcerated for short periods of time in jail facilities, generally for misdemeanor sentencing or while awaiting trial (Binswanger et. al., 2009). In the United States, it is estimated that over 11 million people are processed through local jails each year (Marks & Turner, 2014; Kinner & Wang, 2014). Many inmates leave jail rapidly after posting bail, having charges dropped, or receiving a sentence. This makes the average weekly turnover approximately 60% (Marks & Turner, 2014). After release, jail inmates' health problems often burden the local community health system (Marks & Turner, 2014). When reentering the community, former inmates with poorly managed conditions are overrepresented in acute care settings (Kinner & Wang, 2014). There is emerging evidence of a correlation between poor health outcomes and risk of recidivism (i.e. relapse into criminal behavior); therefore, addressing processes to improve health outcomes may indirectly affect public safety (Kinner & Wang, 2014).

Correctional health care provided to jail inmates may be an opportunity to change health outcomes for the local community as well as the individual (Travis et. al., 2013; Marks & Turner, 2014; Kinner & Wang, 2014; Dumont et. al., 2013). Collaboration between jail and community health systems eliminates interruptions in the continuity of care, mitigates chronic conditions of high-risk inmates, and creates efficiencies that benefit all stakeholders (Marks & Turner, 2014). Provision of a discharge plan, which includes a follow up appointment, as well as, bridge medication (i.e. a 30-day supply of medication to bridge the gap between jail and community providers) is one example of a formulated solution.

Jail inmates have poorer health and higher prevalence of underlying chronic illness compared to the general population (Binswanger et. al., 2009; Kinner & Wang, 2014; Travis et. al., 2013). Widespread characteristics that trend among inmates are low levels of education, substance abuse, alcohol abuse, smoking, poor nutrition, mental illness, and low levels of self-efficacy which exacerbate poorly managed chronic illness (Binswanger et. al., 2009; Kinner & Wang, 2014). Chronic psychological stress may be as important as hyperlipidemia when ranking risk factors for cardiovascular disease (Binswanger et. al., 2009; Kinner & Wang, 2014; Travis et. al., 2013; Hicken et. al., 2014).

Racial disparities are increased in both incarceration and hypertension. Hypertension occurs at an earlier age in African-Americans, with approximately 40% prevalence overall, compared to 30% for Caucasians over the past few decades (Hicken et. al., 2014). In 2013, the African-American incarceration rate was 3,119 per 100,000 compared to the Caucasian incarceration rate of 487 per 100,000 (Dumont et. al., 2013).

Many inmates are uninsured therefore the jail setting is their sole source of health care (Marks & Turner, 2014; Ross, 2011). Ninety percent of those leaving jail reenter the community without health insurance of any kind and thus the investment of health care received in jail is lost (Marks & Turner, 2014; Kinner & Wang, 2014). Adequate discharge planning that includes facilitating health care upon reintegration and identifying and enrolling Medicaid eligible inmates would smooth the transition back to the community (Marks & Turner, 2014).

In an attempt to maximize the effectiveness of an intervention in the jail setting, barriers to treatment adherence must be closely assessed and carefully considered in the

design and implementation of health promotion programs. Consciousness of blood pressure measurement (i.e. self-awareness) is a key factor to blood pressure control, which is lower in patients who infrequently use health care (Egan et. al. 2014). Increasing knowledge, creating positive relationships with providers, and facilitating social support can greatly affect self-management in patients with hypertension (Flynn et. al., 2013). The following five key areas must be address with any hypertension treatment regimen in order to overcome barriers.

Non-adherence

Adherence is the extent to which personal behaviors correspond to an agreed upon plan of care, or treatment regimens, with a health care provider (Alghurair et. al., 2012). Non-adherence to treatment regimens may be intentional or unintentional, and is complicated by many factors (Bailey, Oramasionwu, & Wolf, 2013). Adherence is not a single behavior, but multiple behaviors that are influenced by environmental, social, and individual dynamics (Stein, 2011). To improve adherence, a thorough understanding of patient perceptions and experiences must be explored (Marshal, Wolfe, & McKevitt, 2012). Adherence assumes that skills, resources, and motivation are present to follow health care recommendations (Hill et. al., 2011). Medication adherence, health literacy, dietary choices, and tobacco use are all components influencing hypertension treatment adherence.

Medication adherence. Medication adherence is one of the many factors that contribute to successful management of hypertension. It is estimated that patients with hypertension take 53%-70% of medications prescribed (Alhalaiqa et. al., 2012). Non-adherence with medication results in uncontrolled blood pressure, poor health outcomes,

and increased health care costs (Hill, Houston, & DeGuest, 2011). The integration of the medication self-management model can examine barriers in the steps of fill, understand, organize, take, monitor, and sustain to identify gaps in health literacy (Bailey et. al., 2013). In addition to self-reporting, ability to pay, and pill counts, exploring experiences of symptoms and concerns about drug side effects are all part of a comprehensive intervention (Marshall, Wolfe, & McKevitt, 2012; Hill et. al., 2011).

Health literacy. Low health literacy is linked to reduced medication adherence and greater use of emergency care (The Cecil G. Sheps Center for Health Service Research, 2013). Health literacy, defined as an individual's capacity to comprehend health information, plays a major role in analyzing adherence behaviors (Bailey et. al., 2013). In one study, self-efficacy and health literacy were built in the form of adherence therapy and based on the premise that the patient's beliefs impacted their adherence to their medication regimen. Cognitive and motivational interviewing was used to successfully modify beliefs, improve adherence, and reduce blood pressure (Alhalaiqa et. al., 2011).

Diet. The Dietary Approaches to Stop Hypertension (DASH) diet is the first line, non-pharmacologic treatment for hypertension (Epstein et. al., 2012). This diet encompasses high fiber, more fruits and vegetables, and less sodium (Epstein et. al., 2012). One problem with dietary recommendations for the inmate population is that socioeconomically and ethnically, there is generally less access to healthy, diverse food options while processed foods are widely available and affordable in the inmates' communities (Epstein et. al., 2012). Due to these considerations, trained cultural community leaders may act as partners to tailor the dietary teaching to be culturally

sensitive while enhancing family and social support, which may result in improved adherence after release (Epstein et. al., 2012).

Tobacco use. Inmates have a prevalence of smoking up to three times that of the general population, ranging from 84% to 88% (Arries & Maposa, 2013). The average tobacco use per day is equal to 20 cigarettes, with the mean age of onset of tobacco use before the age of 15 years (Arries & Maposa, 2013). Incorporating smoking cessation as part of a comprehensive intervention aimed at decreasing hypertension can greatly contribute to improved outcomes (Hayes, Leischow, Lawrence, & Lee, 2010). Currently, usual care for smoking cessation is the distribution of written information.

The Need for Novel Approaches

Novel approaches are needed and shared medical appointments can address and target some key behaviors that may decrease hypertension, as well as identify and address barriers to health promoting behaviors (Egan et. al., 2014). Shared medical appointments are a multifaceted intervention based on health conditions that combine interactive education, social support, technical assistance with medications, and facilitation to obtain community resources (Edelman et. al., 2012). Benefits have been achieved in blood pressure measures and reduction of cardiovascular risk in studies that concentrated on interventions to improve diabetes outcomes (Kirsh et. al, 2007; Edelman et. al., 2010).

Group dynamics and physical environment are crucial elements in behavioral change with shared medical appointments (Thompson, Meeuwisse, Dahle, & Drummond, 2014). The Veterans Affairs (VA) health system uses shared medical appointments and provides a guide to conducting the encounter (Edelman et. al., 2010; USVA, 2008). A systematic review was completed by the Veterans Affairs health system that compared 19

studies of shared medical appointments with usual care for diabetes; all studies were associated with decreased levels of hemoglobin A₁C (mean difference=-0.55;CI, -0.99 to -0.11) (Edelman et. al., 2010). Five studies reported effects on systolic blood pressure, showing a consistent and statically significant effect (mean difference=-5.2; CI, -7.40 to -3.05) (Edelman et. al., 2010).

The review of the literature yielded no studies on the shared medical appointment model for chronic disease processes in the jail or prison setting. There was literature addressing group interventions and peer led teaching centered on HIV and women's health issues in prisons, but the program was not led by a medical provider (Zack, Smith, Andrews, & May, 2013; St. Lawrence et. al., 1997; Goldstein, Warner-Robbins, McLean, Macatula, & Conlin, 2009; Sifunda et. al., 2008). A successful shared medical appointment requires the support and assistance of the jail staff (e.g., administrators, providers, guards, etc) and thus, their input is needed to determine the feasibility of a toolkit for implementing the shared medical appointment model in the correctional setting. This Doctor of Nursing Practice project has the potential to strongly impact how care is provided in the jail setting through the shared medical appointment.

CHAPTER 2: METHODOLOGY

Design

The project included multiple phases to design and determine the feasibility of a toolkit for implementation of the shared medical appointment approach for hypertension management in a jail setting. This project was reviewed by the Office of Human Research Ethics at the University of North Carolina at Chapel Hill and determined to be exempt from Institutional Review Board approval, as it does not constitute human subject research. Phase I consisted of a review of literature and hypertension management guidelines. Phase II was the actual development of the toolkit and included evaluation by focus groups. Guided by the chronic care model and best practices for toolkit development, a prototype was designed and presented to staff of the jail for feedback. Phase III included revision of the toolkit based upon the feedback from the jail staff. The feedback was use to make revisions to accommodate staff preferences and maximize operational efficiency, while maintaining National Commission on Correctional Health Care standards for chronic care management.

The National Commission on Correctional Health Care is the accrediting body that establishes quality standards and best practices for health services in jail settings. The standards specified by the commission are intended to improve the health of inmates and the community in which they return (NCCHC, 2014). The chronic disease service standard states that “patient’s with chronic diseases are identified and enrolled in a chronic disease program to decrease the frequency and severity of symptoms, prevent

disease progression and complication, and foster improved function” (NCCHC, 2014, p.107). The program incorporates regular visits, treatment plans, and patient education.

Participants and Setting

Two focus groups were conducted consisting of a convenience sample of staff that are employed in the medical department and jail setting. Participants in the first group included one physician, one nurse, and one correctional officer. Participants in the second focus group consisted of one physician assistant, one director of nursing, two nurses, and one correctional officer.

The setting for the focus groups was the Gaston County Jail and Annex. This facility has over 185,000 square feet and an operating inmate capacity of 527 men and women ages 16 and over. The jail houses state pretrial detainees, convicted inmates, pretrial federal inmates, weekender inmates, federal work release inmates, and detainees for Immigrations and Customs for up to 72 hours.

Phases and Process

Phase I: Review of the Literature and Hypertension Management Guidelines

A review of the literature was conducted regarding best practice for the shared medical visit. Evidence-based practice guidelines for hypertension management were incorporated into toolkit prototype for the shared medical visit. CINAHL, Pub Med, and Google Scholar were accessed through the UNC library to conduct a series of searches for publications to compose the outline of the literature review. Initial search terms used were: “inmate health”; “jail hypertension”; “inmate chronic disease.” Next, the terms: “shared medical visit”; “shared medical appointment”; “group visit” and “group medical

visit” were used. These searches were limited to publications after 2008. Searches were also done using: “chronic care model”; “treatment adherence”; and “toolkit.”

Phase II: Development of the Shared Medical Appointment Toolkit for Hypertension Management

Step 1: Development of a Toolkit Prototype

A toolkit prototype was designed based upon the guide *Facilitator’s Guide: Implementation Toolkit: Intervention and Organizational Readiness* (The California Social Work Education Center [CalSWEC], 2015). The guide was developed by The California Social Work Education Center (CalSWEC). Based out of the University of California at Berkley’s School of Social Work, CalSWEC is the nation's largest coalition of social work educators who collaborate to provide professional education, student support, in-service training, and workforce evaluation research (CalSWEC, 2015). The guide provides a systematic process for evaluating an intervention by collecting background information, assessing organizational readiness, building a toolkit, and conducting focus groups.

Toolkit Basics. The toolkit prototype is found in appendix1. Objectives of the toolkit include: to provide staff with a blueprint to implement the shared medical appointment approach to manage hypertension, to provide background information of current jail standards and evidence-based hypertension management guidelines, and to provide site-specific resource material for participants to receive follow up care when integrating back into the community. A basic overview of the elements of the toolkit and the approach for the shared medical appointment are presented below.

Overview. This section includes a synopsis of the prevalence of hypertension in jails and rationale for improved methods of chronic care delivery. Information focused on

an overall participant goal of increased awareness of blood pressure was presented. The shared medical appointment approach is defined and explained. The chronic care model is outlined as the framework for the topic based appointments and the six elements of self-management support, clinical information systems, decision support community resource and policies, organizational support, and delivery system design is presented. Benefits for jail staff and for participants are explored.

Background information. This section presents accreditation standards of health promotion, self-care, medical diets, tobacco use, discharge planning, continuity of care during incarceration, and chronic disease services as required by the National Commission on Correctional Health Care. Elements, characteristics, and goals of the shared medical appointment are outlined. Research and agencies that have participated in the use of shared medical appointments are presented. Group dynamics and physical environment are identified as essential elements in the approach. Goals for the shared medical appointment are: to allow providers more interaction time with participants, utilize techniques to build problem solving skills, practice goal setting, formulate an action plan, and to develop motivation and self-efficacy through peer support. The roles of facilitator and provider are defined and responsibilities of each are introduced.

Skills needed. Skills used during shared medical appointments such as motivational interviewing are overviewed. Motivational interviewing is defined and support is given for its application (Alhalaquia et. al., 2011). The collaborative manner of motivational interviewing is outlined and its importance emphasized in the process of bringing about long-lasting behavioral change (Madon, Loignon, & Lane, 2009). A link is shared for a video that provides an introduction to motivational interviewing with

clinical examples of its application (Matulich, 2013). The process elements of motivational interviewing of engaging, focusing, evoking, and planning are defined (Matulich, 2013).

The concept of low health literacy is introduced with the definition, prevalence information and an example of the teach-back method. Guided discussions are presented as a means to facilitate the shared medical appointment and minimize the provider's voice during the session (Edelman et. al., 2012; USVA, 2008). The priority of participant skill building is emphasized to practice problem solving during peer interactions (USVA, 2008).

Preparing for the shared medical appointment. Current evidence-based practice references from the National Commission on Correctional Health Care guide on hypertension and the American Heart Association algorithm for treatment are provided in this section. Inclusion and exclusion criteria for creating a hypertension registry are outlined. Appropriate participants includes: male inmates, over the age of 21, prescribed hypertension medication, with a body mass index of over 25, and a blood pressure measurement not yet at individual goal. Inappropriate characteristics are outlined as those with an elevated security status, in protective custody, conflicting gang affiliations with others in the group, and inmates with major psychiatric illness. A step-by-step approach is presented on preparation for the pre-implementation phase of the shared medical appointment, including labs, vital signs and collection instructions and inclusion of the Hypertension Self Care Profile.

Implementation guide. Agenda setting for the shared medical appointment and flow of the visit are presented. Each session lasts approximately 90 minutes containing

the elements of a check-in process, instructions on handling introductions, individual participant sessions (i.e. physical exam, medication adjustment), using session handouts to guide group discussion, and debriefing among staff after the session. Handouts with key points for topic discussions are introduced for each of the four sessions. These topics correspond to educational topics suggested by the National Commission on Correctional Health Care and the American Heart Association guidelines. Information and exercises are adapted from evidence-based resources from the Centers for Disease Control (CDC), National Institute of Health, JNC-8, and the American Heart Association. Critical environmental provisions concerning seating and tone of the visit are overviewed. Curriculum includes education and self-management strategies for: alcohol and tobacco, diet for hypertension control, medications adherence, and stress and weight management.

Session handouts and health literacy. Health literacy universal precautions (i.e. the assumption that every participant has low health literacy) were used when developing the session handouts (The Cecil G. Sheps Center for Health Service Research, 2013). The information and diagrams on the session handouts is adapted from evidence-based resources on the related topic from national organizations such as CDC, National Institute of Health, and American Heart Association. Communication skills for staff, such as the teach-back method, are overviewed in the toolkit (Coleman, 2011). Addressing health literacy was a priority when developing reference information, communicating community resources to participants, and teaching skills to staff.

The focus of the shared medical appointment in week one is smoking and tobacco cessation. The handout contains current guidelines of two drinks per day, evidence that tobacco and alcohol can raise blood pressure, and the concept of replacing triggers with

alternative coping strategies are presented as key points for the session. Examples of triggers are presented (e.g. feeling stressed, after finishing a meal, talking on the phone). The guided activity for participants is to create a list of three reasons they would want to become smoke free. The list is discussed, motivational interviewing is used to set goals and formulate an action plan in the group setting (CDC, 2015). A blood pressure measurement guide, national quit phone line, and community resource information are included (American Heart Association, 2015; CDC, 2015).

In week two, dietary recommendations and sodium restrictions are overviewed. The handout and guided activities of food label reading are the focus of practice and discussion. Comparisons between frozen peas and canned peas are used as a practical application (NIH, 2003). Sodium saving tips and fast food options are provided in handout form (McDonalds, 2015; Frensenius Medical Care, 2015). The blood pressure measurement guide and community resource information are also included (American Heart Association, 2015).

The third shared medical appointment handout focused on prescription medications. How to access the bridge medication program offered at release is discussed. Guided discussion focused around categories of hypertension medication (e.g. diuretics, beta-blockers, ACE inhibitors) and the side effects each may cause are presented. Options and strategies utilized are discussed to improve adherence to individual medication regimens. The blood pressure measurement guide and community resource information are included (American Heart Association, 2015).

The fourth and final shared medical appointment focuses on managing weight and stress. The handout provides the recommendation of three to four 40-minute sessions of

moderate intensity physical activity. Guided discussions as to how this might be accomplished on the individual level are explored. Motivational interviewing is used to help participants set goals and form an action plan to incorporate physical activity and identify stress triggers. The blood pressure measurement guide, body mass index chart, and community resource information is included (American Heart Association, 2015; NIH, 2003).

Evaluation and conclusion. Instructions on evaluation of the four shared medical appointments is included. Measures to collect, such as the repeated Hypertension Self Care Profile and blood pressure flows, are listed. The process of debriefing among staff is reviewed to adjust for delivery need and correct operational flow challenges.

Step 2: The Focus Group

The toolkit prototype was distributed and two focus groups were held for staff and other non-inmate stakeholders. An overview of the toolkit prototype was presented. Participants were asked about their perceptions, opinions, beliefs, and attitudes about the toolkit prototype and the feasibility of implementing the shared medical appointment for hypertension management in jail populations. Qualitative data were collected during this focus group discussion. Trends were identified and summarized from the feedback across both focus groups.

Focus group results. The principle investigator moderated the focus groups and kept detailed notes from the session for toolkit refinement. No identifying information was recorded. Comments were used to develop trends to revise the toolkit and were not attributed to any individual. Participation in the focus group was entirely voluntary.

There was no compensation or incentive for participating in the focus group. Participants in the focus group were questioned in the following areas:

1. Perspectives and attitudes on the concept of shared medical visits,
2. Baseline assessment of training needs for implementation of shared medical visits for hypertension management,
3. Recommendations, issues and opportunities to consider for implementation, and
4. Perspectives on next steps for implementation.

Feedback recorded across both groups was very similar and themes emerged as 1) concerns about the multiple shared medical appointments as a set, 2) the volume of participants who could be eligible to participate versus the small volume who would be served, and 3) the length of the validated assessment tool (Hypertension Self Care Profile) used to assess and evaluate health behaviors, motivation, and self-efficacy.

Theme 1: Concern about multiple shared medical appointments. Focus group participants voiced concerns over the logistical issues and time investment that would present when trying to maintain the same group of inmates for four weeks to complete the set of proposed visits. One staff member stated that many factors play into inmate availability, not just the fact that they leave the facility. “The inmate could be in court, have a attorney meeting, have family visitation, or be locked down, it would be less complicated and easier for staff to access inmates who are available for one extended session.”

Despite revisiting the basic foundations of rapport building, peer relationships, and motivational interviewing, the staff was not convinced that the theoretical potential for affecting outcomes was worth the resource investment due to the high volume of

inmates with hypertension. “We have 180 inmates with hypertension at any given time, as many inmates as possible should have a chance to attend,” one focus group member advocated. A medical staff member brought up the possibility that a select group of inmates that were poorly controlled could benefit from the multiple shared medical appointment approach, but it would not be an efficient and sustainable first line use of resources.

Theme 2: The large volume of participants needing help. Focus group participants also voiced concerns over the actual participant volume needing help with hypertension management compared to the potential small participant volume that could be accommodated by the shared medical appointments. “At any given time there are approximately 180 inmates in the facility with hypertension” was repeated. All of the focus group members were in agreement that although involving ten participants in four sessions may be more effective on outcomes, a longer session that could reach 12-15 participants would be more efficient. During discussion it was discovered that availability of the meeting space and the extra officer to chaperone the sessions could only occur a maximum of once a week due to limited resources. One group participant said, “if we are able to see 15 inmates a week in a one session, we would be able to potentially reach 60 inmates using the same resources as the proposed program.” Another group participant pointed out, “If we are only going to see ten inmates a month we will never be able to keep up.”

Theme 3: Assessment tool is too long. The medical staff represented in the focus group believed that the assessment and evaluation tool used for behavior, motivation, and self-efficacy is simply too long. The Hypertension Self Care Profile is a 60-question

profile collected before the shared medical appointment set and after. The pre- and post-intervention scores would be compared to evaluate the intervention. Focus group participants felt that, not only would it be time-consuming and labor-intensive to collect, participants would tire of being asked 60 questions. One group participant said, “we ask inmates so many questions to meet all the other requirements for standard of care, I can’t imagine asking 60 more! We are typically doing good if we can obtain answers for the questions we have to know to take care of them.” When they realized that the questionnaire would be collected, not once, but twice (once before the shared medical appointment set and then again after the shared medical appointment set for evaluation purposes) they were certainly against it. They did consider that collecting information in the domains of baseline health behaviors, current motivation, and confidence levels (self-efficacy) were a good way to evaluate the effectiveness of material and content covered in the session.

Other comments. Many comments across both groups viewed a one session option as an efficient way to meet the time constrain of seeing chronic care clinic inmates within 45 days of booking, as set by facility policy. Although the group participants understood the gains that may be made in health outcomes on the individual participant level, the pressures of time efficiencies and workflow improvement were more important and the practical priority at this time.

Phase III: Revision of the ToolKit and Presentation to the Staff

After the Feasibility of the original toolkit prototype was evaluated, the toolkit was revised to incorporate data collected during the focus groups. Changes were made to accommodate site-specific needs.

The revised toolkit is included in appendix 2. Specific changes as a result of the focus group feedback are below in table 1. After the revisions were made to incorporate focus group feedback, it was evident that the core elements of the shared medical appointment approach were missing. For this reason, the title of the final product was changed to *How to Implement the Chronic Care Group Educational Session for Hypertension Management*. Guided discussions, motivational interviewing, and rapport building cannot be established over a one-time, one-hour session when delivering all of the information originally covered in the four shared medical appointment set. The information on motivational interviewing and guided discussions was retained in the final toolkit to encourage the development of those skills by the staff, as they are useful in participant interactions. Specific changes to the initial toolkit are included in Table 1.

Table 1 *Changes to Shared Medical Appointment Toolkit Prototype*

Prototype	Feedback	Change
Title: <i>How to Implement the Shared Medical Appointment for Hypertension</i>	Educational session was favored over the Shared Medical Appointment approach	Title changed to: <i>How to Implement the Chronic Care Group Educational Session for Hypertension</i>
First objective: To provide jail staff with blueprint to implement the hypertension shared medical visit approach	Educational session was favored over the Shared Medical Appointment approach	Objective revised to: To provide jail staff with a blueprint to implement a group session to present educational information for inmates with hypertension
Implementation Guide: Step 1: Who is appropriate? BMI over 25, to make certain that healthy weight may be a goal	Session criteria shall include as many inmates with hypertension that would like to attend	Inclusion criteria removed.
Implementation Guide: Step 2: administer the hypertension self-care profile to those inmates on the registry	The evaluation method (Hypertension Self-Care Profile) for health behaviors, motivation, and self-efficacy is too long	Implementation Guide: Step 2: Administer the revised nine question pre-session assessment to participants
Implementation Guide:	If security status is	Implementation Guide:

Step 3: Select 10 inmates from the registry	acceptable, the session may accommodate more than 10 inmates	Step 3: Select 12-15 inmates from the registry
Hypertension Self-Care Profile	The evaluation method (Hypertension Self-Care Profile) for health behaviors, motivation, and self-efficacy is too long	Pre-Session Assessment was created to briefly assess current behavior, current motivation, and self-efficacy (confidence)
Preparing for the Shared Medical Appointment	Instead of extended discussion time, it is more practical to condense all of the topics into one session.	Instructions modified to include different terminology for group session. Instructions on setting the tone remained so that staff may be exposed to the skills that are key elements of the shared medical visit approach, although they are not required.
SMA Week 1: Smoking and Tobacco	The 4 separate shared medical appointments would be more useful if condensed into 1 session	Key Points added to Group Educational Session Agenda Content reduced to 1 handout for the Group Educational Session
SMA Week 2: Diet for Hypertension	The 4 separate shared medical appointments would be more useful if condensed into 1 session	Key Points added to Group Educational Session Agenda Content reduced to 1 handout for the Group Educational Session American Heart Association: Why Should I Limit Sodium included McDonalds: Simple Steps to Save on Sodium included Fresenius: Lower Sodium Fast Food Options included
SMA Week 3: Prescription Medications	The 4 separate shared medical appointments would be more useful if condensed into 1 session	Key Points added to Group Educational Session Agenda

		Content reduced to 1 handout for the Group Educational Session Medication Chart deleted
SMA Week 4: Stress and Weight Management	The 4 separate shared medical appointments would be more useful if condensed into 1 session	Key Points added to Group Educational Session Agenda Content reduced to 1 handout for the Group Educational Session Body Mass Index chart added
Evaluation: Repeat the Hypertension Self-Care Profile given at the end of 4 SMAs	The evaluation method (Hypertension Self-Care Profile) for health behaviors, motivation, and self-efficacy is too long	Evaluation: Repeat the pre-session assessment at the end of the Group Education Session

The toolkit objectives were rewritten to accommodate revised title and language. The term ‘shared medical appointment’ was replaced with ‘group educational session.’ The inclusion criteria of BMI greater than 25 was removed. The focus group participants expressed a desire to include as many inmates as possible with hypertension who were interested in participating in the group session. They felt this specific criterion would exclude many who could benefit from other topics addressed. The Hypertension Self Care Profile was replaced with a brief nine question assessment that reflected the information of interest that the focus group felt would broadly evaluate effectiveness. The four separate shared medical appointment handouts were condensed into a one-session packet participants receive at the beginning of the group educational session.

CHAPTER 3: DISCUSSION

The concept of shared medical appointments has been used in the Veterans Affairs health system, managed care organizations, and primary care practices (Edelman et. al., 2012; USVA, 2008). The shared appointments have proven effective in the management of diabetes and has been associated with decreased A₁C levels and shown effects on systolic blood pressure (Edelman et. al., 2010; USVA, 2008). Prior to beginning this project, the concept of the shared medical appointment had been discussed with the sheriff and the medical director at the jail and it was felt that this would be a great enhancement to care. The initial plan was to implement a four-week shared medical appointment set covering separate topics of behavioral factors related to hypertension management in the jail setting. Due to other issues, the focus switched from actually implementing the shared medical appointment to developing a toolkit and exploring the feasibility of that resource with the jail staff.

As it turns out, this was a much more useful project which demonstrated that perhaps the shared medical appointments would not be sustainable in this setting at this time due to the multiple sessions of shared medical appointments, greater inmate volumes needing the shared medical appointment than could be served, and resource limitations. Due to the nature of this jail, such as inmate security issues and logistical concerns, the shared medical appointment in this setting would not foster the concepts of motivational interviewing, rapport building, and guided discussions. Therefore, the revised toolkit,

which included a one time educational session including the information from the shared medical appointment toolkit, was developed.

The notion of group educational sessions is not foreign to the jail. The jail has an existing, successful inmate education program in place. The library of the jail is a common meeting place for inmate groups such as general education development (GED) classes, human immunodeficiency virus (HIV) education, Alcoholics Anonymous, and substance abuse education (Gaston County Government, 2015). The room has adequate space, audio-visual equipment, and seating to accommodate a group session. Procedures are already in place for correctional staff to transport, handoff, and facilitate inmate movement and security for educational programs.

Economic Implications

Modifying the existing process with the group educational session instead of the shared medical appointment model may have economic impact. The group educational session would provide chronic disease management, health education, and community resources to 60 inmates within a 30-day time period (15 inmates per week) with no more resource investment. Because nearly all inmates return to the community, incarceration is a public health opportunity to reach the medically underserved and address health disparities (Dumont et. al., 2013). When inmates return to the community, complex health problems and chronic disease management become public health problems (Kinner & Wang, 2014). Improvement in efficiency could improve hypertension control, resulting in economic benefits realized in the community health system.

Recent evolving literature links poor health outcomes to increase risk of recidivism (Kinner & Wang, 2014; Marks & Turner, 2014). The association to public

safety could also economically benefit the community as an effort to reduce crime (Kinner & Wang, 2014). One important way to break the cycle of reentry to jail is to link inmates with community services to address health needs and provide tools to manage their health, and not to lose the investment made in health care provided in the jail (Marks & Turner, 2014).

Limitations

Inmates were not included in the focus groups, due to the protected status of the vulnerable population. Without inmate input, key stakeholder's perceptions and opinions are missing in the evaluation of the toolkit. Scheduling difficulties prevented other representation from the community clinic providing follow up care from attending. Feedback from the different perspective could have been useful when revising the toolkit.

Recommendations

Recommendations for future consideration would encompass the use of the shared medical appointment approach for use with a select sub-population of inmates with poorly controlled hypertension who were willing and appropriate to attend appointments in a group setting. The proposed set of four shared medical appointments addressing behavioral factors of hypertension management could be administered. Perhaps the validated tool originally proposed could be administered pre-and post-intervention to evaluate effectiveness of the intervention. This approach could be used as part of the treatment plan, on an as needed basis, when individuals are identified as needing more than the first-line group education session.

Conclusion

In summary, the shared medical appointment might not be an effective approach for hypertension management in this jail setting at this time. The shared medical appointment approach will not be implemented in this setting due to inmate participant volume, sustainability concerns, and alternative resource allocation.

Nevertheless, the shared medical appointment is an approach that may be used for a particularly hard to control group in the future that may benefit from behavioral intervention.

How to Implement the Shared Medical Appointment for Hypertension Management

In a Jail Setting (Prototype)

Erin Flitt NP-C, MSN, MBA

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Objectives of the Toolkit



Overview

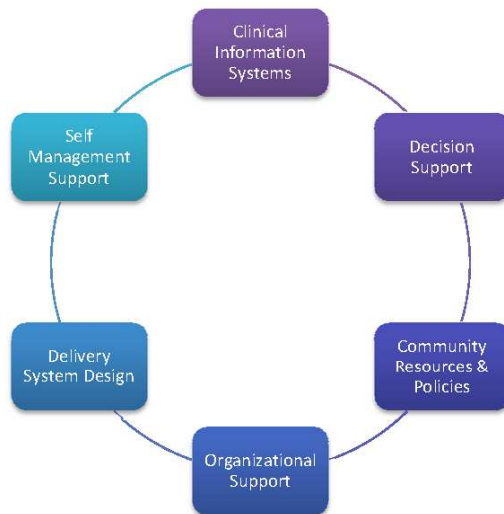
In the United States, jail inmates have a higher prevalence of hypertension than the general public. In inmates ages 50-60 years, the rate of hypertension is as high as 50% (Alhalaiqa, Deane, Nawafleh, Clark, & Gray, 2012). In the United States, it is estimated that over 11 million people are processed through local jails each year (Marks & Turner, 2014; Kinner & Wang, 2014). After release, jail inmates' health problems often burden the local community health system. When reentering the community, former inmates with poorly managed conditions are overrepresented in acute care settings (Kinner & Wang, 2014). There is emerging evidence of a correlation between poor health outcomes and risk of recidivism (i.e. relapse into criminal behavior); therefore processes to improve health outcomes may indirectly affect public safety (Kinner & Wang, 2014).

Many inmates are uninsured, resulting in the jail setting acting as the sole source of health care (Marks & Turner, 2014; Ross, 2011). Ninety percent of those leaving jail reenter the community without health insurance of any kind, opposing the investment of health care received in jail (Marks & Turner, 2014; Kinner & Wang, 2014). In an attempt to maximize the effectiveness of an intervention in the jail setting, barriers to treatment adherence must be closely assessed and carefully considered in the design and implementation of health promotion programs. A key factor to blood pressure control is self-awareness, which is lower in those who infrequently use health care (Flynn et. al., 2013).

Shared Medical Appointments (SMA) are group visits defined by condition where practitioners utilize social integration, interactive education, and medication management to achieve improved outcomes (Edelman et. al., 2012). SMAs are a multifaceted intervention that combines interactive education, social support, technical assistance with medications, and facilitation to obtain community resources (Edelman et. al., 2012). Applying this intervention to the jail setting will allow care to occur earlier in the intake process and more frequently than traditional chronic care visits, as well as provide support to decrease barriers to treatment adherence. This approach increases the likelihood of reaching inmates with shorter lengths of stay, prior to their return to the community, resulting in a positive effect on community health and the entire local health system.

Chronic Care Model

Shared medical appointments are based on the Chronic Care Model, which is a conceptual framework that identifies 6 fundamental areas for change in routine chronic disease management in the ambulatory setting. The chronic care model views management of ongoing conditions as multifactorial, complex, and flexible with goals to increase individual outcomes and community health as a whole (Coleman, Austin, Brach, & Wagner, 2009).



Benefits to Staff

It is encouraging to motivate and empower the inmate population to take charge of their chronic condition and improve their self-management skills.

Benefits to Participants

Participants experience peer support, skill building, and solutions to individual challenges in a way the traditional one-on-one visit does not provide.

Background Information

Shared medical appointments meet the National Commission on Correctional Health (NCCCHC) accreditation standards pertaining to health promotion, self-care, medical diets, tobacco use, discharge planning, continuity and coordination of care during incarceration, and chronic disease services (NCCCHC, 2014). In socioeconomic groups where health literacy may be low, but peer support is high, the shared medical appointment approach may be the optimal model to augment the traditional one-on-one visit (Egger et. al., 2014).

Group dynamics and physical environment are crucial elements in behavioral change with shared medical appointments (Thompson, Meeuwisse, Dahle, & Drummond, 2014). The Veterans Affairs (VA) health system uses shared medical appointments and provides a guide to conducting the encounters (Edelman et. al., 2010; USVA, 2008). The shared medical appointment is a group appointment among participants who share the same health condition. Participants check in, have vital signs taken, and are escorted to a private area where a physical exam is performed by a provider and any individualized care (i.e. medication adjustments, confidential questions, etc.) may be addressed. Following the private encounter, the participant is seated in an area configured so that group dynamics can occur, typically chairs placed in a circle. The ensuing group discussion is provider guided, but the provider minimizes their voice to allow for participants to reflect and problem solve on their own (Edelman et. al., 2010; USVA, 2008).

The goals of the shared medical appointment approach are to allow providers more interaction time with participants and to use techniques to allow participants to build problem solving skills, set personalized goals, formulate an action plan, and develop motivation and self-efficacy through peer support. Adherence to treatment is a behavioral choice in many cases; this approach is intended to assist the participant to work through his own ambivalence about behavioral components of hypertension management.

Roles

Facilitator – This person may be an RN or LPN. The facilitator takes the main responsibility for sticking to the agenda and participant flow and logistics. Also, the facilitator would be responsible for any follow up, order changes, or further action needed after the session.

Provider – The physician, Nurse Practitioner, or Physician Assistant – One is necessary for medication adjustments and curriculum review. Two may be ideal for more complex patients that may need more in-depth individual time.

Skills Needed

Behavioral change is brought about most effectively in collaboration with a patient, not in an advice-giving manner (Madson, Loignon, & Lane, 2009). **Motivational interviewing** is an evidence based patient-centered counseling style used to move an individual towards change by strengthening his or her own argument for change (USVA, 2008). This approach has been used effectively in substance abuse treatment and has intensified positive changes in behavioral risk factors to health, such as, decreasing risky sexual behaviors, cultivating medication adherence, and enhancing readiness to change in eating disorders (Madson, Loignon, & Lane, 2009). To use this approach, the provider selectively elicits and reinforces positive self-statements, directing the patient to move toward that direction into positive behavior change (USVA, 2008).

A great overview of Motivational Interviewing can be viewed by clicking this link:
<https://www.youtube.com/watch?v=s3MCJZ7OGRk>

In Motivational Interviewing, the provider does not assume the authority position with the participant, rather evoking the participant's perspective and values rather than imparting their own. The provider respects the participant's decision regarding self-direction, even if they do not align with what the provider considers optimal (USVA, 2008). Motivational Interviewing targets participant-specific change and assists in formulating an action plan for change (Madson, Loignon, & Lane, 2009).

The process used:

- Engaging – building rapport
- Focusing – set an agenda
- Evoking – change talk
- Planning – develop a specific plan (Matulich, 2013).

A low level of health literacy is a major problem among a third of adults in the United States (Coleman, 2011). Using the **teach-back method** to facilitate health literacy is a way to evaluate the interaction (The Cecil G. Sheps Center for Health Service Research, 2013). Teach-back method is also called the “show me” method. Teach-back is an evidence-based approach used to prompt patients to put into their own words what their understanding of treatment plan and action they need to take to participate in their care (Tamura-Lis, 2013). During the conclusion of the shared medical appointment, this can be especially helpful for participants to assess the understanding of access of bridge care to the community setting.

Guided discussions are a way to stay on topic while minimizing your voice. Keep in mind that the goal is to allow participants to share and problem-solve with and for each other (USVA, 2008). As the facilitator, gently nudging discussion back on topic provides for repetition during the discussion.

Preparing for the Shared Medical Appointment

The National Commission on Correctional Health (NCCHC) provides guidance for hypertension management in the jail setting (see page 12) as does the American Heart Association (see page 15). The current NCCHC Chronic Disease Clinic Initial Baseline Medical Data Form (see page 17) may be used, as in the current documentation process. The Chronic Disease Clinic Follow-Up Form (see page 22) may be used as well, depending on where in treatment participants fall.

Step 1

Create a hypertension registry of inmates who meet criteria for the shared medical appointment.

Who is appropriate?



Who is not appropriate?



security status



protective custody



conflicting gang affiliation



major psychiatric illness

Step 2

Schedule a nurse visit, as usual, to draw labs related to chronic care clinic visits. Ask inmates from the hypertension registry if they are interested in participating in the shared medical appointment. If inmates are not interested and would prefer a one-on-one provider visit for chronic care management, then remove them from the hypertension registry.

For those who remain on the registry, administer the High Blood Pressure Self Care Profile (see page 23) to assess their behaviors, motivation and self-efficacy.

Step 3

Select 10 inmates from the hypertension registry for the shared medical appointment.

Implementation Guide

To facilitate a swift check in process, labs, Hypertension Self Care Profile scores, and vital sign flows can be reviewed prior to the shared medical appointment, due to the daily tasking and monitoring presently in process in the jail. Doing this can give great insight and context to the degree of control the participant is experiencing during the group portion of the visit. This can also allow the private visit prior to the group discussion to occur in an abbreviated time, probably 3-5 minutes.

After check in, the participant will have a seat in the group environment.

Establish an agenda

Set a schedule to cover content, but to allow ample time for discussion. The entire appointment should last approximately 90 minutes, allowing about 30 minutes for individual participant sessions. Handouts with reflective activities have been included to assist in covering main teaching points for each shared medical appointment (starting on page 28). Please note that some agenda items may be moved around. If you find that it is easier to start a group discussion in the beginning and end with the individualized visits, then mix it up. As long as the shared medical appointment includes these core ingredients:

- Check-in
- Introductions
- Group Discussions
- Individual Participant Sessions (i.e. physical exam, medication adjustment)
- Debriefing

Set the tone

- Sit with the participants, join the group in a chair within the circle.
- Introductions are crucial to building the peer relationship.
An icebreaker may be to ask the participant his first name and share how long he has had hypertension
- ENGAGE the patients – discussions begin with open ended questions
- Use the skills of **motivational interviewing**, **guided discussions**, and the **teach-back method** during the group interaction. You will develop these skills over time.

Evaluation

To evaluate the success of the shared medical appointments:

- Repeat the Hypertension Self Care Profile (page 23) - Compare the initial score to the score given at the end of the series of four shared medical appointments.
- Track participant process – Continue to monitor blood pressure flows and medication adherence via the medication administration record in the electronic medical record while in the facility.
- Debrief among the staff – discuss what went well and what didn't.

Conclusion

The shared medical appointment approach is a way to mesh the medical exam, health education, and develop participant self-efficacy through skill building. The approach has been shown to improve health outcomes in chronic conditions.

NCCHC Hypertension Guide



National Commission on
Correctional Health Care

1145 W. Diversey Pkwy. 773-880-1460
Chicago, Illinois 60614 www.ncchc.org

Guidance for Disease Management in Correctional Settings

HYPERTENSION

NCCHC issues guidance to assist correctional health care clinicians in evidence-based decision making. This document is meant to supplement—not replace—nationally accepted clinical guidelines issued by organizations such as the Eighth Joint National Committee, the National Institutes of Health, and the Federal Bureau of Prisons. For specific clinical practice guidelines and recommendations, please see the resources listed on page 3.

Introduction

Although clinical guidelines are important decision support for evidence-based practice, to leverage the potential of guidelines to improve patient outcomes and resource use, NCCHC recommends that health care delivery systems also have components including primary care teams, other decision support at the point of care (such as reminders), disease registries, and patient self-management support. These components have been shown to improve outcomes for patients with chronic conditions. In addition, we recommend establishment of a strategic quality management program that supports ongoing evaluation and improvement activities focused on a set of measures that emphasize outcomes as well as process and practice. For information on the chronic care model, model for improvement, and outcomes measures, see the resources listed on page 3.

Hypertension Care in Corrections

Hypertension is among the most prevalent chronic medical conditions in corrections. Age-adjusted rates are higher than in the general population. Suboptimal treatment results in excess heart disease, stroke, and kidney disease. Improved strategies are needed to optimize hypertension treatment.

A scientific advisory from the American Heart Association, the American College of Cardiology, and the Centers for Disease Control and Prevention recommends a system-level approach to improving hypertension control. This approach includes eight components relevant to corrections.

1. *Identifying all patients eligible for management.* It is important that all inmates be screened for hypertension on entry to the correctional system and reassessed on annually if systolic blood pressure (SBP) < 130 and diastolic blood pressure (DBP) < 80. Those with SBP 130-139 or DBP 80-89 should be reassessed in 6 months or less. Those with SBP ≥ 140 or DBP ≥ 90 should have the diagnosis of hypertension confirmed with a second reading taken in no less than 1 month (and much sooner depending on severity). It should be noted that pregnant women with SBP > 140 or DBP > 90 should be immediately referred to a specialist with experience caring for pregnant women. High blood pressure in pregnancy may also be a sign of preeclampsia, a condition that needs urgent attention to avoid risk of harm to the mother and fetus. Management of hypertensive disorders in pregnancy requires separate protocols and specialized expertise. All patients with hypertension should undergo a comprehensive evaluation that includes assessment of modifiable risk factors. All patients should have a complete physical examination with particular attention to the presence of comorbidities including signs and symptoms of vascular disease, heart disease, stroke, and renal disease.

Initial laboratory tests include:

- Chem-7
- Fasting lipid panel
- Electrocardiogram
- Urinalysis

2. *Monitoring at the practice/population level.* This can be done through a BP registry that includes the names, BP readings, and date of persons with a diagnosis of hypertension. Some electronic health records allow for the creation of such a registry. Alternatively, this can be created by nursing or support staff using Excel spreadsheets. This facilitates identification of persons and recall of those not at goal.

3. *Increasing patient and provider awareness.* Patients and providers should be educated regarding the latest guidelines and approaches. The Eighth Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC8) recommends using the same blood pressure target among adults regardless of whether diabetes or kidney disease is present. The American Diabetes Association recommends a target of < 140/80 for diabetics. JNC8 also recommends a higher target (< 150/90) for persons 60 years and older than for younger persons (< 140/90). However, to date, the higher target for older persons has not been endorsed by the American Heart Association or the American College of Cardiology.

4. *Providing an effective diagnosis and treatment guideline.* A simple treatment algorithm is recommended (see <http://millionhearts.hhs.gov/resources.html>). In the absence of specific conditions or indications, diuretics and ACE inhibitors remain first-line treatments, followed by calcium channel blockers. Treatment involves not only effective medication management but also treatment of modifiable cardiovascular risk factors, such as smoking, diet, physical activity, lipids, diabetes, and substitution of medications that increase blood pressure. Treatment requires effective patient education and self-management. Patients with BP > 180/110 warrant urgent evaluation and management. Similarly, patients with acute chest pain, significant shortness of breath, or neurological symptoms require emergency evaluation.

5. *Systematic follow-up of patients for initiation and intensification of therapy.* All patients not at goal should be seen for follow-up within 1 month for consideration for intensification of therapy. Patients should be evaluated for dizziness or recent falls potentially related to blood pressure lowering.

6. *Clarifying roles of health care providers to implement a team approach.* Delegation of tasks will depend on the preferences of the clinician and training of staff. Examples include delegation of diet and exercise counseling to an RN or maintenance of the hypertension registry by an LPN or MA.

7. *Reducing barriers for patients to receive and adhere to medications as well as to implementing lifestyle modifications.* This can mean working with the dietary department to reduce sodium content, changing medication when side effects are bothersome, and encouraging physical exercise as allowable.

8. *Leveraging the electronic medical record systems being established throughout the United States to support each of these steps.* Examples include the creation of registries and alerts, and the use of order sets, templates, and patient education materials embedded within the system. These tools also can help to tailor management to BP severity.

Quality Improvement Measures

The following quality improvement measures are suggested, but they are not intended to be a complete list necessary to ensure a successful hypertension management program in a correctional setting. We recommend that the improvement measures for a patient population be reported at a facility level and at a provider or team level. These indicators should be compared over time to correlate improvement.

Process

- Percentage of patients suspected of having a hypertension diagnosis who had at least one blood pressure reading within 1 month if still present in the facility or system
- Percentage of patients with a hypertension diagnosis who had at least one fasting lipid panel and fasting plasma glucose in the preceding 24 months
- Percentage of patients with a hypertension diagnosis whose degree of control is categorized as fair or poor who have a plan that includes a strategy for improving blood pressure control

Outcomes

- Percentage of patients with a hypertension diagnosis who have blood pressures < 140/< 90 based on the last blood pressure reading in the preceding 6 months
- Percentage of patients with a hypertension diagnosis and diabetes who have blood pressures < 130/< 80 based on the last blood pressure reading in the preceding 6 months

Recommended Resources to Support Evidence-Based Practice and Quality Improvement

RESOURCE	2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults: Report From the Panel Members Appointed to the Eighth Joint National Committee (JNC 8)
SOURCE	The Journal of the American Medical Association
URL	http://jama.jamanetwork.com/article.aspx?articleid=1791497
RESOURCE	Essential Hypertension (February 2009)
SOURCE	University of Michigan Health System; available from the Agency for Healthcare Research and Quality's National Guideline Clearinghouse
URL	http://www.lwwpartnerships.com/assets/files/ANAES/Cardiology2010/Pediatric_hypertension_update_12.pdf
RESOURCE	Million Hearts: Resources
SOURCE	Centers for Disease Control and Prevention
URL	http://millionhearts.hhs.gov/resources.html
RESOURCE	Hypertension Prevention, Treatment, Control and Sodium Reduction Policy
SOURCE	Centers for Disease Control and Prevention
URL	http://www.cdc.gov/primarycare/materials/hypertension/index.html
RESOURCE	The Heart/Stroke Recognition Program
SOURCE	National Committee for Quality Assurance and American Heart Association
URL	http://www.ncqa.org/tabid/140/Default.aspx
RESOURCE	Tools, reports, and other resources
SOURCE	Institute for Healthcare Improvement
URL	http://www.ihl.org
RESOURCE	How to Improve / Model for Improvement
SOURCE	Associates in Process Improvement. Available from the Institute for Healthcare Improvement
URL	http://www.ihl.org/knowledge/Pages/HowtoImprove/default.aspx
RESOURCE	Measures
SOURCE	Institute for Healthcare Improvement
URL	http://www.ihl.org/knowledge/Pages/Measures/default.aspx
RESOURCE	HEDIS & Quality Measurement
SOURCE	National Committee for Quality Assurance
URL	http://www.ncqa.org/tabid/59/Default.aspx

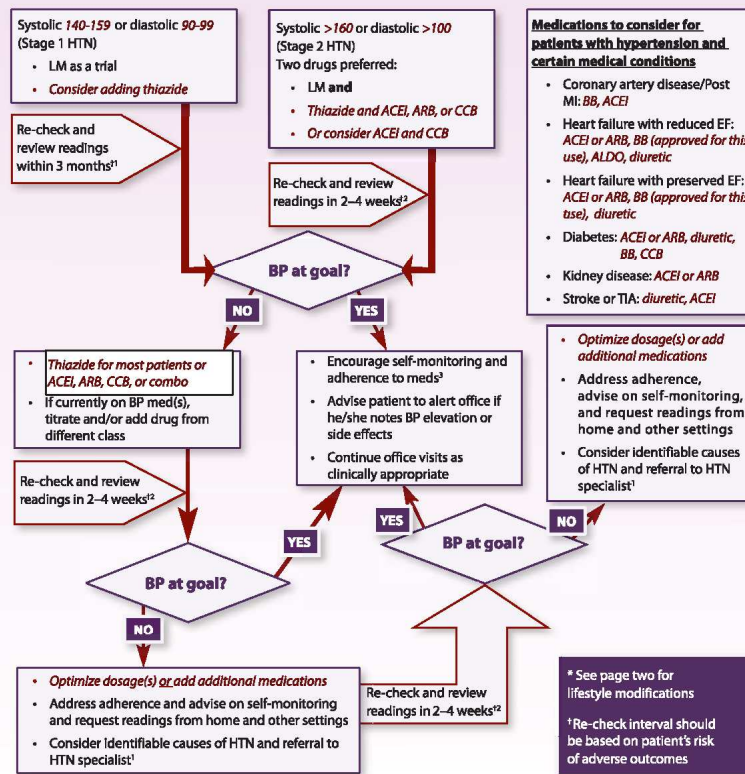
Last reviewed: October 2014
For the latest version, go to
<http://www.ncchc.org/guidance>

Treatment Algorithm

Gaston County Jail

Protocol for Controlling Hypertension in Adults¹

The blood pressure (BP) goal is set by a combination of factors including scientific evidence, clinical judgment, and patient tolerance. For most people, the goal is <140 and <90; however some individuals may be better served by other BP goals. Lifestyle modifications (LM)^{*} should be initiated in all patients with hypertension (HTN) and patients should be assessed for target organ damage and existing cardiovascular disease. Self-monitoring is encouraged for most patients throughout their care and requesting and reviewing readings from home and community settings can help in achieving and maintaining good control. For patients with hypertension and certain medical conditions, specific medications should be considered, as listed in the box on the right below.



Instructions for use of the template

1. Gather clinical staff to make consensus decisions about:
 - Specific medications to be prescribed for most patients with hypertension
 - Medications to consider for patients with hypertension and certain medical conditions
 - Starting dosages and dosage increases with each titration
 - Time intervals for follow-up and titration
2. Customize the template by accepting the variables in red or modifying them with other drug names, dosages, and titration
 - As needed, develop separate protocols for subpopulations with different treatment goals
3. Adopt the protocol across the practice or system and revise it over time to meet the needs of patients and staff

*Lifestyle Modifications ¹ (LM)		
Modification	Recommendation	Approximate SBP ^{***} Reduction (Range) ^{††}
Weight reduction	Maintain normal body weight (body mass index 18.5–24.9 kg/m ²)	5–20 mm Hg/10kg
Adopt DASH ^{†††} eating plan	Consume a diet rich in fruits, vegetables, and lowfat dairy products with a reduced content of saturated and total fat	8–14 mm Hg
Dietary sodium reduction	Reduce dietary sodium intake to no more than 100 mmol per day (2.4 g sodium or 6 g sodium chloride)	2–8 mm Hg
Physical activity	Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week which may be broken into shorter time intervals such as 10 minutes each of moderate or vigorous effort)	4–9 mm Hg
Moderation of alcohol consumption	Limit consumption to no more than 2 drinks (e.g. 24 oz. beer, 10 oz. wine, or 3 oz. 80-proof whiskey) per day in most men, and to no more than 1 drink per day in women and lighter weight persons	2–4 mm Hg
^{***} SBP – systolic blood pressure ^{††} The effects of implementing these modifications are dose and time dependent, and could be greater for some individuals ^{†††} DASH – Dietary Approaches to Stop Hypertension		

Abbreviations

- ACEI – Angiotensin-Converting Enzyme Inhibitor
- ALDO – Aldosterone Antagonist
- ARB – Angiotensin II Receptor Blocker
- BB – Beta Blocker
- CCB – Calcium Channel Blocker
- EF – Ejection Fraction
- MI – Myocardial Infarction
- TIA – Transient Ischemic Attack

References

- ¹ National Heart, Lung and Blood Institute, National Institutes of Health. *The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure - Complete Report*. National Heart, Lung, and Blood Institute, National Institutes of Health. NIH Publication No. 04-5230, 2004.
- ² Jaffe MG, Lee GA, Young JD, Sidney S, Go AS. Improved Blood Pressure Control Associated with a Large-Scale Hypertension Program. *JAMA*. 2013;310(7):699-705.
- ³ Centers for Disease Control and Prevention. *Self-Measured Blood Pressure Monitoring: Action Steps for Public Health Practitioners*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2013.

Other Resources

Sacks FM, Svetkey LP, Vollmer WM, et al. Effects on blood pressure of reduced dietary sodium and the Dietary Approaches to Stop Hypertension (DASH) diet. DASH-Sodium Collaborative Research Group. *N Engl J Med*. 2001;344:3-10.

US Department of Health and Human Services. 2008 physical activity guidelines for Americans. 2008. <http://www.health.gov/PAGuidelines>. Accessed November 4, 2013.

Suggested Citation

Centers for Disease Control and Prevention. *Protocol for Controlling Hypertension in Adults*. Atlanta, Georgia. 2013.

CS243702

Chronic Disease Clinic Initial Baseline Medical Data Form

Chronic Disease Clinic Initial Baseline Medical Data

Check all that apply and complete appropriate clinic HX:

- | | | |
|--|-----------------------------------|------------------------------|
| <input type="checkbox"/> Pulmonary/Asthma/COPD | <input type="checkbox"/> HTN/CV | <input type="checkbox"/> TB |
| <input type="checkbox"/> General Medical | <input type="checkbox"/> Seizures | <input type="checkbox"/> HIV |
| <input type="checkbox"/> Liver Disease/HCV | <input type="checkbox"/> Diabetes | |
| <input type="checkbox"/> Other: _____ | | |

Personal Risk Factors:		Family History:		Surgeries/Hospitalizations:	
Y	N	Y	N	Y	N
<input type="radio"/>	<input type="radio"/>	Smoking: Pack year	<input type="radio"/>	<input type="radio"/>	Anemia
<input type="radio"/>	<input type="radio"/>	High Blood Pressure	<input type="radio"/>	<input type="radio"/>	Asthma
<input type="radio"/>	<input type="radio"/>	High Cholesterol	<input type="radio"/>	<input type="radio"/>	Cancer: types
<input type="radio"/>	<input type="radio"/>	Sedentary Lifestyle	<input type="radio"/>	<input type="radio"/>	
<input type="radio"/>	<input type="radio"/>	Obesity	<input type="radio"/>	<input type="radio"/>	Diabetes
<input type="radio"/>	<input type="radio"/>	Diabetes	<input type="radio"/>	<input type="radio"/>	Heart Disease
<input type="radio"/>	<input type="radio"/>	Alcohol	<input type="radio"/>	<input type="radio"/>	High Blood Pressure
<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	Kidney Disease
<input type="radio"/>	<input type="radio"/>	Substance Abuse:	<input type="radio"/>	<input type="radio"/>	Mental Illness
<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	Sickle Cell
<input type="radio"/>	<input type="radio"/>	Injection Drug use	<input type="radio"/>	<input type="radio"/>	Tuberculosis
<input type="radio"/>	<input type="radio"/>	Multiple sexual partners	<input type="radio"/>	<input type="radio"/>	
<input type="radio"/>	<input type="radio"/>	Unsterile tattooing/body piercing	<input type="radio"/>	<input type="radio"/>	

General Description/Chief Complaint:(Attach medication profile or list medications)

Cardiovascular/Hypertension/Diabetes (Date of onset of symptoms:)

Y	N	Y	N	Y	N	Y	N
<input type="checkbox"/>	<input type="checkbox"/>	Chest Pain	<input type="checkbox"/>	<input type="checkbox"/>	Leg Swelling	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Shortness of Breath	<input type="checkbox"/>	<input type="checkbox"/>	Claudication	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Palpitation	<input type="checkbox"/>	<input type="checkbox"/>	Heart attack/surgery	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	PVD	<input type="checkbox"/>	<input type="checkbox"/>	CVA/Stroke	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Orthopnea	<input type="checkbox"/>	<input type="checkbox"/>	Rheumatic fever	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Dyslipidemia	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Headache	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Syncope/Dizziness	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Hypoglycemic Episodes	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Kidney Disease	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Weight Gain/Loss	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Blurred Vision	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Foot problems	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Nocturia	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Polyuria	<input type="checkbox"/>	<input type="checkbox"/>

Details of boxes checked Y:

Inmate Name:	Number:	Institution:	Date:
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Page 1

Y	N		Y	N	
<input type="checkbox"/>	<input type="checkbox"/>	Aura	<input type="checkbox"/>	<input type="checkbox"/>	Gum Disease: _____
<input type="checkbox"/>	<input type="checkbox"/>	Postictal State	<input type="checkbox"/>	<input type="checkbox"/>	Date of Last Seizure
<input type="checkbox"/>	<input type="checkbox"/>	Number of Seizures in past 3 mos. _____	<input type="checkbox"/>	<input type="checkbox"/>	LOC
<input type="checkbox"/>	<input type="checkbox"/>	Type of Seizures _____			
<input type="checkbox"/>	<input type="checkbox"/>	Other Neurological Symptoms? (headache, incontinence, paralysis)			

Y	N		Y	N		Y	N	
<input type="checkbox"/>	<input type="checkbox"/>	Anorexia	<input type="checkbox"/>	<input type="checkbox"/>	Weight Loss/Gain	<input type="checkbox"/>	<input type="checkbox"/>	Abnormal Pap Smear
<input type="checkbox"/>	<input type="checkbox"/>	Malaise	<input type="checkbox"/>	<input type="checkbox"/>	Peripheral Neuropathy	<input type="checkbox"/>	<input type="checkbox"/>	Hx Previous Antiviral Tx
<input type="checkbox"/>	<input type="checkbox"/>	Oral Lesions (herpes/thrush)	<input type="checkbox"/>	<input type="checkbox"/>	TB Infection/Tuberculosis			(list drugs below)
<input type="checkbox"/>	<input type="checkbox"/>	Nausea/Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	Hx Pneumonia	<input type="checkbox"/>	<input type="checkbox"/>	Jaundice
<input type="checkbox"/>	<input type="checkbox"/>	Constipation	<input type="checkbox"/>	<input type="checkbox"/>	Opportunistic Infections	<input type="checkbox"/>	<input type="checkbox"/>	Joint Pain
<input type="checkbox"/>	<input type="checkbox"/>	Diarrhea	<input type="checkbox"/>	<input type="checkbox"/>	AIDS Diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	Pruritis
<input type="checkbox"/>	<input type="checkbox"/>	Anorectal pain/lesions	<input type="checkbox"/>	<input type="checkbox"/>	Abdominal Pain/Swelling			
<input type="checkbox"/>	<input type="checkbox"/>	Stool Changes						

Y	N	Y	N
<input type="checkbox"/>	<input type="checkbox"/> Wheezing _____ per week	<input type="checkbox"/>	<input type="checkbox"/> # Asthma Attacks per week _____
<input type="checkbox"/>	<input type="checkbox"/> Nighttime Awakening Symptoms _____ per week	<input type="checkbox"/>	<input type="checkbox"/> Exposure to Environmental Risk (asbestos, chemical exposure, etc.)
<input type="checkbox"/>	<input type="checkbox"/> Hospitalized for Asthma within the last year	<input type="checkbox"/>	<input type="checkbox"/> Hemoptysis
<input type="checkbox"/>	<input type="checkbox"/> Number of ER Visits in past 3 Months _____	<input type="checkbox"/>	<input type="checkbox"/> Fever
<input type="checkbox"/>	<input type="checkbox"/> History of Intubations	<input type="checkbox"/>	<input type="checkbox"/> Liver Disease
<input type="checkbox"/>	<input type="checkbox"/> Short Acting Inhalers use _____ times per week	<input type="checkbox"/>	<input type="checkbox"/> Night Sweats
<input type="checkbox"/>	<input type="checkbox"/> Prior Systemic Steroids	<input type="checkbox"/>	<input type="checkbox"/> Weight Loss
<input type="checkbox"/>	<input type="checkbox"/> Activity Intolerance	<input type="checkbox"/>	<input type="checkbox"/> Persistent Cough (> 3 weeks)
<input type="checkbox"/>	<input type="checkbox"/> GERD	<input type="checkbox"/>	<input type="checkbox"/> Prior TB History
<input type="checkbox"/>	<input type="checkbox"/> Allergies		

Inmate Name:	Number:	Institution:	Date:
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Physical Exam

Vital Signs:

Temp:	Blood Pressure:	Pulse:	Resp:	Height:	Weight: (lbs):	Peak Flow:	Pain Scale:	Functional Assessment:
-------	-----------------	--------	-------	---------	----------------	------------	-------------	------------------------

HEENT _____

Neck: _____

Heart: _____

Lungs: _____

Abdomen: _____

Extremities: _____

GU/rectal: _____

Other: _____

Labs:

Hgb A1C:	Hct:	ALT:	T. Chole:	Triglycerides:
CD4 Cell:	Hgb:	BUN:	LDL:	INR:
HIV RNA VL:	AST:	Creatinine:	HDL:	Other:

Assessment: diagnoses

Degree of Control				
	G	F	P	N/A
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inmate Name:	Number:	Institution:	Date:
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Page 3

Education Provided: (describe below)

Disease process/abnormal labs: _____

Medication Mgmt (purposes, side effects): _____

Nutrition: _____

Smoking/Tobacco use: _____

Exercise: _____

Alcohol/substance abuse _____

Other: _____

PLAN:

Medication Changes: _____

Diagnostics:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> EKG | <input type="checkbox"/> CBC | <input type="checkbox"/> Hepatitis Panel A/B/C | <input type="checkbox"/> Liver Enzymes |
| <input type="checkbox"/> Chest x-ray | <input type="checkbox"/> Medication Levels | <input type="checkbox"/> Toxoplasmosis AB | <input type="checkbox"/> LFT |
| <input type="checkbox"/> Lipid Studies | <input type="checkbox"/> HIV Antibody | <input type="checkbox"/> RPR | <input type="checkbox"/> Sputum AFB Smear |
| <input type="checkbox"/> Chemistry | <input type="checkbox"/> CD4 count | <input type="checkbox"/> Pap Smear | <input type="checkbox"/> Sputum AFB Culture |
| <input type="checkbox"/> HgbA1C | <input type="checkbox"/> Viral Load | <input type="checkbox"/> Platelet | |
| <input type="checkbox"/> Urine Micro albumin | <input type="checkbox"/> HCV | <input type="checkbox"/> UA | |

Immunizations:

- ☐ Influenza Vaccine ☐ Pneumococcal Vaccine

Other Tests: _____

Monitoring:

BP: _____ times per day/week/month Glucose: _____ times per day/week/month Peak Flow: _____
Other: _____

Referral:

Specialist (indicate specialty and priority level): _____

Other Chronic Care Program? (specify): _____

Inmate Name:	Number:	Institution:	Date:
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Page 4

Additional Information: _____

Additional Information: _____

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100% of the total sample size (N = 1000) was used for the analysis.

1. The first part of the document is a header section containing the title "THE EFFECTS OF THE 2008 FINANCIAL CRISIS ON THE UK ECONOMY" and the author's name "JAMES H. M. SMITH".

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Clinician Signature/Credential

Date _____

Inmate Name:	Number:	Institution:	Date:
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Page 5

Chronic Disease Follow Up Form

Chronic Disease Clinic Follow-Up

Inmate Name:	
Number:	Institution:

List chronic diseases:

1)	3)	5)
2)	4)	6)

Attach pharmacy profile or list current medications:

Subjective:

Asthma: # attacks in last month? _____		Seizure disorder: # seizures since last visit? _____	
# short acting beta agonist canisters in last month? _____		Diabetes mellitus: # of hypoglycemic reactions since last visit? _____	
# times awakening with asthma symptoms per week? _____		Weight loss/gain ↓ ↑ #lbs	
CV/hypertension (Y/N):	Chest pain?	SOB?	Palpitations?
			Ankle edema?
HIV/HCV (Y/N):	Nausea/vomiting?	Abdominal pain/swelling?	Diarrhea?
			Rashes/lesions?

For all diseases, since last visit, describe new symptoms:

Patient adherence (Y/N): with medications? _____ with diet? _____ with exercise? _____

Vital signs: Temp _____ BP _____ Pulse _____ Resp _____ Wt _____ PEFr _____ INR _____
 Labs: Hgb A1C _____ HIV VL _____ CD4 _____ Total Chol _____ LDL _____ HDL _____ Trig _____

Range of fingerstick glucose/BP monitoring:

PE:

HEENT/neck:	Extremities:
Heart:	Neurological:
Lungs:	GU/rectal:
Abdomen:	Other:

Assessment:

	Degree of Control				Clinical Status			
	G	F	P	NA	I	S	W	NA
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plan:

Medication changes: _____

Diagnostics: _____

Labs: _____

Monitoring: BP: _____ X day/week/month Glucose: _____ X day/week/month Peak flow: _____ Other: _____

Education provided: ☐ Nutrition ☐ Exercise ☐ Smoking ☐ Test results ☐ Medication management ☐ Other: _____

Referral (list type): Specialist: _____ Chronic care program: _____

days to next visit? ☐ 90 ☐ 60 ☐ 30 ☐ Other: _____ Discharged from CCC: [name] _____

Advance Level Provider Signature:	Date:
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Page 1

Hypertension Self-Care Profile (HTN-SCP)

1. Listed below are common recommendations for persons with hypertension. **How often do you do the following?**

Items	Always	Frequently	Sometimes	Rarely/ Never
C1. Take part in regular physical activity (e.g. 30 minutes of walking 4-5 times a week)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C2. Read nutrition facts label to check information on sodium content?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C3. Replace traditional high-salt foods (e.g. canned soups, Oodles of Noodles) with low-salt products (e.g. homemade soups, fresh vegetables)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C4. Limit use of high-salt condiments (e.g. ketchup)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C5. Eat less than 1 teaspoon of table salt per day (6 grams)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C6. Eat less foods that are high in saturated (e.g. red meat, butter) and trans fat (e.g. shortening, lard)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C7. Use broil, bake or steam instead of frying when cooking?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C8. Read nutrition facts label to check information on saturated (e.g. butter, red meat) and trans fat (e.g. lard, shortening)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C9. Replace traditional high-fat foods (e.g. deep fried chicken) with low-fat products (e.g. baked chicken)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C10. Limit total calorie intake from fat (less than 65 grams) daily?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

How to Implement the Shared Medical Appointment for Hypertension Management | 23

C11. Eat 5 or more servings of fruits and vegetables daily?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C12. Practice moderation in drinking alcohol daily (2 glasses or less for men; 1 glass or less for women)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C13. Practice non-smoking?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C14. Check your blood pressure at home?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C15. Forget to take your blood pressure medicine?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C16. Forget to fill your prescriptions?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C17. Keep your weight down?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C18. Monitor situations that cause a high level of stress (e.g. arguments, death in the family) resulting in blood pressure elevation?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C19. Engage in activities that can lower stress (e.g. deep breathing, meditation)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C20. See a doctor regularly?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

2. Listed below are common recommendations for persons with hypertension. **How important is it to you to do the following?**

Items	Very important	important	Somewhat important	Not important
C21. Take part in regular physical activity (e.g. 30 minutes of walking 4-5 times per week)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C22. Eat less processed foods such as (e.g. canned or frozen foods, lunch meats)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

C23. Read nutrition facts label to check information on sodium content?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C24. Replace traditional high-salt foods (e.g. canned soups, Oodles of Noodles) with low-salt products (e.g. homemade soups, fresh vegetables)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C25. Limit use of high-salt condiments (e.g. ketchup)	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C26. Eat less than 1 teaspoon of table salt per day (6 grams)	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C27. Eat less foods that are high in saturated (e.g. red meat, butter) and trans fat (e.g. lard, shortening)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C28. Use broil, bake or steam instead of frying when cooking?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C29. Read food nutrition facts label to check information on saturated (e.g. butter, red meats) and trans fat (e.g. lard, shortening)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C30. Replace traditional high-fat foods (e.g. deep fried chicken) with low-fat foods (e.g. baked chicken)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C31. Limit total calorie intake from fat (less than 65grams) daily?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C32. Eat 5 or more servings of fruits and vegetables daily?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C33. Practice moderation in drinking alcohol daily (2 glasses or less for men; 1 glass or less for women)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C34. Practice non-smoking?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C35. Check your blood pressure at home	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

C36. Take your blood pressure medicine?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C37. Get your prescriptions filled?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C38. Keep your weight down?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C39. Try to stay away from anything and anybody that causes stress?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C40. See a doctor regularly?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

3. Listed below are common recommendations for persons with hypertension. **How confident are you that you could,**

Items	Very confident	Confident	Somewhat confident	Not confident
C41. Take part in regular physical activity (e.g. 30 minutes of walking 4-5 per week)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C42. Eat less processed foods such as (e.g. lunch meats, canned or frozen foods)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C43. Read nutrition facts label to check information on sodium content?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C44. Replace traditional high-salt foods (e.g. canned soups, Oodles of Noodles) with low-salt products (e.g. homemade soups, fresh vegetables)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C45. Limit use of high-salt condiments (e.g. ketchup)	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C46. Eat less than 1 teaspoon of table salt per day (6 grams)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C47. Eat less foods that are high in saturated (e.g. red meat, butter) and trans fat (e.g. lard, shortening)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

C48. Use broil, bake or steam instead of frying when cooking?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C49. Read nutrition facts label to check information on saturated (e.g. butter, red meats) and trans fat (e.g. lard, shortening)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C50. Replace traditional high-fat foods (e.g. deep fried chicken) with low-fat products (e.g. baked chicken)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C51. Limit total calorie intake from fat (less than 65grams) daily?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C52. Eat 5 or more servings of fruits and vegetables daily?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C53. Practice moderation in drinking alcohol daily (2 glasses or less for men; 1 glass or less for women)?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C54. Practice non-smoking?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C55. Check your blood pressure at home?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C56. Take your blood pressure medicine?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C57. Get your prescriptions filled?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C58. Keep your weight down?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C59. Try to stay away from anything and anybody that causes any kind of stress?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁
C60. See a doctor regularly?	<input type="checkbox"/> ₄	<input type="checkbox"/> ₃	<input type="checkbox"/> ₂	<input type="checkbox"/> ₁

Han, Lee, Commodore-Mensah, & Kim (2014)

SMA Week 1: Smoking and Tobacco

During the SMA in week one, content will be focused on alcohol and tobacco cessation. The accompanying reference sheet is an adaptation of evidence-based guidelines for the Centers for Disease Control (CDC), the American Heart Association (AHA), and the JNC-8 (CDC, 2015; Epstein et. al., 2012; James et. al., 2014; AHA, 2015).

Key Points

- Tobacco can temporarily raise blood pressure (James et. al., 2014)
- Alcohol can raise blood pressure ((James et. al., 2014)
- Current guidelines suggest limiting alcohol to a maximum of 2 drinks per day (James et. al., 2014)
- Discussion and reflection to identify individual triggers
- Discussion and reflection to avoid individual triggers and/or alternative coping mechanisms

Name: _____

Week 1 Date: _____

Blood Pressure Today:

Blood Pressure Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal	less than 120	and	less than 80
Prehypertension	120–139	or	80–89
High			
Stage 1	140–159	or	90–99
Stage 2	160 or higher	or	100 or higher

Make a list of all of the reasons you want to become smoke free and keep it in a place where you will see it often, like your car or where you kept your cigarettes. When you feel the need to smoke, take a look at the list to remind yourself why you want to quit.

1. _____

2. _____

3. _____

Identify Smoking Triggers

Everyone who smokes has smoking triggers. Knowing your triggers helps you stay in control. At first, you might want to avoid triggers all together. After staying quit for awhile, you may be able to find other ways to handle your triggers. Here are some common smoking triggers:

- Feeling stressed
- Feeling down
- Talking on the phone
- Drinking alcohol
- Watching TV
- Driving
- Finishing a meal
- Taking a work break
- Going to a bar
- Seeing someone else smoke
- Cooling off after a fight
- Feeling lonely
- After having sex
- Drinking coffee

Adapted from CDC (2015)

Tips for Slips

Don't be discouraged if you slip up and smoke one or two cigarettes. One cigarette is better than an entire pack. But don't use it as excuse to start smoking again because it's a slippery slope. Many ex-smokers try stopping many times before they finally succeed. When people slip up, it's usually within the first three months after quitting.

Here's what you can do if you slip:

- Understand that you've had a slip. You've had a small setback. This doesn't make you a smoker again.
- Don't be too hard on yourself. One slip up doesn't make you a failure. It doesn't mean you can't quit for good.
- Don't be too easy on yourself either. If you slip up, don't say, "Well, I've blown it. I might as well smoke the rest of this pack". It's important to get back on the non-smoking track right away. Remember, your goal is no cigarettes—not even one puff.
- Feel good about all the time you went without smoking. Try to learn how to make your coping skills better.
- [Identify the trigger](#). Exactly what was it that made you smoke? Be aware of that trigger. Decide now how you will cope with it when it comes up again.
- Learn from your experience. What has helped you the most to keep from smoking? Make sure to do that on your next try.
- Are you using a medicine to help you quit? Don't stop using your medicine after only one or two cigarettes. Stay with it. It will help you get back on track.
- Know and use the tips on [Smokefree.gov](#). People with even one coping skill are more likely to stay non-smokers than those who don't know any.
- See your doctor or another health professional. He or she can help motivate you to quit smoking.
- [Ask for the support you need](#) from friends, family members, co-workers, etc. that you need to stay quit. You don't have to do this alone!

What are the cardiovascular risks associated with drinking alcohol?

- Drinking too much alcohol can raise the levels of some fats in the blood (triglycerides).
- It can also lead to high blood pressure, heart failure, and an increased calorie intake.
- Excessive drinking and binge drinking can lead to stroke
- Other serious problems include fetal alcohol syndrome, cardiomyopathy, cardiac arrhythmia and sudden cardiac death.

How Much Will You Save?

Smoking cigarettes is expensive. Use our calculator to find out how much of your money is going up in smoke. For reference, the average price of a pack of cigarettes is \$5.31 in the United States.

How many cigarettes do you smoke per day? *

How much do you pay per pack?

\$

For follow up:

Highland Health Center
609 North Highland Street
Gastonia, North Carolina 28052
New Patient: 704-874-3316
Appointments: 704-833-1550
You will not be turned away for
financial reasons.

1-800-QUIT-NOW

(1-800-784-8669)

or in Spanish:

1-855-DEJALO-YA

(1-855-335-3569)

Adapted from CDC (2015)

SMA Week 2: Diet for Hypertension

During the SMA in week 2, the content will cover the importance of diet in controlling hypertension. This will include an overview of the DASH (Dietary Approaches to Stop Hypertension) diet and recommend sodium limitations to 1,500mg per day (James et. al., 2014).

Key Points

- Integrate individual preferences with attainable, heart health food.
- Pass out resource material and practice reading labels
- Use the teach back method to evaluate understanding

Name: _____
 Week 2 Date: _____
 Blood Pressure Today: _____

Blood Pressure Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal	less than 120	and	less than 80
Prehypertension	120–139	or	80–89
High			
Stage 1	140–159	or	90–99
Stage 2	160 or higher	or	100 or higher

COMPARE LABELS

Food labels can help you choose items lower in sodium, as well as calories, saturated fat, total fat, and cholesterol. The label tells you:

FROZEN PEAS	
Nutrition Facts	
Serving Size: ½ cup Servings Per Container: about 3	
Amount Per Serving	
Calories: 60	Calories from Fat: 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 125mg	5%
Total Carbohydrate 11g	4%
Dietary Fiber 6g	22%
Sugars 5g	
Protein 5g	
Vitamin A 15%	Vitamin C 30%
Calcium 0%	Iron 6%

Amount per serving
 Nutrient amounts are provided for one serving. If you eat more or less than a serving, add or subtract amounts. For example, if you eat 1 cup of peas, you need to double the nutrient amounts on the label.

Number of servings
 There may be more than one serving in the package, so be sure to check serving size.

Nutrients
 You'll find the milligrams of sodium in one serving.

Percent daily value
 Percent daily value helps you compare products and tells you if the food is high or low in sodium. Choose products with the lowest percent daily value for sodium.

CANNED PEAS	
Nutrition Facts	
Serving Size: ½ cup Servings Per Container: about 3	
Amount Per Serving	
Calories: 60	Calories from Fat: 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 380mg	16%
Total Carbohydrate 12g	4%
Dietary Fiber 3g	14%
Sugars 4g	
Protein 4g	
Vitamin A 6%	Vitamin C 30%
Calcium 2%	Iron 8%

* Percent Daily Values are based on a 2,000 calorie diet.

? **Which product is lower in sodium?**

Answer: The frozen peas. The canned peas have three times more sodium than the frozen peas.

TIPS TO REDUCE SALT AND SODIUM

- Buy fresh, plain frozen, or canned "with no salt added" vegetables.
- Use fresh poultry, fish, and lean meat, rather than canned or processed types.
- Use herbs, spices, and salt-free seasoning blends in cooking and at the table.
- Cook rice, pasta, and hot cereal without salt. Cut back on instant or flavored rice, pasta, and cereal mixes, which usually have added salt.
- Choose "convenience" foods that are low in sodium. Cut back on frozen dinners, pizza, packaged mixes, canned soups or broths, and salad dressings—these often have a lot of sodium.
- Rinse canned foods, such as tuna, to remove some sodium.
- When available, buy low- or reduced-sodium or no-salt-added versions of foods—see box 11 for guidance on how to use food labels.
- Choose ready-to-eat breakfast cereals that are low in sodium.



THE DASH EATING PLAN

The DASH eating plan shown below is based on 2,000 calories a day. The number of daily servings in a food group may vary from those listed, depending upon your caloric needs.

FOOD GROUP	DAILY SERVINGS (EXCEPT AS NOTED)	SERVING SIZES
Grains and grain products	7–8	1 slice bread 1 cup ready-to-eat cereal* ½ cup cooked rice, pasta, or cereal
Vegetables	4–5	1 cup raw leafy vegetable ½ cup cooked vegetable 6 ounces vegetable juice
Fruits	4–5	1 medium fruit ¼ cup dried fruit ½ cup fresh, frozen, or canned fruit 6 ounces fruit juice
Lowfat or fat free dairy foods	2–3	8 ounces milk 1 cup yogurt 1 ½ ounces cheese
Lean meats, poultry, and fish	2 or fewer	3 ounces cooked lean meat, skinless poultry, or fish
Nuts, seeds, and dry beans	4–5 per week	⅓ cup or 1 ½ ounces nuts 1 tablespoon or ½ ounce seeds ½ cup cooked dry beans
Fats and oils*	2–3	1 teaspoon soft margarine 1 tablespoon lowfat mayonnaise 2 tablespoons light salad dressing 1 teaspoon vegetable oil
Sweets	5 per week	1 tablespoon sugar 1 tablespoon jelly or jam ½ ounce jelly beans 8 ounces lemonade

For follow up:

Highland Health Center
609 North Highland Street
Gastonia, North Carolina 28052
New Patient: 704-874-3316
Appointments: 704-833-1550
You will not be turned away for financial reasons.

Adapted from NIH (2003)



Why Should I Limit Sodium?

You may have been told by your healthcare provider to reduce the salt in your diet. Salt is sodium chloride. You need a certain balance of sodium and water in your body at all times to work properly. Too much salt or too much water in your system will upset the balance. When you're healthy, your kidneys get rid of extra sodium to keep the correct balance.



What's bad about sodium?

Too much sodium in your system causes your body to retain (hold onto) water. This puts an extra burden on your heart and blood vessels. In some people, this may lead to or raise high blood pressure. Having less sodium in your diet may help you lower or avoid high blood pressure. People with high blood pressure are more likely to develop heart disease or have a stroke.

How much sodium do I need?

Most people eat too much sodium, often without knowing it. One teaspoon of salt contains about 2,300 mg of sodium. Your body only needs 200 mg of sodium per day.

- The average American eats about 3,000 to 3,600 mg of sodium a day.
- All Americans should reduce the amount of sodium in their diet to less than 1,500 mg a day.
- Your doctor may tell you to cut salt out completely.

What are sources of sodium?

Most of the sodium in our diets comes from adding it when food is being prepared. Pay attention to food labels, because they tell how much sodium is in food products.

For example: foods with less than 140 mg or 5 percent of the Daily Value (DV) per serving are low in sodium.

Here's a list of sodium compounds to limit in your diet:

- Salt (sodium chloride or NaCl)
- Monosodium glutamate (MSG)
- Baking soda
- Baking powder
- Disodium phosphate
- Any compound that has "sodium" or "Na" in its name

Some over-the-counter and prescription medicines also contain lots of sodium. Make it a habit of reading the labels of all over-the-counter drugs, too.

What foods should I limit?

The best way to reduce sodium is to avoid prepackaged, processed and fast foods, which tend to be high in sodium. Here are a few suggestions on what to limit.

- Salted snacks
- Fish that's frozen, pre-breaded, pre-fried or smoked; also some fish that's canned in oil or brine like tuna, sardines or shellfish

(continued)



- Ham, bacon, corned beef, luncheon meats, sausages and hot dogs
- Canned foods and juices containing salt
- Commercially made main dishes like hash, meat pies and frozen dinners with more than 700 mg of sodium per serving
- Cheeses and buttermilk
- Seasoned salts, meat tenderizers and MSG
- Ketchup, mayonnaise, sauces and salad dressings

How can I cook with less salt and more flavor?

- Avoid adding table salt to foods.
- Use herbs and spices to add flavor to foods. Fresh herbs provide more flavor than dried.
- Eat fresh lean meats, skinless poultry, fish, egg whites and tuna canned in water.
- Choose unsalted nuts and low-sodium or no salt added canned foods. Cook dried peas and beans.
- Use products made without added salt; try low-sodium

bouillon and soups and unsalted, fat-free broth.

- Rinse canned vegetables, beans and shellfish to reduce salt.
- Sprinkle vinegar or citrus juice on foods just before eating. Vinegar is great on vegetables like spinach.



What about eating out?

Controlling your sodium intake doesn't mean spoiling the pleasure of eating out. But order carefully. Consider these tips for meals away from home:

- Select fresh greens and fruits when available.
- Be specific about what you want and how you want your food prepared. Request that your dish be prepared without added salt.
- Remember portion control. When you know you're going to eat something that's higher in sodium, eat less!

HOW CAN I LEARN MORE?

- 1 **Talk to your doctor, nurse or other healthcare professionals.** If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's very important for them to make changes now to lower their risk.
- 2 Call **1-800-AHA-USA1** (1-800-242-8721), or visit **heart.org** to learn more about heart disease.
- 3 For information on stroke, call **1-888-4-STROKE** (1-888-478-7653) or visit us at **StrokeAssociation.org**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your healthcare provider.

For example:

What's my daily sodium limit?
Is there sodium in the medicine I take?

My Questions:

We have many other fact sheets to help you make healthier choices to reduce your risk, manage disease or care for a loved one. Visit **heart.org/answersbyheart** to learn more.
Knowledge is power, so Learn and Live!



©2012, American Heart Association



Simple Steps to Save on Sodium

Sodium is a mineral found in table salt, as well as in many foods, where it occurs both naturally and as added salt. The Dietary Guidelines for Americans generally recommend that we consume less than 2,300 milligrams (mg) of sodium per day—the amount of sodium found in about one teaspoon of salt.

If you're watching how much sodium you eat, try the tips below the next time you're at McDonald's®.

- Request hamburgers without grill seasoning, which contains a mix of salt and pepper.
- Ask for French fries without added salt.
- Don't add salt at the table.
- Skip or go light on sandwich condiments such as ketchup, mustard, pickles, sauces and dressings.
- Use a smaller amount of salad dressings.
- Order sandwiches without cheese. You'll save 230 mg for each slice of American cheese.
- Choose menu items made without sausage or bacon.

To customize various McDonald's Menu items and get the Nutrition Facts, please visit the Food, Nutrition & Fitness section at www.mcdonalds.com. We continually update our Nutrition Facts and ingredient information. Nutrition information based on standard formulation; variations may occur.

Sodium-Saving Ideas

SODIUM SAVED (mg)

Order

A Premium Salad without a crispy or grilled chicken breast filet	710/670
A Quarter Pounder® with Cheese Sandwich or Double Cheeseburger without cheese (2 slices)	480
An Egg McMuffin® Sandwich, Biscuit, or McGriddles® Sandwich without the sausage patty	340
A Quarter Pounder® with Cheese without ketchup and pickle slices	250
An Egg McMuffin® Sandwich without Canadian-style bacon	230
Use only half a packet of salad dressing	170 - 370
A Biscuit or McGriddles® Sandwich without bacon	170
A Filet-O-Fish® Sandwich without tartar sauce	110
A Big Mac® Sandwich without Big Mac Sauce	105
A Premium Chicken Classic® or Premium Chicken Club Sandwich or a Big N' Tasty® Sandwich without mayonnaise dressing	85

+Based on the weight before cooking 4 oz. (113.4g)

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CS-6777

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Nutrient results for meal and menu item suggestions are rounded according to federal rounding regulations. Serving size designation for beverages refers to total cup capacity; the actual amounts of beverage (and ice) may vary.

This information is effective 10-01-2008



Simple Steps to Save on Sodium

If you're keeping tabs on sodium, consider the McDonald's® meal suggestions below.

SODIUM (mg)

Breakfast

Scrambled Eggs (2) **470**
English Muffin
Apple Juice Box (6.75 fl oz)

Hotcakes with syrup **730**
1% Low Fat White Milk Jug (8 fl oz)

Lunch/Dinner

Bacon Ranch Salad without chicken **650**
Newman's Own® Ranch Dressing, ½ pkg.
Fruit 'n Yogurt Parfait
Bottled water

Hamburger **700**
Small French Fries
Apple Juice Box (6.75 fl oz)

Chicken McNuggets® (6 piece) **770**
Apple Dippers with Low Fat Caramel Dip
1% Low Fat White Milk Jug (8 fl oz)

Filet O Fish® Sandwich without tartar sauce **790**
Side Salad
Newman's Own® Creamy Caesar Dressing, ½ pkg.
Bottled water

Honey Mustard Snack Wrap® (Grilled) **860**
Snack Size Fruit & Walnut Salad
Bottled water



To get the Nutrition Facts for your favorite McDonald's meal, please visit our **Bag a McMeal™** feature in the Food, Nutrition & Fitness section at www.mcdonalds.com. We continually update our Nutrition Facts and ingredient information. Nutrition information based on standard formulation; variations may occur.

Nutrient results for meal and menu item suggestions are rounded according to federal rounding regulations. Serving size designation for beverages refers to total cup capacity; the actual amounts of beverage (and ice) may vary. Milk Jugs vary in California and Alaska.

This information is effective 10-01-2008

McDonald's Menu Items for Sodium Watchers

Breakfast Items: Less than 700 milligrams of sodium

- Apple Juice Box (15 mg)
- Fruit 'n Yogurt Parfait (85 mg)
- 1% Low Fat Milk Jug (125 mg)
- Scrambled Eggs (180 mg)
- English Muffin (280 mg)
- Hash Browns (310 mg)
- Sausage Patty (340 mg)
- Egg McMuffin® without cheese (580 mg)
- Hotcakes with Syrup (no margarine) (610 mg)

Lunch/Dinner Items: Less than 800 milligrams of sodium

- Snack Size Fruit & Walnut Salad (60 mg)
- Side Salad and ½ pkg. Newman's Own® LowFat Family Recipe Italian Dressing (370 mg)
- Caesar Salad without chicken and ½ pkg. of Newman's Own® Caesar Dressing (430 mg)
- Southwest Salad without chicken and 1 pkg. of Newman's Own® Creamy Southwest Dressing (490 mg)
- Hamburger (520 mg)
- Filet-O-Fish® Sandwich without tartar sauce (530 mg)
- Bacon Ranch Salad without chicken and ½ pkg. of Newman's Own® Ranch Dressing (560 mg)
- Big N' Tasty® Sandwich (720 mg)
- Quarter Pounder® without cheese (730 mg)
- McChicken® Sandwich without mayonnaise dressing (740 mg)
- Cheeseburger (750 mg)

Snacks: Less than 200 milligrams of sodium

- Apple Juice Box (15 mg)
- Apple Dippers with Low Fat Caramel Dip (35 mg)
- Vanilla Reduced Fat Ice Cream Cone (60 mg)
- Fruit 'n Yogurt Parfait (85 mg)
- Chocolate Chip Cookie (90 mg)
- Strawberry, Hot Caramel or Hot Fudge Sundae (95/160/180 mg)
- 1% Low Fat White or Chocolate Milk Jug (125/150 mg)
- Baked Apple Pie (170 mg)
- Strawberry or Vanilla Triple Thick® Shake, 16 fl oz cup (170/190 mg)

*Based on the weight before cooking 4 oz. (113.4g)

©2008 McDonald's



Lower-sodium Fast Food Options



Here are some of the lower-sodium foods that you can order (keeping in mind that you may feel best if you keep your sodium to 1,200 to 2,000 mg/day or less if you are on in-center hemodialysis, or 3,000 to 4,000 mg/day or less if you are on peritoneal dialysis). Print out a copy and keep it with you or in your car for quick reference when you're on the go.

Arby's®

- Croissant with scrambled egg (400 mg sodium)
- Gourmet chocolate chunk cookies (2) (320 mg sodium)
- Apple or cherry turnover, iced (200-210 mg sodium)
- Vanilla shake, regular size (390 mg sodium)
- Chocolate shake, regular size (450 mg sodium)

Burger King®

- French toast sticks - 5 sticks, with syrup (450 mg sodium)
- Cini-mini's with icing (400 mg sodium)
- Fruit-topped oatmeal (290 mg sodium)
- Hamburger (490 mg sodium)
- Whopper Jr.® - no cheese (530 mg sodium)
- Garden salad, no dressing (50 mg sodium)
- Chicken Tenders® 4 pieces (310 mg sodium)
- Dutch apple pie (310 mg sodium)
- Hershey's sundae pie (220 mg sodium)
- Oreo or Oreo Brownie sundae (390 mg sodium)
- Peach & granola sundae (170 mg sodium)
- Strawberry shake (130 mg sodium)

Dairy Queen®

- Grilled chicken wrap (450 mg sodium)
- Breaded mushrooms (500 mg sodium)
- Vanilla cone, medium (140 mg sodium)
- Chocolate malt, small (250 mg sodium)

- Small Blizzard (180-430 mg sodium)
- Peanut Buster® Parfait (350 mg sodium)
- Medium sundae (130-390 mg sodium)
- Buster Bar® (220 mg sodium)
- Strawberry shortcake (370 mg sodium)
- Chocolate Dilly® Bar (70 mg sodium)
- Small shake (190-370 mg sodium)

Hardee's®

- Hamburger (480 mg sodium)
- Onion rings (470 mg sodium)
- Apple turnover (260 mg sodium)

Jack In The Box®

- French toast sticks - 4 sticks (530 mg sodium)
- Spicy corn sticks (140 mg sodium)
- Hamburger deluxe (540 mg sodium)
- Beef taco, (320 mg sodium)
- Shakes and desserts (260-560 mg sodium)

Kentucky Fried Chicken®

- Caesar side salad with parmesan garlic croutons, no dressing (250 mg sodium)
- KFC Snacker®, Honey BBQ (470 mg sodium)
- Drumstick - grilled - (290 mg sodium)
- Drumstick - original recipe (310 mg sodium)
- Whole wing - original recipe (380 mg sodium)
- Chicken breast - original recipe, no skin or breading (580 mg sodium)
- Drumstick - extra crispy (360 mg sodium)
- Whole wing - extra crispy (410 mg sodium)



Lower-sodium Fast Food Options



Kentucky Fried Chicken® continued

- Biscuit (530 mg sodium)
- Coleslaw (135 mg sodium)
- Green beans (260 mg sodium)
- Corn on the cob, 5.5 inch piece (5 mg sodium)
- Macaroni salad (430 mg sodium)
- Apple turnover (160 mg sodium)
- Lil' Bucket™ parfait (140-240 mg sodium)
- Oreo cookie and creme pie slice (210 mg sodium)

McDonalds®

- Apple dippers, with caramel dip (35 mg sodium)
- Snack size fruit and walnuts (60 mg sodium)
- Fruit and maple oatmeal (160 mg sodium)
- Cinnamon Melts (370 mg sodium)
- Fruit'n Yogurt parfait (85 mg sodium)
- Chicken McNuggets® (6) no sauce (540 mg sodium)
- Honey packet (1) - (0 mg sodium)
- Sweet'n Sour sauce (1) - (150 mg sodium)
- Honey mustard sauce (1) - (115 mg sodium)
- Hamburger (520 mg sodium)
- Premium Caesar salad (w/grilled chicken) (580 mg sodium)
- Bacon ranch salad, no chicken (300 mg sodium)
- Side salad, with Newman's Own® ranch dressing (540 mg sodium)
- McDonaldland® cookies (300 mg sodium)
- Caramel apple parfait (85 mg sodium)
- Vanilla reduced fat ice cream cone (60 mg sodium)
- Baked apple pie (170 mg sodium)

Pizza Hut®

- Medium pan pizza, one slice cheese (530 mg sodium)
- Medium pan pizza, one slice pepperoni and mushroom (520 mg sodium)
- Medium pan pizza, one slice Veggie Lover's® (500 mg sodium)
- Medium pan pizza, one slice ham & pineapple (520 mg sodium)
- Medium pan pizza, one slice Italian sausage & red onion (560 mg sodium)
- Medium Thin'n Crispy® pizza, one slice cheese (550 mg sodium)
- Medium Thin'n Crispy® pizza, one slice pepperoni and mushroom (540 mg sodium)
- Medium Thin'n Crispy® pizza, one slice ham & pineapple (540 mg sodium)
- Medium Thin'n Crispy® pizza, one slice Veggie Lover's® (530 mg sodium)
- Medium hand-tossed pizza, one slice Veggie Lover's® (530 mg sodium)
- Medium hand-tossed pizza, one slice cheese (550 mg sodium)
- Medium hand-tossed pizza, one slice pepperoni & mushroom (540 mg sodium)
- Medium hand-tossed pizza, one slice ham & pineapple (550 mg sodium)
- 12" Fit'n Delicious Pizza™, one slice, ham, red onion, and mushroom (550 mg sodium)
- 12" Fit'n Delicious Pizza™, one slice, chicken, red onion, green pepper (510 mg sodium)
- Breadstick, 1 piece (260 mg sodium)
- All American crispy or bone out wings (no sauce) (500 mg sodium)
- Apple pie (2 pies) (190 mg sodium)



Lower-sodium Fast Food Options



Subway®

- Grilled chicken and baby spinach salad (330 mg sodium)
- Veggie Delite® 6 inch sub (310 mg sodium)
- Oven roasted chicken salad (270 mg sodium)
- Roast beef salad (450 mg sodium)
- Bacon egg and cheese muffin melt (550 mg sodium)
- Egg and cheese muffin melt (460 mg sodium)
- Cookies and desserts (70-290 mg sodium)

Taco Bell®

- Fresco crunchy taco (310 mg sodium)
- Grilled steak soft taco (550 mg sodium)
- Crunchy taco (290 mg sodium)
- Crunchy Taco Supreme® (320 mg sodium)
- Gordita supreme, chicken (510 mg sodium)
- Volcano taco (410 mg sodium)
- Gordita Supreme steak or beef (550 mg sodium)
- Hot sauce and salsa (35-80 mg sodium)
- Beef soft taco (510 mg sodium)
- Chicken soft taco (460 mg sodium)
- Original chicken flatbread sandwich (580 mg sodium)
- Chalupa Supreme® steak (570 mg sodium)
- Avocado ranch dressing (50 mg sodium)
- Caramel apple empanada (310 mg sodium)
- Mexican rice (200 mg sodium)
- Nachos (370 mg sodium)
- Cinnamon twists (200 mg sodium)

Wendy's®

- Chicken nuggets 5 pieces, no sauce (460 mg sodium)
- Sweet and sour or barbecue sauce - 1 package (120 mg sodium)
- Jr. hamburger w/ketchup (540 mg sodium)
- Apple pecan chicken salad, half-size, no dressing (580 mg sodium)
- Caesar side salad with caesar dressing and croutons (515 mg sodium)
- Apple slices (0 mg sodium)
- Vanilla or chocolate Frosty™ small (135-140 mg sodium)
- Wild berry frosty shake small (170 mg sodium)
- Oreo frosty parfait (190 mg sodium)
- Caramel apple frosty parfait (140 mg sodium)

Content from Kidney School, a program of the Medical Education Institute, Inc.

SMA Week 3: Prescription Medications

During the SMA in week 3, content will focus on the use of prescription medications.

Key Points

- Guided discussion pertaining to common side effects of antihypertensive medications
- Expectations of treatment with these medications and common side effects with strategies to manage common side effects (James et. al., 2014)
- Discussions involving issues surrounding medication continuity after release
- Goal with creating a workable plan of care and acclimation back into the community
- Offer option available to issue 30 days supplies of prescribed medication to bridge to community appointment
- Review \$4 pharmacy lists that is most convenient to the participant
- Inform participants of website goodrx.com to price check medications, if able to access the internet
- Provide contact information for a sliding scale community clinic

Name: _____

Week 3 Date: _____

Blood Pressure Today:

Blood Pressure Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal	less than 120	and	less than 80
Prehypertension	120–139	or	80–89
High			
Stage 1	140–159	or	90–99
Stage 2	160 or higher	or	100 or higher

BLOOD PRESSURE DRUGS

DRUG CATEGORY	HOW THEY WORK
Diuretics	These are sometimes called “water pills” because they work in the kidney and flush excess water and sodium from the body through urine.
Beta-blockers	These reduce nerve impulses to the heart and blood vessels. This makes the heart beat less often and with less force. Blood pressure drops, and the heart works less hard.
Angiotensin converting enzyme inhibitors	These prevent the formation of a hormone called angiotensin II, which normally causes blood vessels to narrow. The blood vessels relax, and pressure goes down.
Angiotensin antagonists	These shield blood vessels from angiotensin II. As a result, the blood vessels open wider, and pressure goes down.
Calcium channel blockers	These keep calcium from entering the muscle cells of the heart and blood vessels. Blood vessels relax, and pressure goes down.
Alpha-blockers	These reduce nerve impulses to blood vessels, allowing blood to pass more easily.
Alpha-beta-blockers	These work the same way as alpha-blockers but also slow the heartbeat, as beta-blockers do.
Nervous system inhibitors	These relax blood vessels by controlling nerve impulses.
Vasodilators	These directly open blood vessels by relaxing the muscle in the vessel walls.

For follow up:

Highland Health Center
609 North Highland Street
Gastonia, North Carolina 28052
New Patient: 704-874-3316
Appointments: 704-833-1550
You will not be turned away for
financial reasons.

- Put a favorite picture of yourself or a loved one on the refrigerator with a note that says, "Remember To Take Your High Blood Pressure Drugs."
- Keep your high blood pressure drugs on the nightstand next to your side of the bed.
- Take your high blood pressure drugs right after you brush your teeth, and keep them with your toothbrush as a reminder.
- Put "sticky" notes in visible places to remind yourself to take your high blood pressure drugs. You can put notes on the refrigerator, on the bathroom mirror, or on the front door.
- Set up a buddy system with a friend who also is on daily medication and arrange to call each other every day with a reminder to "take your blood pressure drugs."
- Ask your child or grandchild to call you every day with a quick reminder. It's a great way to stay in touch, and little ones love to help the grown-ups.
- Place your drugs in a weekly pillbox, available at most pharmacies.
- If you have a personal computer, program a start-up reminder to take your high blood pressure drugs, or sign up with a free service that will send you a reminder e-mail every day.
- Remember to refill your prescription. Each time you pick up a refill, make a note on your calendar to order and pick up the next refill 1 week before the medication is due to run out.

[illegible]

Adapted from NIH (2003) & AHA (2015)

SMA Week 4: Managing Weight and Stress

During the SMA in week 4, the session will focus on managing stress and maintaining a healthy weight.

Key Points

- Recommendation of 3-4, 40 minutes sessions of moderate to vigorous intensity physical activity (James et. al., 2014). Discussions will be guided on how this may fit in the individual's life.
- Motivational interviewing techniques can be used to assist participants in identifying exercise goals, opportunities for incorporating exercise, and person barriers to exercise including individual stress triggers.
- Strategies can be introduced for building relationships with people who care about healthy changes.
- Explore and identify the participants' support group.

Name: _____

Week 4 Date: _____

Blood Pressure Today: _____

Blood Pressure Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal	less than 120	and	less than 80
Prehypertension	120–139	or	80–89
High			
Stage 1	140–159	or	90–99
Stage 2	160 or higher	or	100 or higher

HOW TO LOSE WEIGHT ON THE DASH EATING PLAN

The DASH eating plan was not designed to promote weight loss. But it is rich in low-calorie foods such as fruits and vegetables. You can make it lower in calories by replacing high-calorie foods with more fruits and vegetables—and that also will make it easier for you to reach your DASH eating plan goals. Here are some examples:

To increase fruits:

- Eat a medium apple instead of four shortbread cookies. You'll save 80 calories.
- Eat $\frac{1}{4}$ cup of dried apricots instead of a 2-ounce bag of pork rinds. You'll save 230 calories.

To increase vegetables:

- Have a hamburger that's 3 ounces instead of 6 ounces. Add a $\frac{1}{2}$ cup serving of carrots and a $\frac{1}{2}$ cup serving of spinach. You'll save more than 200 calories.
- Instead of 5 ounces of chicken, have a stir fry with 2 ounces of chicken and $1\frac{1}{2}$ cups of raw vegetables. Use a small amount of vegetable oil. You'll save 50 calories.

To increase lowfat or fat free dairy products:

- Have a $\frac{1}{2}$ cup serving of lowfat frozen yogurt instead of a $1\frac{1}{2}$ -ounce milk chocolate bar. You'll save about 110 calories.

And don't forget these calorie-saving tips:

- Use lowfat or fat free condiments, such as fat free salad dressings.
- Eat smaller portions—cut back gradually.
- Choose lowfat or fat free dairy products to reduce total fat intake.
- Use food labels to compare fat content in packaged foods. Items marked lowfat or fat free are not always lower in calories than their regular versions. See box 11 on how to read and compare food labels.
- Limit foods with lots of added sugar, such as pies, flavored yogurts, candy bars, ice cream, sherbet, regular soft drinks, and fruit drinks.
- Eat fruits canned in their own juice.
- Snack on fruit, vegetable sticks, unbuttered and unsalted popcorn, or bread sticks.
- Drink water or club soda.

For follow up:

Highland Health Center
609 North Highland Street
Gastonia, North Carolina 28052
New Patient: 704-874-3316
Appointments: 704-833-1550
You will not be turned away for
financial reasons.

Dealing With Stress

Here are some tips that may help reduce the stress in your life. Try them out. Come up with your own ideas. If something works for you, great! If not, no big deal. Simply try another one. Keep looking for ways to make your quit easier.

- Take a break. Even if it is just for a few minutes, take a breather from a stressful situation. This might mean doing something that you find relaxing, like playing a game or talking with a friend. It could also mean stepping away from the situation for a while by taking a walk or going to get a snack.
- Breathe deeply. Take a few slow, deep breaths. For an extra benefit, breathe in through your nose and out through your mouth. You will feel your body relax.
- Exercise. When your body is active, it sends out natural chemicals that improve your mood and reduce your stress. Walking is one of the easiest exercises for most people. Even a short walk every day will help you to reduce your stress and improve your health.
- Visualize. Close your eyes and imagine you are in a place where you feel safe, comfortable, and relaxed. It can be a real place or one you make up. Picture it as clearly as you can. Let yourself enjoy being there for a few minutes.
- Scan for tension. Our bodies hold on to stress and tension. Scan through your body and look for places where you are tight. These are areas you should target for stress relief. Some simple things you can do to reduce stress include stretching, exercise, or getting a massage. Even a few minutes of rubbing your shoulders, neck, and head can release lots of tension.
- Talk to someone. Talking with a friend or family member about your life is a great way to help reduce stress.
- Focus on the here and now. A lot of people get stressed out thinking about the future. Try focusing just on what is happening now, not on what you might have to deal with in the future.
- Take care of yourself. Especially right after quitting smoking, you should make extra efforts to take care of yourself. This includes basic things like:
 - Eating a balanced diet
 - Drinking lots of water
 - Getting enough sleep
- Cut out caffeine. Caffeine helps keep you awake when you are tired, but it also can make you feel tense, jittery, worried, and stressed. If you are feeling stressed, drinking caffeinated coffee, tea, or soda can make it worse. This is especially true when you are quitting smoking. Cutting back or even eliminating caffeine can help reduce your stress.
- Face the problem. Stop and think about what makes you stressed. Is there something you could be doing to fix the problem? It can be helpful to talk with others about what is happening and see if there are ways to make it better.

BMI	21	22	23	24	25	26	27	28	29	30	31
HEIGHT (FEET AND INCHES)	BODY WEIGHT (POUNDS)										
4' 10"	100	105	110	115	119	124	129	134	138	143	148
5' 0"	107	112	118	123	128	133	138	143	148	153	158
5' 2"	115	120	126	131	136	142	147	153	158	164	169
5' 4"	122	128	134	140	145	151	157	163	169	174	180
5' 6"	130	136	142	148	155	161	167	173	179	186	192
5' 8"	138	144	151	158	164	171	177	184	190	197	203
5' 10"	146	153	160	167	174	181	188	195	202	209	216
6' 0"	154	162	169	177	184	191	199	206	213	221	228
6' 2"	163	171	179	186	194	202	210	218	225	233	241
6' 4"	172	180	189	197	205	213	221	230	238	246	254

The Stress-smoking Link

Many people smoke when they feel stressed. Even though they know that smoking hurts them and the ones they love, some smokers find it hard to give up cigarettes as a way to cope with stress.

Stress is part of life, so a key part of quitting smoking for many people is finding ways to handle stress and take care of themselves without smoking. Spend some time thinking about and looking for ways to deal with the busy days that are so often a part of life.

Adapted from NIH (2003) & CDC (2015)

References

- Alhalaiqa, F., Deane, K., Nawafleh, A., Clark, A., & Gray, R. (2012). Adherence therapy for medication non-compliant patients with hypertension: A randomized controlled trial. *Journal of Human Hypertension*, 26(2), 117-126.
- American Heart Association (2015). High blood pressure resources for professionals. Retrieved from: http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/HighBloodPressureToolsResources/High-Blood-Pressure-Resources-For-Professionals_UCM_461722_Article.jsp
- Binswanger, A., Kruegar, P., & Steiner, J. (2011). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *Journal of Epidemiology in Community Health*, 63, 912-919.
- California Social Work Education Center (CalSWEC) (2015). Facilitator's guide implementation toolkit: intervention and organizational readiness. Retrieved from (<http://calswec.berkeley.edu/toolkits/implementation-toolkits/how-build-implementation-toolkit-start-finish>).
- Centers for Disease Control (2015). *Tips from former smokers*. Retrieved from: <http://www.cdc.gov/tobacco/campaign/tips/index.html>
- Coleman, K., Austin, B., Brach, C., & Wagner, E. (2009). Evidence on the chronic care model in the new millennium. *Health Affairs*(28), 75-85.
- Coleman, C. (2011). Teaching health professionals about health literacy: a review of the literature. *Nursing Outlook*, 59, 70-78.
- Edelman, D., McDuffie, J., Oddone, E., Gierisch, J., Williams Jr, J., Nagi, A., & Wing, L. (2012). Shared medical appointments for chronic medical conditions: A systematic review.
- Edelman, D., Fredrickson, S., Melnyk, S., Coffman, C., Jeffreys, A., Datta, S., . . . Stewart, H. (2010). Medical clinics versus usual care for patients with both diabetes and hypertension: a randomized trial. *Annals of Internal Medicine*, 152(11), 689-696.
- Egger, G., Binns, A., Cole, M., Ewald, D., Davies, L., Meldrum, H., . . . Noffsinger, E. (2014). Shared medical appointments: an adjunct for chronic disease management in Australia? *Australian Family Physician*, 43(3), 151-154.
- Flynn, S., Ameling, J., Hill-Briggs, F., Wolff, J., Bone, L., Levine, D., & Boulware, L. (2013). Facilitators and barriers to hypertension self-management in urban African-Americans: Perspectives of patients and family members. *Patient preference and adherence*, 7, 741-749.

- Frensenius Medical Care (2015). Lower sodium fast food options. Retrieved from: <http://www.pennockhealth.com/Brochures/Lowersodium%20Fast%20Food%20Options.pdf>
- Goldstein, E., Warner-Robbins, C., McLean, C., Macatula, L., & Conlin, R. (2009). A peer-driven mentoring case management community reentry model: An application for jails and prisons. *Family & Community Health, 32*(4), 309-313.
- Han, H., Lee, H., Commodore-Mensah, Y., & Kim, M. (2014). Development and validation of the hypertension self-care profile. *Journal of Cardiovascular Nursing, 29*(3), E11-E20.
- James, P., Oparil, S., Carter, B., Cushman, W., Dennison-Himmelfarb, C., Handler, J., ... & Ortiz, E. (2014). 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA, 311*(5), 507-520.
- Kinner, S. & Wang, E. (2014). The case for improving the health of ex-prisoners. *American Journal of Public Health, 104*(8), 1352-1355.
- Kirsh, S., Watts, S., Pascuzzi, K., O'Day, M. E., Davison, D., Strauss, G., ... Aron, D. C. (2007). Shared medical appointments based on the chronic care model: a quality improvement project to address the challenges of patients with diabetes with high cardiovascular risk. *Quality & Safety in Health Care, 16*, 349-353. doi: 10.1136/qshc.2006.019158
- Madson, M., Loignon, A., and Lane, C. (2009). Training in motivational interviewing: a systematic review. *Journal of Substance Abuse Treatment, 36*, 101-109.
- Matulich, B. (2013). Introduction to motivational Interviewing. Retrieved from: <http://www.upitibe/cp/watej?v=s3MCJZ7OGRk>.
- Marks, J. & Turner, N. (2014). The critical link between health care and jails. *Health Affairs, 33*(3), 443-447. Doi: 10.1377/hlthaff.2013.1350
- McDonalds (2015). *Simple steps to save on sodium*. Retrieved from: http://www.mcdonalds.com/content/dam/McDonalds/Documents/McDonalds_SimpleStepsToSaveOnSodium.pdf
- National Commission on Correctional Health Care (2014). *Standards for Health Services in Jails*. Chicago, Illinois.
- National Institutes of Health (2003). Your guide to lowering blood pressure. Publication No 03-5232. Retrieved from: https://www.nhlbi.nih.gov/files/docs/public/heart/hbp_low.pdf
- Ross, M. (2011). Pedagogy for prisoners: an approach to peer health education for inmates. *Journal of Correctional Health Care, 17*, 6. DOI: 10.1177/1078345810378251

- Stein, K. (2011). The group appointment trend gains traction: how dietetics fits into a new model of health care delivery. *Journal of the American Dietetic Association*, 340-353.
- Tamura-Lis, W. (2013). Teach-back for quality education and patient safety. *Urologic Nursing*, 33(6), 267-298.
- The Cecil G. Sheps Center for Health Service Research (2013). Health literacy universal precautions toolkit for cardiology, Ver. 7. 2013. Retrieved from: <http://www.shepscenter.unc.edu/wp-content/uploads/2013/05/Health-Literacy-Toolkit-Cardiology.pdf>
- Thompson, C., Meeuwisse, I., Dahlke, R., & Drummond, N. (2014). Group medical visits in primary care for patients with diabetes and low socioeconomic status: users' perspectives and lessons for practitioners. *Canadian Journal of Diabetes*, 38, 198-204. doi: 10.1016/j.cjcd.2014.03.012
- Travis, J., Western, B., & Redburn, S. (2014). The growth of incarceration in the United States: Exploring causes and consequences.
- US Veterans Administration (2008). VA shared medical appointments for patients with diabetes: maximizing patient and provider expertise to strengthen care management. Retrieved from: <http://www.queri.research.va.gov/tools/diabetes/shared-medappt.pdf>

How to Implement the Chronic Care Group Educational Session for Hypertension Management

In a Jail Setting

Erin Flitt NP-C, MSN, MBA

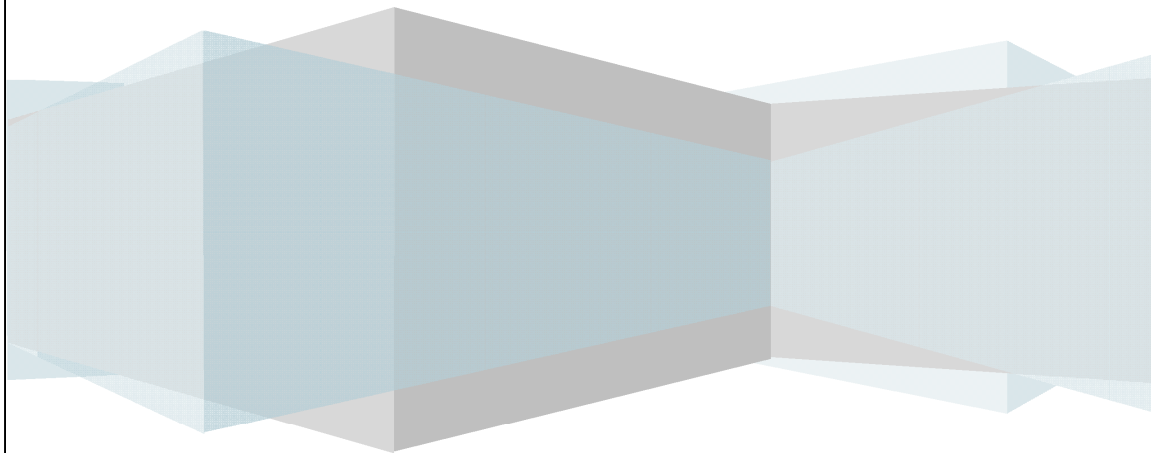



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Objectives of the Toolkit:

- 
- To provide jail staff with a blueprint to implement a group session to present educational information for inmates with hypertension management
 - To provide background information of current jail standards and evidenced based hypertension management guidelines
 - To provide site-specific resource material for participants to receive follow up care
-

Overview

In the United States, jail inmates have a higher prevalence of hypertension than the general public. In inmates ages 50-60 years, the rate of hypertension is as high as 50% (Alhalaqia, Deane, Nawafleh, Clark, & Gray, 2012). In the United States, it is estimated that over 11 million people are processed through local jails each year (Marks & Turner, 2014; Kinner & Wang, 2014). After release, jail inmates' health problems often burden the local community health system. When reentering the community, former inmates with poorly managed conditions are overrepresented in acute care settings (Kinner & Wang, 2014). There is emerging evidence of a correlation between poor health outcomes and risk of recidivism (i.e. relapse into criminal behavior); therefore processes to improve health outcomes may indirectly affect public safety (Kinner & Wang, 2014).

Many inmates are uninsured, resulting in the jail setting acting as the sole source of health care (Marks & Turner, 2014; Ross, 2011). Ninety percent of those leaving jail reenter the community without health insurance of any kind, opposing the investment of health care received in jail (Marks & Turner, 2014; Kinner & Wang, 2014). In an attempt to maximize the effectiveness of an intervention in the jail setting, barriers to treatment adherence must be closely assessed and carefully considered in the design and implementation of health promotion programs. A key factor to blood pressure control is self-awareness, which is lower in patients who infrequently use health care (Flynn et. al., 2013).

Background Information

Group educational sessions meet the National Commission on Correctional Health (NCCHC) accreditation standards pertaining to health promotion, self-care, medical diets, tobacco use, discharge planning, continuity and coordination of care during incarceration, and chronic disease services (NCCHC, 2014).

Roles

Facilitator – This person may be an RN or LPN. The facilitator takes the main responsibility for sticking to the agenda and participant flow and logistics. Also, the facilitator would be responsible for any follow up, order changes, or further action needed after the session.

Provider – The physician, Nurse Practitioner, or Physician Assistant – One is necessary for medication adjustments and curriculum review. Two may be ideal for more complex patients that may need more in-depth individual time.

Skills Needed

Behavioral change is brought about most effectively in collaboration with a patient, not in an advice-giving manner (Madson, Loignon, & Lane, 2009). **Motivational interviewing** is an evidence based patient-centered counseling style used to move an individual towards change by strengthening his or her own argument for change (USVA, 2008). This approach has been used effectively in substance abuse treatment and has intensified positive changes in behavioral risk factors to health, such as, decreasing risky sexual behaviors, cultivating medication adherence, and enhancing readiness to change in eating disorders (Madson, Loignon, & Lane, 2009). To use this approach, the provider selectively elicits and reinforces positive self-statements, directing the patient to move toward that direction into positive behavior change (USVA, 2008).

A great overview of Motivational Interviewing can be viewed by clicking this link:
<https://www.youtube.com/watch?v=s3MCJZ7OGRk>

In Motivational Interviewing, the provider does not assume the authority position with the participant, rather evoking the participant's perspective and values rather than imparting their own. The provider respects the participant's decision regarding self-direction, even if they do not align with what the provider considers optimal (USVA, 2008). Motivational Interviewing targets participant-specific change and assists in formulating an action plan for change (Madson, Loignon, & Lane, 2009).

The process used:

- Engaging – building rapport
- Focusing – set an agenda
- Evoking – change talk
- Planning – develop a specific plan (Matulich, 2013).

A low level of health literacy is a major problem among a third of adults in the United States (Coleman, 2011). Using the **teach-back method** to facilitate health literacy is a way to evaluate the interaction (The Cecil G. Sheps Center for Health Service Research, 2013). Teach-back method is also called the “show me” method. Teach-back is an evidence-based approach used to prompt patients to put into their own words what their understanding of treatment plan and action they need to take to participate in their care (Tamura-Lis, 2013). During the conclusion of the shared medical appointment, this can be especially helpful for participants to assess the understanding of access of bridge care to the community setting.

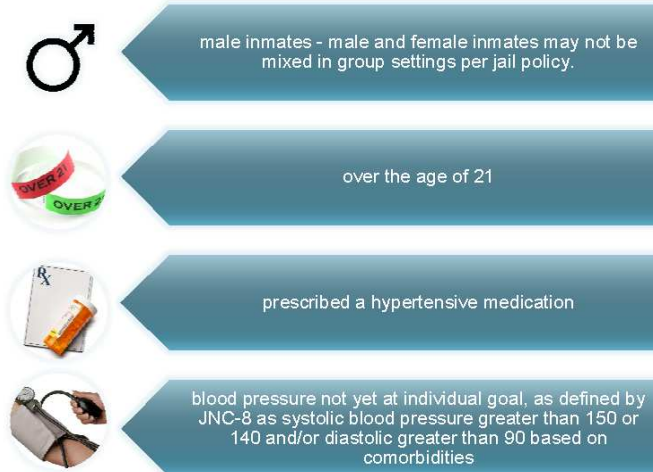
Guided discussions are a way to stay on topic while minimizing your voice. Keep in mind that the goal is to allow participants to share and problem-solve with and for each other (USVA, 2008). As the facilitator, gently nudging discussion back on topic provides for repetition during the discussion.

Preparing for the Group Educational Session

Step 1

Create a registry of inmates who meet criteria for the group session.

Who is appropriate?



Who is not appropriate?



Step 2

Schedule a nurse visit, as usual to draw labs related to chronic care visits. Ask inmates from the registry if they are interested in the group educational session. If inmates are not interested and would prefer a one-on-one provider visit for chronic care, then remove them from the registry.

For those who remain on the registry, administer the pre-session assessment.

Step 3

Select 12-15 inmates from the registry for the group session.

Pre-Session Assessment

Current Behavior	1	2	3
1. Do you exercise 4-5 times per week?			
2. Do you look at nutritional labels on the foods you eat?			
3. Do you smoke, vape or dip?			
Current Motivation			
1. Do you want to exercise 4-5 times per week?			
2. Do you want to monitor the sodium you eat?			
3. Do you want to stop smoking, vaping, or dipping?			
Self-Efficacy			
1. Are you confident you could exercise 4-5 times per week?			
2. Do you feel confident that you know how to monitor the sodium you eat?			
3. Do you feel like you can stop smoking, vaping, or dipping?			

Implementation Guide

To facilitate a swift check in process, labs, pre-session scores, and vital sign flows can be reviewed prior to the group session, due to the daily tasking and monitoring available in the jail setting. Doing this can give great insight as to the context in which the participant blood pressure control during the group portion of the visit. This can allow the private visit prior to the group in an abbreviated time, probably 3-5 minutes.

After check in, the participant will have a seat in the group environment, which are chairs arranged in a semi-circle.

Establish the agenda

Set a schedule to cover content. The session should last approximately 90 minutes. If the medical exams take more than the allotted 30 minutes, then the facilitator may start the group session while the provider continues with the individual participants. Please note that some agenda items may be moved around. If you find that it is easier to start a group discussion in the beginning of the session and end with the individualized visits, then mix it

up. A session packet is provided (see page 22) to correspond to educational content on the session agenda.

Group Educational Session Agenda

Smoking and Tobacco – 15 minutes

- Tobacco can temporarily raise blood pressure (James et. al., 2014)
- Alcohol can raise blood pressure ((James et. al., 2014)
- Current guidelines suggest limiting alcohol to a maximum of 2 drinks per day (James et. al., 2014)
- Discussion and reflection to identify individual triggers (CDC, 2015)
- Discussion and reflection to avoid individual triggers and/or alternative coping mechanisms (CDC, 2015).

Diet for Hypertension – 15 minutes

- Overview of the DASH (Dietary Approaches to Stop Hyertension) (James et. al., 2014)
- Sodium limitations – 1,500mg per day (James et. al., 2014)
- Integrate individual preferences with attainable, heart health food.
- Pass out resource material and practice reading labels
- Use the teach back method to evaluate understanding

Prescription Medications – 15 minutes

- Guided discussion pertaining to common side effects of antihypertensive medications
- Expectations of treatment with these medications and common side effects with strategies to manage common side effects (James et. al., 2014)
- Discussions involving issues surrounding medication continuity after release
- Goal with creating a workable plan of care and acclimation back into the community
- Offer option available to issue 30 days supplies of prescribed medication to bridge to community appointment
- Review \$4 pharmacy lists that is most convenient to the participant
- Inform participants of website goodrx.com to price check medications, if able to access the internet
- Provide contact information for a sliding scale community clinic

Managing Weight and Stress – 15 minutes

- Recommendation of 3-4, 40 minutes sessions of moderate to vigorous intensity physical activity (James et. al., 2014). Discussions will be guided on how this may fit in the individual's life.

- Motivational interviewing techniques can be used to assist participants in identifying exercise goals, opportunities for incorporating exercise, and person barriers to exercise including individual stress triggers.
- Strategies can be introduced for building relationships with people who care about healthy changes.
- Explore and identify the participants' support group.

Evaluation

To evaluate the success of the group educational session:

- Repeat the Pre-Session Assessment - Compare the initial score to the score given at the end of the group session.
- Track participant process – Continue to monitor blood pressure flows while in the facility.
- Debrief among the staff – Discuss what went well and what didn't.

Hypertension Guideline



National Commission on
Correctional Health Care

1145 W. Diversey Pkwy. 773-880-1460
Chicago, Illinois 60614 www.ncchc.org

Guidance for Disease Management in Correctional Settings

HYPERTENSION

NCCHC issues guidance to assist correctional health care clinicians in evidence-based decision making. This document is meant to supplement—not replace—nationally accepted clinical guidelines issued by organizations such as the Eighth Joint National Committee, the National Institutes of Health, and the Federal Bureau of Prisons. For specific clinical practice guidelines and recommendations, please see the resources listed on page 3.

Introduction

Although clinical guidelines are important decision support for evidence-based practice, to leverage the potential of guidelines to improve patient outcomes and resource use, NCCHC recommends that health care delivery systems also have components including primary care teams, other decision support at the point of care (such as reminders), disease registries, and patient self-management support. These components have been shown to improve outcomes for patients with chronic conditions. In addition, we recommend establishment of a strategic quality management program that supports ongoing evaluation and improvement activities focused on a set of measures that emphasize outcomes as well as process and practice. For information on the chronic care model, model for improvement, and outcomes measures, see the resources listed on page 3.

Hypertension Care in Corrections

Hypertension is among the most prevalent chronic medical conditions in corrections. Age-adjusted rates are higher than in the general population. Suboptimal treatment results in excess heart disease, stroke, and kidney disease. Improved strategies are needed to optimize hypertension treatment.

A scientific advisory from the American Heart Association, the American College of Cardiology, and the Centers for Disease Control and Prevention recommends a system-level approach to improving hypertension control. This approach includes eight components relevant to corrections.

1. *Identifying all patients eligible for management.* It is important that all inmates be screened for hypertension on entry to the correctional system and reassessed on annually if systolic blood pressure (SBP) < 130 and diastolic blood pressure (DBP) < 80. Those with SBP 130–139 or DBP 80–89 should be reassessed in 6 months or less. Those with SBP ≥ 140 or DBP ≥ 90 should have the diagnosis of hypertension confirmed with a second reading taken in no less than 1 month (and much sooner depending on severity). It should be noted that pregnant women with SBP > 140 or DBP > 90 should be immediately referred to a specialist with experience caring for pregnant women. High blood pressure in pregnancy may also be a sign of preeclampsia, a condition that needs urgent attention to avoid risk of harm to the mother and fetus. Management of hypertensive disorders in pregnancy requires separate protocols and specialized expertise. All patients with hypertension should undergo a comprehensive evaluation that includes assessment of modifiable risk factors. All patients should have a complete physical examination with particular attention to the presence of comorbidities including signs and symptoms of vascular disease, heart disease, stroke, and renal disease.

Initial laboratory tests include:

- Chem-7
- Fasting lipid panel
- Electrocardiogram
- Urinalysis

NCCHC Guidance: Hypertension
October 2014

Page 1

2. *Monitoring at the practice/population level.* This can be done through a BP registry that includes the names, BP readings, and date of persons with a diagnosis of hypertension. Some electronic health records allow for the creation of such a registry. Alternatively, this can be created by nursing or support staff using Excel spreadsheets. This facilitates identification of persons and recall of those not at goal.

3. *Increasing patient and provider awareness.* Patients and providers should be educated regarding the latest guidelines and approaches. The Eighth Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC8) recommends using the same blood pressure target among adults regardless of whether diabetes or kidney disease is present. The American Diabetes Association recommends a target of < 140/80 for diabetics. JNC8 also recommends a higher target (< 150/90) for persons 60 years and older than for younger persons (< 140/90). However, to date, the higher target for older persons has not been endorsed by the American Heart Association or the American College of Cardiology.

4. *Providing an effective diagnosis and treatment guideline.* A simple treatment algorithm is recommended (see <http://millionhearts.hhs.gov/resources.html>). In the absence of specific conditions or indications, diuretics and ACE inhibitors remain first-line treatments, followed by calcium channel blockers. Treatment involves not only effective medication management but also treatment of modifiable cardiovascular risk factors, such as smoking, diet, physical activity, lipids, diabetes, and substitution of medications that increase blood pressure. Treatment requires effective patient education and self-management. Patients with BP > 180/110 warrant urgent evaluation and management. Similarly, patients with acute chest pain, significant shortness of breath, or neurological symptoms require emergency evaluation.

5. *Systematic follow-up of patients for initiation and intensification of therapy.* All patients not at goal should be seen for follow-up within 1 month for consideration for intensification of therapy. Patients should be evaluated for dizziness or recent falls potentially related to blood pressure lowering.

6. *Clarifying roles of health care providers to implement a team approach.* Delegation of tasks will depend on the preferences of the clinician and training of staff. Examples include delegation of diet and exercise counseling to an RN or maintenance of the hypertension registry by an LPN or MA.

7. *Reducing barriers for patients to receive and adhere to medications as well as to implementing lifestyle modifications.* This can mean working with the dietary department to reduce sodium content, changing medication when side effects are bothersome, and encouraging physical exercise as allowable.

8. *Leveraging the electronic medical record systems being established throughout the United States to support each of these steps.* Examples include the creation of registries and alerts, and the use of order sets, templates, and patient education materials embedded within the system. These tools also can help to tailor management to BP severity.

Quality Improvement Measures

The following quality improvement measures are suggested, but they are not intended to be a complete list necessary to ensure a successful hypertension management program in a correctional setting. We recommend that the improvement measures for a patient population be reported at a facility level and at a provider or team level. These indicators should be compared over time to correlate improvement.

Process

- Percentage of patients suspected of having a hypertension diagnosis who had at least one blood pressure reading within 1 month if still present in the facility or system
- Percentage of patients with a hypertension diagnosis who had at least one fasting lipid panel and fasting plasma glucose in the preceding 24 months
- Percentage of patients with a hypertension diagnosis whose degree of control is categorized as fair or poor who have a plan that includes a strategy for improving blood pressure control

Outcomes

- Percentage of patients with a hypertension diagnosis who have blood pressures < 140/< 90 based on the last blood pressure reading in the preceding 6 months
- Percentage of patients with a hypertension diagnosis and diabetes who have blood pressures < 130/< 80 based on the last blood pressure reading in the preceding 6 months

Recommended Resources to Support Evidence-Based Practice and Quality Improvement

RESOURCE	2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults: Report From the Panel Members Appointed to the Eighth Joint National Committee (JNC 8)
SOURCE	The Journal of the American Medical Association
URL	http://jama.jamanetwork.com/article.aspx?articleid=1791497
RESOURCE	Essential Hypertension (February 2009)
SOURCE	University of Michigan Health System; available from the Agency for Healthcare Research and Quality's National Guideline Clearinghouse
URL	http://www.lwwpartnerships.com/assets/files/ANAES/Cardiology2010/Pediatric_hypertension_update_12.pdf
RESOURCE	Million Hearts: Resources
SOURCE	Centers for Disease Control and Prevention
URL	http://millionhearts.hhs.gov/resources.html
RESOURCE	Hypertension Prevention, Treatment, Control and Sodium Reduction Policy
SOURCE	Centers for Disease Control and Prevention
URL	http://www.cdc.gov/primarycare/materials/hypertension/index.html
RESOURCE	The Heart/Stroke Recognition Program
SOURCE	National Committee for Quality Assurance and American Heart Association
URL	http://www.ncqa.org/tabid/140/Default.aspx
RESOURCE	Tools, reports, and other resources
SOURCE	Institute for Healthcare Improvement
URL	http://www.ihl.org
RESOURCE	How to Improve / Model for Improvement
SOURCE	Associates in Process Improvement. Available from the Institute for Healthcare Improvement
URL	http://www.ihl.org/knowledge/Pages/HowtoImprove/default.aspx
RESOURCE	Measures
SOURCE	Institute for Healthcare Improvement
URL	http://www.ihl.org/knowledge/Pages/Measures/default.aspx
RESOURCE	HEDIS & Quality Measurement
SOURCE	National Committee for Quality Assurance
URL	http://www.ncqa.org/tabid/59/Default.aspx

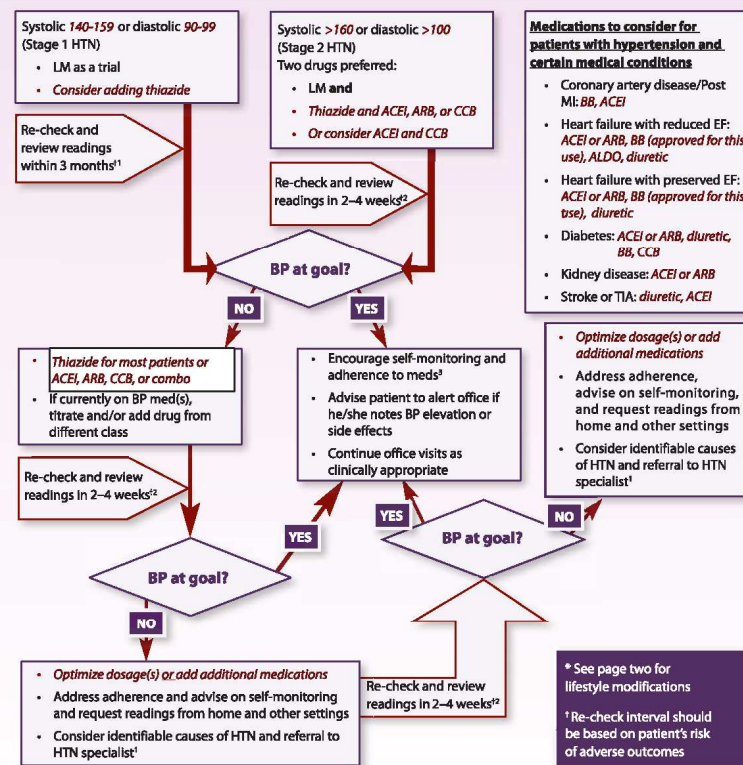
Last reviewed: October 2014
For the latest version, go to
<http://www.ncchc.org/guidance>

Treatment Algorithm

Gaston County Jail

Protocol for Controlling Hypertension in Adults¹

The blood pressure (BP) goal is set by a combination of factors including scientific evidence, clinical judgment, and patient tolerance. For most people, the goal is <140 and <90; however some individuals may be better served by other BP goals. Lifestyle modifications (LM)* should be initiated in all patients with hypertension (HTN) and patients should be assessed for target organ damage and existing cardiovascular disease. Self-monitoring is encouraged for most patients throughout their care and requesting and reviewing readings from home and community settings can help in achieving and maintaining good control. For patients with hypertension and certain medical conditions, specific medications should be considered, as listed in the box on the right below.



Instructions for use of the template

1. Gather clinical staff to make consensus decisions about:
 - Specific medications to be prescribed for most patients with hypertension
 - Medications to consider for patients with hypertension and certain medical conditions
 - Starting dosages and dosage increases with each titration
 - Time intervals for follow-up and titration
2. Customize the template by accepting the variables in red or modifying them with other drug names, dosages, and titration
 - As needed, develop separate protocols for subpopulations with different treatment goals
3. Adopt the protocol across the practice or system and revise it over time to meet the needs of patients and staff

*Lifestyle Modifications ¹ (LM)		
Modification	Recommendation	Approximate SBP ^{***} Reduction (Range) ^{††}
Weight reduction	Maintain normal body weight (body mass index 18.5–24.9 kg/m ²)	5–20 mm Hg/10kg
Adopt DASH ^{†††} eating plan	Consume a diet rich in fruits, vegetables, and lowfat dairy products with a reduced content of saturated and total fat	8–14 mm Hg
Dietary sodium reduction	Reduce dietary sodium intake to no more than 100 mmol per day (2.4 g sodium or 6 g sodium chloride)	2–8 mm Hg
Physical activity	Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week which may be broken into shorter time intervals such as 10 minutes each of moderate or vigorous effort)	4–9 mm Hg
Moderation of alcohol consumption	Limit consumption to no more than 2 drinks (e.g. 24 oz. beer, 10 oz. wine, or 3 oz. 80-proof whiskey) per day in most men, and to no more than 1 drink per day in women and lighter weight persons	2–4 mm Hg
^{***} SBP – systolic blood pressure ^{††} The effects of implementing these modifications are dose and time dependent, and could be greater for some individuals ^{†††} DASH – Dietary Approaches to Stop Hypertension		

Abbreviations

- ACEI – Angiotensin-Converting Enzyme Inhibitor
- ALDO – Aldosterone Antagonist
- ARB – Angiotensin II Receptor Blocker
- BB – Beta Blocker
- CCB – Calcium Channel Blocker
- EF – Ejection Fraction
- MI – Myocardial Infarction
- TIA – Transient Ischemic Attack

References

- ¹ National Heart, Lung and Blood Institute, National Institutes of Health. *The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure - Complete Report*. National Heart, Lung, and Blood Institute, National Institutes of Health. NIH Publication No. 04-5230, 2004.
- ² Jaffe MG, Lee GA, Young JD, Sidney S, Go AS. Improved Blood Pressure Control Associated with a Large-Scale Hypertension Program. *JAMA*. 2013;310(7):699-705.
- ³ Centers for Disease Control and Prevention. *Self-Measured Blood Pressure Monitoring: Action Steps for Public Health Practitioners*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2013.

Other Resources

Sacks FM, Svetkey LP, Vollmer WM, et al. Effects on blood pressure of reduced dietary sodium and the Dietary Approaches to Stop Hypertension (DASH) diet. DASH-Sodium Collaborative Research Group. *N Engl J Med*. 2001;344:3-10.

US Department of Health and Human Services. 2008 physical activity guidelines for Americans. 2008. <http://www.health.gov/PAGuidelines>. Accessed November 4, 2013.

Suggested Citation

Centers for Disease Control and Prevention. *Protocol for Controlling Hypertension in Adults*. Atlanta, Georgia. 2013.

CS243702

Adapted from AHA (2015)

Chronic Disease Initial Visit Form

Chronic Disease Clinic Initial Baseline Medical Data

Check all that apply and complete appropriate clinic HX:

- | | | |
|--|-----------------------------------|------------------------------|
| <input type="checkbox"/> Pulmonary/Asthma/COPD | <input type="checkbox"/> HTN/CV | <input type="checkbox"/> TB |
| <input type="checkbox"/> General Medical | <input type="checkbox"/> Seizures | <input type="checkbox"/> HIV |
| <input type="checkbox"/> Liver Disease/HCV | <input type="checkbox"/> Diabetes | |
| <input type="checkbox"/> Other: _____ | | |

Personal Risk Factors:		Family History:		Surgeries/Hospitalizations:
Y	N	Y	N	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Smoking: Pack year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Anemia
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Asthma
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cancer: types
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Diabetes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Heart Disease
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	High Blood Pressure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Kidney Disease
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mental Illness
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sickle Cell
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tuberculosis
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

General Description/Chief Complaint:(Attach medication profile or list medications)

Cardiovascular/Hypertension/Diabetes (Date of onset of symptoms: _____)

Y	N	Y	N	Y	N	Y	N
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Details of boxes checked Y: _____

Inmate Name:	Number:	Institution:	Date:
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Page 1

Y	N		Y	N	
<input type="checkbox"/>	<input type="checkbox"/>	Aura	<input type="checkbox"/>	<input type="checkbox"/>	Gum Disease: _____
<input type="checkbox"/>	<input type="checkbox"/>	Postictal State	<input type="checkbox"/>	<input type="checkbox"/>	Date of Last Seizure
<input type="checkbox"/>	<input type="checkbox"/>	Number of Seizures in past 3 mos. _____	<input type="checkbox"/>	<input type="checkbox"/>	LOC
<input type="checkbox"/>	<input type="checkbox"/>	Type of Seizures _____			
<input type="checkbox"/>	<input type="checkbox"/>	Other Neurological Symptoms? (headache, incontinence, paralysis)			

Y	N		Y	N		Y	N	
<input type="checkbox"/>	<input type="checkbox"/>	Anorexia	<input type="checkbox"/>	<input type="checkbox"/>	Weight Loss/Gain	<input type="checkbox"/>	<input type="checkbox"/>	Abnormal Pap Smear
<input type="checkbox"/>	<input type="checkbox"/>	Malaise	<input type="checkbox"/>	<input type="checkbox"/>	Peripheral Neuropathy	<input type="checkbox"/>	<input type="checkbox"/>	Hx Previous Antiviral Tx
<input type="checkbox"/>	<input type="checkbox"/>	Oral Lesions (herpes/thrush)	<input type="checkbox"/>	<input type="checkbox"/>	TB Infection/Tuberculosis	(list drugs below)		
<input type="checkbox"/>	<input type="checkbox"/>	Nausea/Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	Hx Pneumonia	<input type="checkbox"/>	<input type="checkbox"/>	Jauundice
<input type="checkbox"/>	<input type="checkbox"/>	Constipation	<input type="checkbox"/>	<input type="checkbox"/>	Opportunistic Infections	<input type="checkbox"/>	<input type="checkbox"/>	Joint Pain
<input type="checkbox"/>	<input type="checkbox"/>	Diarrhea	<input type="checkbox"/>	<input type="checkbox"/>	AIDS Diagnosis	<input type="checkbox"/>	<input type="checkbox"/>	Pruritis
<input type="checkbox"/>	<input type="checkbox"/>	Anorectal pain/lesions	<input type="checkbox"/>	<input type="checkbox"/>	Abdominal Pain/Swelling			
<input type="checkbox"/>	<input type="checkbox"/>	Stool Changes						

Y	N		Y	N	
<input type="checkbox"/>	<input type="checkbox"/>	Wheezing	<input type="checkbox"/>	<input type="checkbox"/>	# Asthma Attacks per week _____
<input type="checkbox"/>	<input type="checkbox"/>	Nighttime Awakening Symptoms _____ per week	<input type="checkbox"/>	<input type="checkbox"/>	Exposure to Environmental Risk (asbestos, chemical exposure, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	Hospitalized for Asthma within the last year	<input type="checkbox"/>	<input type="checkbox"/>	Hemoptysis
<input type="checkbox"/>	<input type="checkbox"/>	Number of ER Visits in past 3 Months _____	<input type="checkbox"/>	<input type="checkbox"/>	Fever
<input type="checkbox"/>	<input type="checkbox"/>	History of Intubations	<input type="checkbox"/>	<input type="checkbox"/>	Liver Disease
<input type="checkbox"/>	<input type="checkbox"/>	Short Acting Inhalers use _____ times per week	<input type="checkbox"/>	<input type="checkbox"/>	Night Sweats
<input type="checkbox"/>	<input type="checkbox"/>	Prior Systemic Steroids	<input type="checkbox"/>	<input type="checkbox"/>	Weight Loss
<input type="checkbox"/>	<input type="checkbox"/>	Activity Intolerance	<input type="checkbox"/>	<input type="checkbox"/>	Persistent Cough (> 3 weeks)
<input type="checkbox"/>	<input type="checkbox"/>	GERD	<input type="checkbox"/>	<input type="checkbox"/>	Prior TB History
<input type="checkbox"/>	<input type="checkbox"/>	Allergies			

Inmate Name:	Number:	Institution:	Date:
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Page 2

Physical Exam

Vital Signs:

Temp:	Blood Pressure:	Pulse:	Resp:	Height:	Weight: (lbs):	Peak Flow:	Pain Scale:	Functional Assessment:
-------	-----------------	--------	-------	---------	----------------	------------	-------------	------------------------

HEENT _____

Neck: _____

Heart: _____

Lungs: _____

Abdomen: _____

Extremities: _____

GU/rectal: _____

Other: _____

Labs:

Hgb A1C:	Hct:	ALT:	T. Chole:	Triglycerides:
CD4 Cell:	Hgb:	BUN:	LDL:	INR:
HIV RNA VL:	AST:	Creatinine:	HDL:	Other:

Assessment: diagnoses

Degree of Control				
	G	F	P	N/A
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inmate Name:	Number:	Institution:	Date:
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Page 3

Education Provided: (describe below)

Disease process/abnormal labs: _____

Medication Mgmt (purposes, side effects): _____

Nutrition: _____

Smoking/Tobacco use: _____

Exercise: _____

Alcohol/substance abuse _____

Other: _____

PLAN:

Medication Changes: _____

Diagnostics:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> EKG | <input type="checkbox"/> CBC | <input type="checkbox"/> Hepatitis Panel A/B/C | <input type="checkbox"/> Liver Enzymes |
| <input type="checkbox"/> Chest x-ray | <input type="checkbox"/> Medication Levels | <input type="checkbox"/> Toxoplasmosis AB | <input type="checkbox"/> LFT |
| <input type="checkbox"/> Lipid Studies | <input type="checkbox"/> HIV Antibody | <input type="checkbox"/> RPR | <input type="checkbox"/> Sputum AFB Smear |
| <input type="checkbox"/> Chemistry | <input type="checkbox"/> CD4 count | <input type="checkbox"/> Pap Smear | <input type="checkbox"/> Sputum AFB Culture |
| <input type="checkbox"/> HgbA1C | <input type="checkbox"/> Viral Load | <input type="checkbox"/> Platelet | |
| <input type="checkbox"/> Urine Micro albumin | <input type="checkbox"/> HCV | <input type="checkbox"/> UA | |

Immunizations:

- ☐ Influenza Vaccine ☐ Pneumococcal Vaccine

Other Tests: _____

Monitoring:

BP: _____ times per day/week/month Glucose: _____ times per day/week/month Peak Flow: _____
Other: _____

Referral:

Specialist (indicate specialty and priority level): _____

Other Chronic Care Program? (specify): _____

Inmate Name:	Number:	Institution:	Date:
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Page 4

Additional Information: _____

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Clinician Signature/Credential
Date

Inmate Name:	Number:	Institution:	Date:
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Page 5

Chronic Disease Follow Up Form

Chronic Disease Clinic Follow-Up

Inmate Name:	
Number:	Institution:

List chronic diseases:

1)	3)	5)
2)	4)	6)

Attach pharmacy profile or list current medications:

Subjective:

Asthma: # attacks in last month?	Seizure disorder: # seizures since last visit?
# short acting beta agonist canisters in last month?	Diabetes mellitus: # of hypoglycemic reactions since last visit? _____
# times awakening with asthma symptoms per week?	Weight loss/gain ↓ ↑ #lbs
CV/hypertension (Y/N): Chest pain?	SOB? Palpitations? Ankle edema?
HIV/HCV (Y/N): Nausea/vomiting?	Abdominal pain/swelling? Diarrhea? Rashes/lesions?

For all diseases, since last visit, describe new symptoms: _____

Patient adherence (Y/N): with medications? _____ with diet? _____ with exercise? _____

Vital signs: Temp _____ BP _____ Pulse _____ Resp _____ Wt _____ PEFr _____ INR _____
 Labs: Hgb A1C _____ HIV VL _____ CD4 _____ Total Chol _____ LDL _____ HDL _____ Trig _____

Range of fingerstick glucose/BP monitoring: _____

PE:

HEENT/neck:	Extremities:
Heart:	Neurological:
Lungs:	GU/rectal:
Abdomen:	Other:

Assessment:

	Degree of Control				Clinical Status			
	G	F	P	NA	I	S	W	NA
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plan:

Medication changes: _____

Diagnostics: _____

Labs: _____

Monitoring: BP: _____ X day/week/month Glucose: _____ X day/week/month Peak flow: _____ Other: _____

Education provided: ☐ Nutrition ☐ Exercise ☐ Smoking ☐ Test results ☐ Medication management ☐ Other: _____

Referral (list type): Specialist: _____ Chronic care program: _____

days to next visit? ☐ 90 ☐ 60 ☐ 30 ☐ Other: _____ Discharged from CCC: [name] _____

Advance Level Provider Signature:	Date:
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Page 1

Session Packet

Name: _____

Date: _____

Blood Pressure Today: _____

Blood Pressure Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal	less than 120	and	less than 80
Prehypertension	120–139	or	80–89
High			
Stage 1	140–159	or	90–99
Stage 2	160 or higher	or	100 or higher

Make a list of all of the reasons you want to become smoke free and keep it in a place where you will see it often, like your car or where you kept your cigarettes. When you feel the need to smoke, take a look at the list to remind yourself why you want to quit.

1. _____
2. _____
3. _____

Identify Smoking Triggers

Everyone who smokes has smoking triggers. Knowing your triggers helps you stay in control. At first, you might want to avoid triggers all together. After staying quit for awhile, you may be able to find other ways to handle your triggers. Here are some common smoking triggers:

- Feeling stressed
- Feeling down
- Talking on the phone
- Drinking alcohol
- Watching TV
- Driving
- Finishing a meal
- Taking a work break
- Going to a bar
- Seeing someone else smoke
- Cooling off after a fight
- Feeling lonely
- After having sex
- Drinking coffee

1-800-QUIT-NOW
(1-800-784-8669)

or in Spanish:

1-855-DEJELO-YA
(1-855-335-3569)

The Stress-smoking Link

Many people smoke when they feel stressed. Even though they know that smoking hurts them and the ones they love, some smokers find it hard to give up cigarettes as a way to cope with stress.

Stress is part of life, so a key part of quitting smoking for many people is finding ways to handle stress and take care of themselves without smoking. Spend some time thinking about and looking for ways to deal with the busy days that are so often a part of life.

Tips for Slips

Don't be discouraged if you slip up and smoke one or two cigarettes. One cigarette is better than an entire pack. But don't use it as excuse to start smoking again because it's a slippery slope. Many ex-smokers try stopping many times before they finally succeed. When people slip up, it's usually within the first three months after quitting.

Here's what you can do if you slip:

- Understand that you've had a slip. You've had a small setback. This doesn't make you a smoker again.
- Don't be too hard on yourself. One slip up doesn't make you a failure. It doesn't mean you can't quit for good.
- Don't be too easy on yourself either. If you slip up, don't say, "Well, I've blown it. I might as well smoke the rest of this pack". It's important to get back on the non-smoking track right away. Remember, your goal is no cigarettes—not even one puff.
- Feel good about all the time you went without smoking. Try to learn how to make your coping skills better.
- Identify the trigger. Exactly what was it that made you smoke? Be aware of that trigger. Decide now how you will cope with it when it comes up again.
- Learn from your experience. What has helped you the most to keep from smoking? Make sure to do that on your next try.
- Are you using a medicine to help you quit? Don't stop using your medicine after only one or two cigarettes. Stay with it. It will help you get back on track.
- Know and use the tips on Smokefree.gov. People with even one coping skill are more likely to stay non-smokers than those who don't know any.
- See your doctor or another health professional. He or she can help motivate you to quit smoking.
- Ask for the support you need from friends, family members, co-workers, etc. that you need to stay quit. You don't have to do this alone!

BMI	21	22	23	24	25	26	27	28	29	30	31
HEIGHT (FEET AND INCHES)	BODY WEIGHT (POUNDS)										
4' 10"	100	105	110	115	119	124	129	134	138	143	148
5' 0"	107	112	118	123	128	133	138	143	148	153	158
5' 2"	115	120	126	131	136	142	147	153	158	164	169
5' 4"	122	128	134	140	145	151	157	163	169	174	180
5' 6"	130	136	142	148	155	161	167	173	179	186	192
5' 8"	138	144	151	158	164	171	177	184	190	197	203
5' 10"	146	153	160	167	174	181	188	195	202	209	216
6' 0"	154	162	169	177	184	191	199	206	213	221	228
6' 2"	163	171	179	186	194	202	210	218	225	233	241
6' 4"	172	180	189	197	205	213	221	230	238	246	254

For follow up:

Highland Health Center
 609 North Highland Street
 Gastonia, North Carolina 28052
 New Patient: 704-874-3316
 Appointments: 704-833-1550
 You will not be turned away for financial reasons.

THE DASH EATING PLAN

The DASH eating plan shown below is based on **2,000 calories a day**. The number of daily servings in a food group may vary from those listed, depending upon your caloric needs.

FOOD GROUP	DAILY SERVINGS (EXCEPT AS NOTED)	SERVING SIZES
Grains and grain products	7–8	1 slice bread 1 cup ready-to-eat cereal* ½ cup cooked rice, pasta, or cereal
Vegetables	4–5	1 cup raw leafy vegetable ½ cup cooked vegetable 6 ounces vegetable juice
Fruits	4–5	1 medium fruit ¾ cup dried fruit ½ cup fresh, frozen, or canned fruit 6 ounces fruit juice
Lowfat or fat free dairy foods	2–3	8 ounces milk 1 cup yogurt 1 ½ ounces cheese
Lean meats, poultry, and fish	2 or fewer	3 ounces cooked lean meat, skinless poultry, or fish
Nuts, seeds, and dry beans	4–5 per week	⅓ cup or 1 ½ ounces nuts 1 tablespoon or ½ ounce seeds ½ cup cooked dry beans
Fats and oils†	2–3	1 teaspoon soft margarine 1 tablespoon lowfat mayonnaise 2 tablespoons light salad dressing 1 teaspoon vegetable oil
Sweets	5 per week	1 tablespoon sugar 1 tablespoon jelly or jam ½ ounce jelly beans 8 ounces lemonade

TIPS TO REDUCE SALT AND SODIUM

- Buy fresh, plain frozen, or canned “with no salt added” vegetables.
- Use fresh poultry, fish, and lean meat, rather than canned or processed types.
- Use herbs, spices, and salt-free seasoning blends in cooking and at the table.
- Cook rice, pasta, and hot cereal without salt. Cut back on instant or flavored rice, pasta, and cereal mixes, which usually have added salt.
- Choose “convenience” foods that are low in sodium. Cut back on frozen dinners, pizza, packaged mixes, canned soups or broths, and salad dressings—these often have a lot of sodium.
- Rinse canned foods, such as tuna, to remove some sodium.
- When available, buy low- or reduced-sodium or no-salt-added versions of foods—see box 11 for guidance on how to use food labels.
- Choose ready-to-eat breakfast cereals that are low in sodium.



COMPARE LABELS

Food labels can help you choose items lower in sodium, as well as calories, saturated fat, total fat, and cholesterol. The label tells you:

FROZEN PEAS	
Nutrition Facts	
Serving Size: ½ cup	
Servings Per Container: about 3	
Amount Per Serving	
Calories: 60	Calories from Fat: 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 125mg	5%
Total Carbohydrate 11g	4%
Dietary Fiber 6g	22%
Sugars 5g	
Protein 5g	
Vitamin A 15%	Vitamin C 30%
Calcium 0%	Iron 6%

Amount per serving
Nutrient amounts are provided for one serving. If you eat more or less than a serving, add or subtract amounts. For example, if you eat 1 cup of peas, you need to double the nutrient amounts on the label.

Number of servings
There may be more than one serving in the package, so be sure to check serving size.

Nutrients
You'll find the milligrams of sodium in one serving.

Percent daily value
Percent daily value helps you compare products and tells you if the food is high or low in sodium. Choose products with the lowest percent daily value for sodium.

CANNED PEAS	
Nutrition Facts	
Serving Size: ½ cup	
Servings Per Container: about 3	
Amount Per Serving	
Calories: 60	Calories from Fat: 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 380mg	16%
Total Carbohydrate 12g	4%
Dietary Fiber 3g	14%
Sugars 4g	
Protein 4g	
Vitamin A 6%	Vitamin C 10%
Calcium 2%	Iron 8%

* Percent Daily Values are based on a 2,000 calorie diet

? Which product is lower in sodium?

Answer: The frozen peas. The canned peas have three times more sodium than the frozen peas.

TIPS TO HELP YOU REMEMBER TO TAKE YOUR BLOOD PRESSURE DRUGS

- Put a favorite picture of yourself or a loved one on the refrigerator with a note that says, "Remember To Take Your High Blood Pressure Drugs."
- Keep your high blood pressure drugs on the nightstand next to your side of the bed.
- Take your high blood pressure drugs right after you brush your teeth, and keep them with your toothbrush as a reminder.
- Put "sticky" notes in visible places to remind yourself to take your high blood pressure drugs. You can put notes on the refrigerator, on the bathroom mirror, or on the front door.
- Set up a buddy system with a friend who also is on daily medication and arrange to call each other every day with a reminder to "take your blood pressure drugs."
- Ask your child or grandchild to call you every day with a quick reminder. It's a great way to stay in touch, and little ones love to help the grown-ups.
- Place your drugs in a weekly pillbox, available at most pharmacies.
- If you have a personal computer, program a start-up reminder to take your high blood pressure drugs, or sign up with a free service that will send you a reminder e-mail every day.
- Remember to refill your prescription. Each time you pick up a refill, make a note on your calendar to order and pick up the next refill 1 week before the medication is due to run out.



Why Should I Limit Sodium?

You may have been told by your healthcare provider to reduce the salt in your diet. Salt is sodium chloride. You need a certain balance of sodium and water in your body at all times to work properly. Too much salt or too much water in your system will upset the balance. When you're healthy, your kidneys get rid of extra sodium to keep the correct balance.



What's bad about sodium?

Too much sodium in your system causes your body to retain (hold onto) water. This puts an extra burden on your heart and blood vessels. In some people, this may lead to or raise high blood pressure. Having less sodium in your diet may help you lower or avoid high blood pressure. People with high blood pressure are more likely to develop heart disease or have a stroke.

How much sodium do I need?

Most people eat too much sodium, often without knowing it. One teaspoon of salt contains about 2,300 mg of sodium. Your body only needs 200 mg of sodium per day.

- The average American eats about 3,060 to 3,600 mg of sodium a day.
- All Americans should reduce the amount of sodium in their diet to less than 1,500 mg a day.
- Your doctor may tell you to cut salt out completely.

What are sources of sodium?

Most of the sodium in our diets comes from adding it when food is being prepared. Pay attention to food labels, because they tell how much sodium is in food products.

For example: foods with less than 140 mg or 5 percent of the Daily Value (DV) per serving are low in sodium.

Here's a list of sodium compounds to limit in your diet:

- Salt (sodium chloride or NaCl)
- Monosodium glutamate (MSG)
- Baking soda
- Baking powder
- Disodium phosphate
- Any compound that has "sodium" or "Na" in its name

Some over-the-counter and prescription medicines also contain lots of sodium. Make it a habit of reading the labels of all over-the-counter drugs, too.

What foods should I limit?

The best way to reduce sodium is to avoid prepackaged, processed and fast foods, which tend to be high in sodium. Here are a few suggestions on what to limit.

- Salted snacks
- Fish that's frozen, pre-breaded, pre-fried or smoked; also some fish that's canned in oil or brine like tuna, sardines or shellfish

(continued)



- Ham, bacon, corned beef, luncheon meats, sausages and hot dogs
- Canned foods and juices containing salt
- Commercially made main dishes like hash, meat pies and frozen dinners with more than 700 mg of sodium per serving
- Cheeses and buttermilk
- Seasoned salts, meat tenderizers and MSG
- Ketchup, mayonnaise, sauces and salad dressings

How can I cook with less salt and more flavor?

- Avoid adding table salt to foods.
- Use herbs and spices to add flavor to foods. Fresh herbs provide more flavor than dried.
- Eat fresh lean meats, skinless poultry, fish, egg whites and tuna canned in water.
- Choose unsalted nuts and low-sodium or no salt added canned foods. Cook dried peas and beans.
- Use products made without added salt; try low-sodium

bouillon and soups and unsalted, fat-free broth.

- Rinse canned vegetables, beans and shellfish to reduce salt.
- Sprinkle vinegar or citrus juice on foods just before eating. Vinegar is great on vegetables like spinach.



What about eating out?

Controlling your sodium intake doesn't mean spoiling the pleasure of eating out. But order carefully. Consider these tips for meals away from home:

- Select fresh greens and fruits when available.
- Be specific about what you want and how you want your food prepared. Request that your dish be prepared without added salt.
- Remember portion control. When you know you're going to eat something that's higher in sodium, eat less!

HOW CAN I LEARN MORE?

- 1 Talk to your doctor, nurse or other healthcare professionals.** If you have heart disease or have had a stroke, members of your family also may be at higher risk. It's very important for them to make changes now to lower their risk.
- 2 Call 1-800-AHA-USA1** (1-800-242-8721), or visit heart.org to learn more about heart disease.
- 3** For information on stroke, call **1-888-4-STROKE** (1-888-478-7653) or visit us at StrokeAssociation.org.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your healthcare provider.
For example:

What's my daily sodium limit?
Is there sodium in the medicine I take?

My Questions:

We have many other fact sheets to help you make healthier choices to reduce your risk, manage disease or care for a loved one. Visit heart.org/answersbyheart to learn more.
Knowledge is power, so Learn and Live!



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Simple Steps to Save on Sodium

Sodium is a mineral found in table salt, as well as in many foods, where it occurs both naturally and as added salt. The Dietary Guidelines for Americans generally recommend that we consume less than 2,300 milligrams (mg) of sodium per day—the amount of sodium found in about one teaspoon of salt.

If you're watching how much sodium you eat, try the tips below the next time you're at McDonald's®.

- Request hamburgers without grill seasoning, which contains a mix of salt and pepper.
- Ask for French fries without added salt.
- Don't add salt at the table.
- Skip or go light on sandwich condiments such as ketchup, mustard, pickles, sauces and dressings.
- Use a smaller amount of salad dressings.
- Order sandwiches without cheese. You'll save 230 mg for each slice of American cheese.
- Choose menu items made without sausage or bacon.

To customize various McDonald's Menu items and get the Nutrition Facts, please visit the Food, Nutrition & Fitness section at www.mcdonalds.com. We continually update our Nutrition Facts and ingredient information. Nutrition information based on standard formulation; variations may occur.

Sodium-Saving Ideas

SODIUM SAVED (mg)

Order

A Premium Salad without a crispy or grilled chicken breast filet	710/670
A Quarter Pounder® with Cheese Sandwich or Double Cheeseburger without cheese (2 slices)	480
An Egg McMuffin® Sandwich, Biscuit, or McGriddles® Sandwich without the sausage patty	340
A Quarter Pounder® with Cheese without ketchup and pickle slices	250
An Egg McMuffin® Sandwich without Canadian-style bacon	230
Use only half a packet of salad dressing	170 - 370
A Biscuit or McGriddles® Sandwich without bacon	170
A Filet-O-Fish® Sandwich without tartar sauce	110
A Big Mac® Sandwich without Big Mac Sauce	105
A Premium Chicken Classic® or Premium Chicken Club Sandwich or a Big N' Tasty® Sandwich without mayonnaise dressing	85

+Based on the weight before cooking 4 oz. (113.4g)

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Nutrient results for meal and menu item suggestions are rounded according to federal rounding regulations. Serving size designation for beverages refers to total cup capacity; the actual amounts of beverage (and ice) may vary.

This information is effective 10-01-2008



Simple Steps to Save on Sodium

If you're keeping tabs on sodium, consider the McDonald's® meal suggestions below.

SODIUM (mg)

Breakfast

Scrambled Eggs (2) **470**
English Muffin
Apple Juice Box (6.75 fl oz)

Hotcakes with syrup **730**
1% Low Fat White Milk Jug (8 fl oz)

Lunch/Dinner

Bacon Ranch Salad without chicken **650**
Newman's Own® Ranch Dressing, ½ pkg.
Fruit 'n Yogurt Parfait
Bottled water

Hamburger **700**
Small French Fries
Apple Juice Box (6.75 fl oz)

Chicken McNuggets® (6 piece) **770**
Apple Dippers with Low Fat Caramel Dip
1% Low Fat White Milk Jug (8 fl oz)

Filet O Fish® Sandwich without tartar sauce **790**
Side Salad
Newman's Own® Creamy Caesar Dressing, ½ pkg.
Bottled water

Honey Mustard Snack Wrap® (Grilled) **860**
Snack Size Fruit & Walnut Salad
Bottled water



To get the Nutrition Facts for your favorite McDonald's meal, please visit our Bag a McMeal™ feature in the Food, Nutrition & Fitness section at www.mcdonalds.com. We continually update our Nutrition Facts and ingredient information. Nutrition information based on standard formulation; variations may occur.

Nutrient results for meal and menu item suggestions are rounded according to federal rounding regulations. Serving size designation for beverages refers to total cup capacity; the actual amounts of beverage (and ice) may vary. Milk Jugs vary in California and Alaska.

This information is effective 10-01-2008

McDonald's Menu Items for Sodium Watchers

Breakfast Items:
Less than 700 milligrams of sodium

- Apple Juice Box (15 mg)
- Fruit 'n Yogurt Parfait (85 mg)
- 1% Low Fat Milk Jug (125 mg)
- Scrambled Eggs (180 mg)
- English Muffin (280 mg)
- Hash Browns (310 mg)
- Sausage Patty (340 mg)
- Egg McMuffin® without cheese (580 mg)
- Hotcakes with Syrup (no margarine) (610 mg)

Lunch/Dinner Items:
Less than 800 milligrams of sodium

- Snack Size Fruit & Walnut Salad (60 mg)
- Side Salad and ½ pkg. Newman's Own® LowFat Family Recipe Italian Dressing (370 mg)
- Caesar Salad without chicken and ½ pkg. of Newman's Own® Caesar Dressing (430 mg)
- Southwest Salad without chicken and 1 pkg. of Newman's Own® Creamy Southwest Dressing (490 mg)
- Hamburger (520 mg)
- Filet-O-Fish® Sandwich without tartar sauce (530 mg)
- Bacon Ranch Salad without chicken and ½ pkg. of Newman's Own® Ranch Dressing (560 mg)
- Big N' Tasty® Sandwich (720 mg)
- Quarter Pounder® without cheese (730 mg)
- McChicken® Sandwich without mayonnaise dressing (740 mg)
- Cheeseburger (750 mg)

Snacks:
Less than 200 milligrams of sodium

- Apple Juice Box (15 mg)
- Apple Dippers with Low Fat Caramel Dip (35 mg)
- Vanilla Reduced Fat Ice Cream Cone (60 mg)
- Fruit 'n Yogurt Parfait (85 mg)
- Chocolate Chip Cookie (90 mg)
- Strawberry, Hot Caramel or Hot Fudge Sundae (95/160/180 mg)
- 1% Low Fat White or Chocolate Milk Jug (125/150 mg)
- Baked Apple Pie (170 mg)
- Strawberry or Vanilla Triple Thick® Shake, 16 fl oz cup (170/190 mg)

*Based on the weight before cooking 4 oz. (113.4g)

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Lower-sodium Fast Food Options

Here are some of the lower-sodium foods that you can order (keeping in mind that you may feel best if you keep your sodium to 1,200 to 2,000 mg/day or less if you are on in-center hemodialysis, or 3,000 to 4,000 mg/day or less if you are on peritoneal dialysis). Print out a copy and keep it with you or in your car for quick reference when you're on the go.

Arby's®

- Croissant with scrambled egg (400 mg sodium)
- Gourmet chocolate chunk cookies (2) (320 mg sodium)
- Apple or cherry turnover, iced (200-210 mg sodium)
- Vanilla shake, regular size (390 mg sodium)
- Chocolate shake, regular size (450 mg sodium)

Burger King®

- French toast sticks - 5 sticks, with syrup (450 mg sodium)
- Cini-mini's with icing (400 mg sodium)
- Fruit-topped oatmeal (290 mg sodium)
- Hamburger (490 mg sodium)
- Whopper Jr.® - no cheese (530 mg sodium)
- Garden salad, no dressing (50 mg sodium)
- Chicken Tenders® 4 pieces (310 mg sodium)
- Dutch apple pie (310 mg sodium)
- Hershey's sundae pie (220 mg sodium)
- Oreo or Oreo Brownie sundae (390 mg sodium)
- Peach & granola sundae (170 mg sodium)
- Strawberry shake (130 mg sodium)

Dairy Queen®

- Grilled chicken wrap (450 mg sodium)
- Breaded mushrooms (500 mg sodium)
- Vanilla cone, medium (140 mg sodium)
- Chocolate malt, small (250 mg sodium)

- Small Blizzard (180-430 mg sodium)
- Peanut Buster® Parfait (350 mg sodium)
- Medium sundae (130-390 mg sodium)
- Buster Bar® (220 mg sodium)
- Strawberry shortcake (370 mg sodium)
- Chocolate Dilly® Bar (70 mg sodium)
- Small shake (190-370 mg sodium)

Hardee's®

- Hamburger (480 mg sodium)
- Onion rings (470 mg sodium)
- Apple turnover (260 mg sodium)

Jack In The Box®

- French toast sticks - 4 sticks (530 mg sodium)
- Spicy corn sticks (140 mg sodium)
- Hamburger deluxe (540 mg sodium)
- Beef taco, (320 mg sodium)
- Shakes and desserts (260-560 mg sodium)

Kentucky Fried Chicken®

- Caesar side salad with parmesan garlic croutons, no dressing (250 mg sodium)
- KFC Snacker®, Honey BBQ (470 mg sodium)
- Drumstick - grilled - (290 mg sodium)
- Drumstick - original recipe (310 mg sodium)
- Whole wing - original recipe (380 mg sodium)
- Chicken breast - original recipe, no skin or breading (580 mg sodium)
- Drumstick - extra crispy (360 mg sodium)
- Whole wing - extra crispy (410 mg sodium)



Lower-sodium Fast Food Options



Kentucky Fried Chicken® continued

- Biscuit (530 mg sodium)
- Coleslaw (135 mg sodium)
- Green beans (260 mg sodium)
- Corn on the cob, 5.5 inch piece (5 mg sodium)
- Macaroni salad (430 mg sodium)
- Apple turnover (160 mg sodium)
- Lil' Bucket™ parfait (140-240 mg sodium)
- Oreo cookie and creme pie slice (210 mg sodium)

McDonalds®

- Apple dippers, with caramel dip (35 mg sodium)
- Snack size fruit and walnuts (60 mg sodium)
- Fruit and maple oatmeal (160 mg sodium)
- Cinnamon Melts (370 mg sodium)
- Fruit'n Yogurt parfait (85 mg sodium)
- Chicken McNuggets® (6) no sauce (540 mg sodium)
- Honey packet (1) - (0 mg sodium)
- Sweet'n Sour sauce (1) - (150 mg sodium)
- Honey mustard sauce (1) - (115 mg sodium)
- Hamburger (520 mg sodium)
- Premium Caesar salad (w/grilled chicken) (580 mg sodium)
- Bacon ranch salad, no chicken (300 mg sodium)
- Side salad, with Newman's Own® ranch dressing (540 mg sodium)
- McDonaldland® cookies (300 mg sodium)
- Caramel apple parfait (85 mg sodium)
- Vanilla reduced fat ice cream cone (60 mg sodium)
- Baked apple pie (170 mg sodium)

Pizza Hut®

- Medium pan pizza, one slice cheese (530 mg sodium)
- Medium pan pizza, one slice pepperoni and mushroom (520 mg sodium)
- Medium pan pizza, one slice Veggie Lover's® (500 mg sodium)
- Medium pan pizza, one slice ham & pineapple (520 mg sodium)
- Medium pan pizza, one slice Italian sausage & red onion (560 mg sodium)
- Medium Thin'n Crispy® pizza, one slice cheese (550 mg sodium)
- Medium Thin'n Crispy® pizza, one slice pepperoni and mushroom (540 mg sodium)
- Medium Thin'n Crispy® pizza, one slice ham & pineapple (540 mg sodium)
- Medium Thin'n Crispy® pizza, one slice Veggie Lover's® (530 mg sodium)
- Medium hand-tossed pizza, one slice Veggie Lover's® (530 mg sodium)
- Medium hand-tossed pizza, one slice cheese (550 mg sodium)
- Medium hand-tossed pizza, one slice pepperoni & mushroom (540 mg sodium)
- Medium hand-tossed pizza, one slice ham & pineapple (550 mg sodium)
- 12" Fit'n Delicious Pizza™, one slice, ham, red onion, and mushroom (550 mg sodium)
- 12" Fit'n Delicious Pizza™, one slice, chicken, red onion, green pepper (510 mg sodium)
- Breadstick, 1 piece (260 mg sodium)
- All American crispy or bone out wings (no sauce) (500 mg sodium)
- Apple pie (2 pies) (190 mg sodium)



Lower-sodium Fast Food Options



Subway®

- Grilled chicken and baby spinach salad (330 mg sodium)
- Veggie Delite® 6 inch sub (310 mg sodium)
- Oven roasted chicken salad (270 mg sodium)
- Roast beef salad (450 mg sodium)
- Bacon egg and cheese muffin melt (550 mg sodium)
- Egg and cheese muffin melt (460 mg sodium)
- Cookies and desserts (70-290 mg sodium)

Taco Bell®

- Fresco crunchy taco (310 mg sodium)
- Grilled steak soft taco (550 mg sodium)
- Crunchy taco (290 mg sodium)
- Crunchy Taco Supreme® (320 mg sodium)
- Gordita supreme, chicken (510 mg sodium)
- Volcano taco (410 mg sodium)
- Gordita Supreme steak or beef (550 mg sodium)
- Hot sauce and salsa (35-80 mg sodium)
- Beef soft taco (510 mg sodium)
- Chicken soft taco (460 mg sodium)
- Original chicken flatbread sandwich (580 mg sodium)
- Chalupa Supreme® steak (570 mg sodium)
- Avocado ranch dressing (50 mg sodium)
- Caramel apple empanada (310 mg sodium)
- Mexican rice (200 mg sodium)
- Nachos (370 mg sodium)
- Cinnamon twists (200 mg sodium)

Wendy's®

- Chicken nuggets 5 pieces, no sauce (460 mg sodium)
- Sweet and sour or barbecue sauce - 1 package (120 mg sodium)
- Jr. hamburger w/ketchup (540 mg sodium)
- Apple pecan chicken salad, half-size, no dressing (580 mg sodium)
- Caesar side salad with caesar dressing and croutons (515 mg sodium)
- Apple slices (0 mg sodium)
- Vanilla or chocolate Frosty™ small (135-140 mg sodium)
- Wild berry frosty shake small (170 mg sodium)
- Oreo frosty parfait (190 mg sodium)
- Caramel apple frosty parfait (140 mg sodium)

Content from Kidney School, a program of the Medical Education Institute, Inc.

References

- Alhalaiqa, F., Deane, K., Nawafleh, A., Clark, A., & Gray, R. (2012). Adherence therapy for medication non-compliant patients with hypertension: A randomized controlled trial. *Journal of Human Hypertension*, 26(2), 117-126.
- American Heart Association (2015). High blood pressure resources for professionals. Retrieved from: http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/HighBloodPressureToolsResources/High-Blood-Pressure-Resources-For-Professionals_UCM_461722_Article.jsp
- Binswanger, A., Kruegar, P., & Steiner, J. (2011). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *Journal of Epidemiology in Community Health*, 63, 912-919.
- California Social Work Education Center (CalSWEC) (2015). Facilitator's guide implementation toolkit: intervention and organizational readiness. Retrieved from (<http://calswec.berkeley.edu/toolkits/implementation-toolkits/how-build-implementation-toolkit-start-finish>).
- Centers for Disease Control (2015). *Tips from former smokers*. Retrieved from: <http://www.cdc.gov/tobacco/campaign/tips/index.html>
- Coleman, K., Austin, B., Brach, C., & Wagner, E. (2009). Evidence on the chronic care model in the new millennium. *Health Affairs*(28), 75-85.
- Coleman, C. (2011). Teaching health professionals about health literacy: a review of the literature. *Nursing Outlook*, 59, 70-78.
- Edelman, D., McDuffie, J., Oddone, E., Gierisch, J., Williams Jr, J., Nagi, A., & Wing, L. (2012). Shared medical appointments for chronic medical conditions: A systematic review.
- Edelman, D., Fredrickson, S., Melnyk, S., Coffman, C., Jeffreys, A., Datta, S., . . . Stewart, H. (2010). Medical clinics versus usual care for patients with both diabetes and hypertension: a randomized trial. *Annals of Internal Medicine*, 152(11), 689-696.
- Egger, G., Binns, A., Cole, M., Ewald, D., Davies, L., Meldrum, H.,....Noffsinger, E. (2014). Shared medical appointments: an adjunct for chronic disease management in Australia? *Australian Family Physician*, 43(3), 151-154.
- Flynn, S., Ameling, J., Hill-Briggs, F., Wolff, J., Bone, L., Levine, D...& Boulware, L. (2013). Facilitators and barriers to hypertension self-management in urban African-Americans: Perspectives of patients and family members. *Patient preference and adherence*, 7, 741-749.

- Frensenius Medical Care (2015). Lower sodium fast food options. Retrieved from: <http://www.pennockhealth.com/Brochures/Lowersodium%20Fast%20Food%20Options.pdf>
- Goldstein, E., Warner-Robbins, C., McLean, C., Macatula, L., & Conlin, R. (2009). A peer-driven mentoring case management community reentry model: An application for jails and prisons. *Family & Community Health, 32*(4), 309-313.
- Han, H., Lee, H., Commodore-Mensah, Y., & Kim, M. (2014). Development and validation of the hypertension self-care profile. *Journal of Cardiovascular Nursing, 29*(3), E11-E20.
- James, P., Oparil, S., Carter, B., Cushman, W., Dennison-Himmelfarb, C., Handler, J., ... & Ortiz, E. (2014). 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA, 311*(5), 507-520.
- Kinner, S. & Wang, E. (2014). The case for improving the health of ex-prisoners. *American Journal of Public Health, 104*(8), 1352-1355.
- Kirsh, S., Watts, S., Pascuzzi, K., O'Day, M. E., Davison, D., Strauss, G., ... Aron, D. C. (2007). Shared medical appointments based on the chronic care model: a quality improvement project to address the challenges of patients with diabetes with high cardiovascular risk. *Quality & Safety in Health Care, 16*, 349-353. doi: 10.1136/qshc.2006.019158
- Madson, M., Loignon, A., and Lane, C. (2009). Training in motivational interviewing: a systematic review. *Journal of Substance Abuse Treatment, 36*, 101-109.
- Marks, J. & Turner, N. (2014). The critical link between health care and jails. *Health Affairs, 33*(3), 443-447. Doi: 10.1377/hlthaff.2013.1350
- McDonalds (2015). *Simple steps to save on sodium*. Retrieved from: http://www.mcdonalds.com/content/dam/McDonalds/Documents/McDonalds_SimpleStepsToSaveOnSodium.pdf
- National Commission on Correctional Health Care (2014). *Standards for Health Services in Jails*. Chicago, Illinois.
- National Institutes of Health (2003). Your guide to lowering blood pressure. Publication No 03-5232. Retrieved from: https://www.nhlbi.nih.gov/files/docs/public/heart/hbp_low.pdf
- Ross, M. (2011). Pedagogy for prisoners: an approach to peer health education for inmates. *Journal of Correctional Health Care, 17*, 6. DOI: 10.1177/1078345810378251
- Stein, K. (2011). The group appointment trend gains traction: how dietetics fits into a new model of health care delivery. *Journal of the American Dietetic Association, 340*-353.

Tamura-Lis, W. (2013). Teach-back for quality education and patient safety. *Urologic Nursing*, 33(6), 267-298.

The Cecil G. Sheps Center for Health Service Research (2013). Health literacy universal precautions toolkit for cardiology, Ver. 7. 2013. Retrieved from: <http://www.shepscenter.unc.edu/wp-content/uploads/2013/05/Health-Literacy-Toolkit-Cardiology.pdf>

Thompson, C., Meeuwisse, I., Dahlke, R., & Drummond, N. (2014). Group medical visits in primary care for patients with diabetes and low socioeconomic status: users' perspectives and lessons for practitioners. *Canadian Journal of Diabetes*, 38, 198-204. doi: 10.1016/j.jcjd.2014.03.012

Travis, J., Western, B., & Redburn, S. (2014). The growth of incarceration in the United States: Exploring causes and consequences.

US Veterans Administration (2008). VA shared medical appointments for patients with diabetes: maximizing patient and provider expertise to strengthen care management. Retrieved from: <http://www.queri.research.va.gov/tools/diabetes/shared-medappt.pdf>

REFERENCES

- Alghurair, S., Hughes, C., Simpson, S., & Guirguis, L. (2012). A systematic review of patient self-reported barriers of adherence to antihypertensive medications using the world health organization multidimensional adherence model. *The Journal of Clinical Hypertension*, 14(12), 877-886.
- Alhalaia, F., Deane, K., Nawafleh, A., Clark, A., & Gray, R. (2012). Adherence therapy for medication non-compliant patients with hypertension: A randomized controlled trial. *Journal of Human Hypertension*, 26(2), 117-126.
- American Heart Association (2015). High blood pressure resources for professionals. Retrieved from: http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/HighBloodPressureToolsResources/High-Blood-Pressure-Resources-For-Professionals_UCM_461722_Article.jsp
- Arries, E., & Maposa, S. (2013). Cardiovascular risk factors among prisoners. *Journal of Forensic Nursing*, 9(1), 52-64. Doi: 10.1097/JFN.0b013e31827a59ef
- Bailey, S., Oramasionwu, C., & Wolf, M. (2013). Rethinking adherence: A health literacy-informed model of medication self-management. *Journal of Health Communication*, 18(sup1), 20-30.
- Binswanger, A., Kruegar, P., & Steiner, J. (2011). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *Journal of Epidemiology in Community Health*, 63, 912-919.
- California Social Work Education Center (CalSWEC) (2015). Facilitator's guide implementation toolkit: intervention and organizational readiness. Retrieved from (<http://calswec.berkeley.edu/toolkits/implementation-toolkits/how-build-implementation-toolkit-start-finish>).
- California Social Work Education Center (CalSWEC) (2015). Factsheet. Retrieved from: <http://calswec.berkeley.edu/sites/default/files/uploads/pdf/CalSWEC/calswec-factsheet.pdf>
- Coleman, K., Austin, B., Brach, C., & Wagner, E. (2009). Evidence on the chronic care model in the new millennium. *Health Affairs*(28), 75-85.
- Dumont, D., Allen, S., Brockmann, B., Alexander, N., & Rich, J. (2013). Incarceration, community health, and racial disparities. *Journal of Health Care for the Poor and Underserved*, 24(1), 78-88. Doi:10.1353/hpu.2013.000
- Edelman, D., McDuffie, J., Oddone, E., Gierisch, J., Williams Jr, J., Nagi, A., & Wing, L. (2012). Shared medical appointments for chronic medical conditions: A systematic review.

- Edelman, D., Fredrickson, S., Melnyk, S., Coffman, C., Jeffreys, A., Datta, S., . . . Stewart, H. (2010). Medical clinics versus usual care for patients with both diabetes and hypertension: a randomized trial. *Annals of Internal Medicine*, 152(11), 689-696.
- Egan, B., Li, J., Huchinson, F., & Ferdinand, K. (2014). Hypertension in the United States 1999-2012; Progress toward Healthy People 202 goals. *Circulation*, CIRCULATIONAHA-114.
- Egger, G., Binns, A., Cole, M., Ewald, D., Davies, L., Meldrum, H.,...Noffsinger, E. (2014). Shared medical appointments: an adjunct for chronic disease management in Australia? *Australian Family Physician*, 43(3), 151-154.
- Epstein, D., Sherwood, A., Smith, P., Craighead, L., Caccia, C., Lin, P.,...& Blumenthal, J. (2012). Determinants and consequences of adherence to the dietary approaches to stop hypertension diet in african-american and white adults with high blood pressure results from the ENCORE trial. *Journal of the Academy of Nutrition & Dietetics*, 112(11), 1763-1773.
- Flynn, S., Ameling, J., Hill-Briggs, F., Wolff, J., Bone, L., Levine, D...& Boulware, L. (2013). Facilitators and barriers to hypertension self-management in urban African-Americans: Perspectives of patients and family members. *Patient preference and adherence*, 7, 741-749.
- Frensenius Medical Care (2015). *Lower sodium fast food options*. Retrieved from : <http://www.pennockhealth.com/Brochures/Lowersodium%20Fast%Food%20Options.pdf>
- Gaston County Government (2015, April 4). Sheriff's Office: Detention. Retrieved from: <http://www.gastongov.com/departments/sheriff/detention>
- Goldstein, E., Warner-Robbins, C., McLean, C., Macatula, L., & Conlin, R. (2009). A peer-driven mentoring case management community reentry model: An application for jails and prisons. *Family & Community Health*, 32(4), 309-313.
- Hayes, J., Leischow, S., Lawrence, D., & Lee, T. (2010). Adherence to treatment for tobacco dependence: Association with smoking abstinence and predictors of adherence. *Nicotine & Tobacco Research*, ntq047.
- Hicken, M., Lee, H., Morenoff, J., House, J., & Williams, D. (2014). Racial/ethnic disparities in hypertension prevalence: Reconsidering the role of chronic stress. *American Journal of Public Health*, 104(1), 117-123.
- Hill, M., Houston, N., & DeGuest, S. (2011). Adherence and persistence with taking medication to control high blood pressure. *Journal of the American Society of Hypertension*, 5(1), 56-63.

- James, P., Oparil, S., Carter, B., Cushman, W., Dennison-Himmelfarb, C., Handler, J., ... & Ortiz, E. (2014). 2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). *JAMA*, 311(5), 507-520.
- Kinner, S. & Wang, E. (2014). The case for improving the health of ex-prisoners. *American Journal of Public Health*, 104(8), 1352-1355.
- Kirsh, S., Watts, S., Pascuzzi, K., O'Day, M. E., Davison, D., Strauss, G., ... Aron, D. C. (2007). Shared medical appointments based on the chronic care model: a quality improvement project to address the challenges of patients with diabetes with high cardiovascular risk. *Quality & Safety in Health Care*, 16, 349-353. doi: 10.1136/qshc.2006.019158
- US Veterans Administration (2008). VA shared medical appointments for patients with diabetes: maximizing patient and provider expertise to strengthen care management. Retrieved from: <http://www.queri.research.va.gov/tools/diabetes/shared-medappt.pdf>
- Madson, M., Loignon, A., and Lane, C. (2009). Training in motivational interviewing: a systematic review. *Journal of Substance Abuse Treatment*, 36, 101-109. Doi: 10.1016/j.jsat.2008.05.005
- Marks, J. & Turner, N. (2014). The critical link between health care and jails. *Health Affairs*, 33(3), 443-447. Doi: 10.1377/hlthaff.2013.1350
- Marshall, I., Wolfe, C., & McKevitt, C. (2012). Lay perspectives on hypertension and drug adherence: Systematic review of quantitative research. *BMJ: British Medical Journal*, 345.
- Matulich, B. (2013). Introduction to motivational interviewing. Retrieved from: <http://www.youtube.com/watch?v=s3MCJZ7OGRk>.
- McDonalds (2015). *Simple steps to save on sodium*. Retrieved from: http://www.mcdonalds.com/content/dam/McDonalds/Documents/McDonalds_SimpleStepsToSaveOnSodium.pdf
- National Commission on Correctional Health Care (2014). *Standards for Health Services in Jails*. Chicago, Illinois.
- Rose, L., Sawyer, A., & Everett, A. (2014). Cardiovascular health literacy and treatment adherence in persons with serious mental illness. *Issues in Mental Health Nursing*, 35(2), 88-99.
- Sifunda, S., Reddy, P., Braithwaite, R., Stephens, T., Bhengu, S., Ruiter, R., & van den Borne, B. (2008). The effectiveness of a peer-led HIV/AIDS and STI health

- education intervention for prison inmates in South Africa. *Health Education & Behavior*, 35(4), 494-508.
- Stein, K. (2011). The group appointment trend gains traction: how dietetics fits into a new model of health care delivery. *Journal of the American Dietetic Association*, 340-353.
- St. Lawrence, J., Eldridge, G., Shelby, M., Little, C., Brasfield, T., & O'Bannon III, R. (1997). HIV risk reduction for incarcerated women: A comparison of brief interventions based on two theoretical models. *Journal of Consulting and Clinical Psychology*, 65(3), 504.
- The Cecil G. Sheps Center for Health Service Research (2013). Health literacy universal precautions toolkit for cardiology, Ver. 7. 2013. Retrieved from: <http://www.shepscenter.unc.edu/wp-content/uploads/2013/05/Health-Literacy-Toolkit-Cardiology.pdf>
- Thompson, C., Meeuwisse, I., Dahlke, R., & Drummond, N. (2014). Group medical visits in primary care for patients with diabetes and low socioeconomic status: users' perspectives and lessons for practitioners. *Canadian Journal of Diabetes*, 38, 198-204. doi: 10.1016/j.cjcd.2014.03.012
- Travis, J., Western, B., & Redburn, S. (2014). The growth of incarceration in the United States: Exploring causes and consequences.
- Zack, B., Smith, C., Andrews, M. C., & May, J. P. (2013). Peer health education in Haiti's National Penitentiary the "health trough walls" experience. *Journal of Correctional Health*, 19(1), 65-68.