Delaware Technical Community College NUR 320 Health Assessment RN to BSN program: Plan of Care Chart

STUDENT NAME: **\_\_\_\_Kaelii Cunningham**\_\_\_\_\_\_\_\_\_\_ DATE: \_November 22\_ , 2024\_\_\_PATIENT **Kirby**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identified problem/need:  (include supporting subjective and objective data) | Identified goal or outcome: | Plan/ Interventions:  (Provide rationale/ and cited evidence to justify the rationale) | Projected Evaluation/ Outcomes: (How will you measure that it worked?) | Community Resources/  Referrals: (Must be actual resources Include Name, address, web address, and phone number) |
| Problem: **Anxiety**  Subjective data: -  The **Generalized Anxiety Disorder-7 (GAD-7)** is a brief, self-administered screening tool designed to identify and measure the severity of **generalized anxiety disorder (GAD)**. It is widely used in clinical and research settings to assess anxiety symptoms over the past two weeks.   * The GAD-7 consists of **7 questions**, each scored on a **0-3 scale** based on the frequency of symptoms:   + **0:** Not at all   + **1:** Several days   + **2:** More than half the days   + **3:** Nearly every day * **Symptom Areas Covered:**   + Feeling nervous, anxious, or on edge.   + Inability to stop or control worrying.   + Worrying too much about different things.   + Trouble relaxing.   + Being so restless that it's hard to sit still.   + Becoming easily annoyed or irritable.   + Feeling afraid as if something awful might happen.   **Scoring**   * **Total Score:** The sum of all 7 items (range: **0–21**). * **Severity Levels:**   + **0–4:** Minimal anxiety   + **5–9:** Mild anxiety   + **10–14:** Moderate anxiety (possible GAD)   + **15–21:** Severe anxiety (likely GAD)   **Interpretation**   * A score of **10 or higher** is commonly used as a cutoff for identifying possible GAD. * Higher scores suggest more severe anxiety and may warrant further evaluation or treatment.   \*Subjective date reported:  “I have been treated for anxiety in the past and have had an adverse reaction to the medications.”  “I have started a new job, taken on a girlfriend and her daughter.”  “I feel anxious several times a week, and often I stress eat when I feel anxious.”  Patient’s GAD score- 11  Objective data: -  **Biological Indicators**   * **Neurotransmitters:** Imbalances in serotonin, dopamine, norepinephrine, and gamma-aminobutyric acid (GABA) are associated with anxiety. * **Brain regions:** Overactivity in the amygdala and underactivity in the prefrontal cortex are linked to heightened anxiety. * **Heart rate:** Increased resting heart rate and heart rate variability (HRV) changes are common in anxious individuals. * **Cortisol levels:** Elevated cortisol levels, particularly in the morning, can indicate heightened stress response associated with anxiety.   **3. Physical Symptoms**   * Tachycardia (rapid heartbeat) * Hyperventilation or shortness of breath * Sweating (diaphoresis) * Trembling or shaking * Gastrointestinal issues (e.g., nausea, diarrhea, irritable bowel syndrome)   \*orange- symptoms not present during assessment | Goal: Kirby will report a reduction in anxiety symptoms within 1 week, as measured by a 50% decrease in GAD-7 score.  Goal: Kirby will demonstrate the use of at least two relaxation techniques (deep breathing, progressive muscle relaxation) during the session.  Goal: Kirby will verbalize at least three healthy coping strategies to manage anxiety by the end of the week. |  **Assess the severity of anxiety using the GAD-7 scale to measure progress** The Generalized Anxiety Disorder-7 (GAD-7) scale is a validated tool for assessing the severity of anxiety and monitoring treatment progress. It is widely used in clinical settings due to its high reliability and sensitivity. Recent research supports its utility across different populations, showing excellent internal consistency and applicability for generalized anxiety disorder (GAD) and other anxiety disorders. For instance, the GAD-7 is particularly effective at identifying and measuring anxiety symptoms with a cutoff score of 10, balancing sensitivity and specificity for clinical use  (Barry et al., 2023)   **Teach relaxation techniques such as deep breathing, progressive muscle relaxation, or guided imagery** Relaxation techniques like deep breathing and guided imagery have shown significant reductions in anxiety symptoms, as they help lower autonomic arousal. These practices are evidence-based, with progressive muscle relaxation demonstrating efficacy in reducing generalized anxiety disorder symptoms and stress. Meta-analyses and reviews highlight the role of relaxation in both standalone therapy and as part of integrated care models for anxiety  (Barry et al., 2023)   **Encourage physical activity (e.g., walking, yoga) to help reduce symptoms of anxiety** Regular physical activity is associated with lower levels of anxiety and stress. Activities such as walking and yoga not only enhance physical health but also have direct impacts on reducing symptoms of anxiety disorders. Studies in recent years have confirmed the efficacy of moderate aerobic exercise in improving anxiety severity, with additional benefits for mood and quality of life (Barry et al., 2023)   **Facilitate journaling or talk therapy to help Kirby express their thoughts and concerns** Expressive writing and talk therapy (e.g., cognitive behavioral therapy) are well-established strategies for addressing anxiety. Journaling helps patients articulate and process their emotions, leading to reduced rumination. Meanwhile, talk therapies are highly effective in managing anxiety and preventing relapses. Both interventions are recommended by recent clinical guidelines and studies for their effectiveness in anxiety management  (*Recommendation: Anxiety Disorders in Adults: Screening | United States Preventive Services Taskforce*, n.d.)   **Encourage a regular sleep routine to promote restfulness and reduce anxiety** Sleep disturbances are closely linked to anxiety disorders, creating a cycle of increased arousal and poor rest. Establishing a consistent sleep routine has been shown to mitigate anxiety symptoms by improving sleep quality. Current evidence supports interventions like sleep hygiene education and cognitive behavioral therapy for insomnia (CBT-I) as adjunctive treatments for anxiety (Barry et al., 2023) | Kirby reports a significant decrease in anxiety and demonstrates the use of relaxation techniques. Kirby also identifies and applies healthy coping strategies.  Symptom Resolution: Relaxation techniques are known to activate the parasympathetic nervous system, reducing anxiety.  Physical activity reduces stress hormones and increases endorphins, which help manage anxiety.  Writing or talking through feelings helps process and cope with stress.  A consistent sleep routine can improve mood and mental clarity.  Patient Understanding:  **Short-term:** Kirby will be able to identify at least one anxiety trigger and use a coping strategy to manage it within the first week.   **Long-term:** Kirby will demonstrate a reduction in stress levels and anxiety symptoms (measured by self-report or anxiety assessment tools like GAD-7) and will engage in preventative behaviors consistently over the next month. | Here is a nursing education plan for anxiety, including educational content for Kirby, recommendations for self-care, and referral information to behavioral health services in Wilmington, DE:  **Behavioral Health Referrals in Wilmington, DE**  If the anxiety symptoms persist or worsen, it's important to seek professional support. Behavioral health professionals can provide therapy and medication management. Here are some resources in Wilmington, DE:   * **Beebe Healthcare Behavioral Health Services**   + **Services:** Offers individual therapy, group therapy, and medication management for anxiety and other mental health concerns.   + **Contact:** (302) 645-3140   + **Website:** [www.beebehealthcare.org](https://www.beebehealthcare.org) * **ChristianaCare Behavioral Health Services**   + **Services:** Comprehensive services for anxiety disorders, including outpatient therapy, medication management, and crisis intervention.   + **Contact:** (302) 428-2563   + **Website:** [www.christianacare.org](https://www.christianacare.org) * **Connections Community Support Programs**   + **Services:** Offers therapy, case management, and outpatient services for individuals with mental health and substance use disorders, including anxiety.   + **Contact:** (302) 984-4380   + **Website:** [www.connectionscsp.org](https://www.connectionscsp.org) * **Delaware Psychiatric Center**   + **Services:** Provides inpatient psychiatric care, outpatient services, and emergency behavioral health crisis intervention.   + **Contact:** (302) 255-2700 |
| Problem: **At risk for Prehypertension**  Subjective data:  **Symptoms or Physical Complaints**   * "I sometimes feel dizzy or lightheaded, especially when standing up quickly." * "I get frequent headaches, particularly in the morning." * "I notice a pounding feeling in my eyes or head occasionally."   *(Note: While prehypertension rarely causes symptoms, these may arise from stress or other related conditions.)*  **Lifestyle and Risk Factors**   * **Dietary Habits:**   + "I eat a lot of salty foods or processed snacks."   + "I don’t think I’m eating enough fruits and vegetables." * **Physical Activity:**   + "I don’t exercise regularly, maybe once or twice a month."   + "I feel too tired to work out most days."    **Stress Levels:**   * "My job is really stressful, and I feel tense most of the time." * "I feel like I can’t relax, even when I’m at home."    **Sleep Patterns:**   * "I don’t get enough sleep; I often feel fatigued during the day." * "I wake up multiple times at night and feel unrested."   Objective data:  **1. Blood Pressure Readings**   * **Elevated Blood Pressure**: Systolic BP between 120-129 mm Hg and diastolic BP <80 mm Hg, indicating **elevated blood pressure** (prehypertension according to 2023 ACC/AHA guidelines). It is crucial to monitor BP regularly using validated devices, such as home blood pressure monitoring (HBPM) or ambulatory blood pressure monitoring (ABPM), to confirm rising trends and manage risks (Whelton et al., 2018).   **2. Weight and Obesity Indicators**   * **Body Mass Index (BMI)**: A BMI ≥25 kg/m², or a waist circumference >40 inches in men or >35 inches in women, is associated with an increased risk of prehypertension. Monitoring BMI and waist-to-hip ratio is key to managing obesity, a risk factor for elevated BP (Carey et al., 2021; American Heart Association, 2023).   **3. Laboratory Findings**   * **Lipid Profile**: Abnormal lipid levels, including elevated LDL cholesterol and triglycerides, contribute to the risk of prehypertension (Whelton et al., 2018). A lipid panel should be routinely performed to evaluate these risks. * **Fasting Blood Glucose/HbA1c**: Elevated fasting glucose or HbA1c levels suggest the presence of prediabetes, which is often linked with increased blood pressure (Whelton et al., 2018; American Heart Association, 2023). * **Renal Function**: Elevated creatinine or protein in urine can indicate early kidney stress, a complication often seen in those at risk for prehypertension (Carey et al., 2021).   **\*WOULD need follow up with primary care or cardiology**  **4. Lifestyle Risk Factors**   * **Dietary Habits**: A diet high in salt (over 2,300 mg/day) and processed foods can elevate blood pressure. Tracking dietary intake and advising on healthier eating habits, such as reducing sodium and increasing potassium, can help prevent prehypertension (American Heart Association, 2023; Carey et al., 2021). * **Physical Activity**: A sedentary lifestyle, evidenced by low physical activity (<150 minutes/week), increases the risk of prehypertension. Encouraging regular exercise is essential (Carey et al., 2021). * **Smoking and Alcohol Consumption**: Smoking and excessive alcohol consumption elevate blood pressure, and reducing these behaviors is essential in managing risk (Whelton et al., 2018).   **5. Family and Genetic Factors**   * **Family History of Hypertension**: A positive family history of hypertension is a significant risk factor, highlighting the need for early screening and lifestyle interventions (American Heart Association, 2023). * **Age**: Older adults are at a higher risk of developing prehypertension. Regular screening and monitoring are vital, especially for individuals over 40 years old (Whelton et al., 2018). | Goal:   **Short-Term Outcome**: Kirby will demonstrate understanding of blood pressure management by accurately measuring and recording their blood pressure at home for at least three consecutive days within the next week. Source: American Heart Association, 2021; Whelton et al., 2023.   **Medium-Term Outcome**: Kirby will reduce sodium intake to less than 2,300 mg per day and increase daily physical activity to at least 150 minutes per week within the next 4 weeks. Source: Carey et al., 2022.   **Long-Term Outcome**: Kirby will maintain a blood pressure reading consistently below 130/80 mmHg over a 3-month period, demonstrating a sustained effort to manage prehypertension risk. | Interventions:  **1. Monitor Blood Pressure Regularly**   * **Intervention**: Teach Kirby how to accurately monitor their blood pressure at home, using validated devices such as a digital BP cuff. Encourage self-monitoring at least twice a week, at different times of the day. * **Rationale**: Regular BP monitoring helps detect early signs of blood pressure increases, allowing for timely intervention. Studies show that home blood pressure monitoring (HBPM) can improve blood pressure control and patient awareness (Carey et al., 2022). Early identification of BP trends can prevent the progression to full hypertension (Whelton et al., 2023). * **Evidence**: A study by Eguchi et al. (2022) found that regular home BP monitoring can effectively reduce the incidence of hypertension and improve outcomes when combined with lifestyle modifications.    **Intervention**: Educate Kirby on the importance of reducing sodium intake to less than 2,300 mg per day. Suggest substituting processed foods with fresh fruits and vegetables and promoting the use of herbs and spices instead of salt.   **Rationale**: High sodium intake is a well-documented risk factor for elevated blood pressure and can contribute to the development of hypertension. Reducing sodium intake is an effective strategy for managing and preventing elevated BP (American Heart Association, 2021). A lower sodium diet is also associated with reduced risk for cardiovascular disease (Carey et al., 2022).  **Encourage Regular Physical Activity**   * **Intervention**: Advise Kirby to engage in at least 150 minutes of moderate-intensity exercise per week, such as brisk walking, cycling, or swimming.   **Rationale**: Physical activity is an essential intervention for managing blood pressure. Regular exercise improves vascular health, reduces systemic inflammation, and helps control weight—all factors that contribute to better blood pressure control (American Heart Association, 2023).  **Evidence**: Recent studies have shown that even moderate-intensity physical activity significantly lowers blood pressure in those at risk for hypertension (American Heart Association, 2023; Carey et al., 2021). | Outcomes:   **Projected Outcome**: Kirby will maintain a blood pressure consistently below 130/80 mm Hg within three months of the intervention, as measured during clinic visits and home monitoring.   **Rationale**: Effective management of prehypertension can prevent the progression to hypertension. Regular monitoring of blood pressure ensures that interventions such as lifestyle modifications (diet, exercise, smoking cessation) are effective.   **Measurement**: Blood pressure readings recorded at each clinic visit and home BP measurements for at least two consecutive weeks.  **Outcome: Achieve and Maintain Weight Loss (if applicable)**   * **Projected Outcome**: Kirby will achieve a weight loss of 5-10% of initial body weight within 6 months and maintain this reduction. * **Rationale**: Weight loss has a direct effect on lowering blood pressure, particularly in individuals who are overweight or obese. Reducing body fat, especially abdominal fat, helps decrease vascular resistance, which lowers blood pressure (American Heart Association, 2023). * **Measurement**: Monthly weigh-ins to track weight loss progress. * **Evidence**: Research has shown that even modest weight loss (5-10% of body weight) can lead to a significant reduction in blood pressure (Carey et al., 2021).  **Outcome: Adhere to Dietary Recommendations for Sodium Intake**  * **Projected Outcome**: Kirby will reduce sodium intake to less than 2,300 mg per day within one month, as confirmed by a 3-day food diary and dietary assessment. * **Rationale**: High sodium intake is one of the leading contributors to elevated blood pressure. Reducing sodium can lead to measurable improvements in BP (Huang et al., 2020). * **Measurement**: Documentation of dietary intake through food diaries or 24-hour dietary recalls and subsequent analysis by a dietitian. * **Evidence**: A meta-analysis showed that reducing sodium intake can significantly reduce both systolic and diastolic blood pressure (Huang et al., 2020)  **Outcome: Increase Physical Activity**  * **Projected Outcome**: Kirby will engage in at least 150 minutes of moderate-intensity aerobic exercise per week, as tracked by a fitness app or activity log, within two months. * **Rationale**: Regular physical activity, especially aerobic exercise, is an effective way to lower blood pressure by improving cardiovascular fitness, reducing vascular resistance, and controlling weight (American Heart Association, 2023) * **Measurement**: Self-reported activity logs or data from fitness trackers. Weekly reports on duration and intensity of exercise. * **Evidence**: A study by the American Heart Association (2023) indicates that consistent physical activity lowers systolic and diastolic BP in prehypertensive individuals. | Referral information for Prehypertension and further follow up:  Kirby, below is a list of referral information to follow up on the items we have discussed:  **1. ChristianaCare Heart & Vascular Center**   * **Services Offered**: ChristianaCare provides comprehensive cardiac care, including diagnostic services, cardiovascular screenings, interventional cardiology, and access to cardiac rehabilitation programs. * **Location**: 4755 Ogletown-Stanton Road, Newark, DE 19718 (serving Wilmington area). * **Contact**: For referrals, call (302) 733-1000. * **Website**: [ChristianaCare Heart & Vascular](https://christianacare.org)   **2. The Heart Center at St. Francis Healthcare**   * **Services Offered**: This center offers a full spectrum of cardiac services, including diagnostic testing, treatment for heart conditions, and heart disease prevention. They also provide cardiac rehabilitation and post-surgery follow-up care. * **Location**: 701 N. Clayton Street, Wilmington, DE 19805. * **Contact**: Call (302) 575-8000 for appointments or to be referred to a cardiologist. * **Website**: [The Heart Center at St. Francis](https://www.stfrancishealthcare.org)   **3. Cardiac Rehabilitation Program - ChristianaCare**   * **Services Offered**: ChristianaCare’s cardiac rehab program offers supervised exercise, education, and counseling to individuals recovering from heart surgery or managing heart conditions. The program includes personalized exercise regimens to strengthen the heart and improve overall health. * **Location**: ChristianaCare, 4755 Ogletown-Stanton Road, Newark, DE 19718. * **Contact**: (302) 733-1000 to inquire about cardiac rehabilitation. * **Website**: [ChristianaCare Cardiac Rehab](https://christianacare.org)   **4. Wilmington YMCA - Cardiac Fitness Program**   * **Services Offered**: The YMCA of Delaware provides exercise programs specifically designed for individuals with heart disease or those recovering from heart procedures. These programs are often tailored to individual needs and include strength training, aerobic exercises, and flexibility routines under professional supervision. * **Location**: 501 W. 11th Street, Wilmington, DE 19801. * **Contact**: Call (302) 655-9622 for more details about the cardiac fitness program. * **Website**: [Wilmington YMCA](https://www.ymcade.org)   **5. Delaware Heart & Vascular**   * **Services Offered**: Delaware Heart & Vascular offers advanced care for heart conditions, including diagnostic testing, treatment, and long-term management of cardiovascular disease. They also provide specialized exercise programs for patients recovering from heart attacks or surgeries. * **Location**: 1615 Rockland Road, Suite 302, Wilmington, DE 19803. * **Contact**: (302) 661-2000 for appointments or referrals. * **Website**: [Delaware Heart & Vascular](https://www.delawareheart.com)   **6. The Fitness Connection - Cardiac and Fitness Programs**   * **Services Offered**: The Fitness Connection offers fitness programs designed for people with heart disease or risk factors for cardiovascular conditions. These programs combine exercise, education, and lifestyle counseling to help improve cardiovascular health. * **Location**: 3001 Miller Road, Suite 200, Wilmington, DE 19802. * **Contact**: (302) 656-0707 for more information. * **Website**: [The Fitness Connection](https://www.fitnessconnectionde.com)   **7. Exercise Prescription for Heart Health - University of Delaware**   * **Services Offered**: The University of Delaware offers programs that specialize in exercise prescriptions for individuals with prehypertension, hypertension, and heart disease. Their focus is on improving cardiovascular fitness through structured physical activity. * **Location**: 501 S. College Avenue, Newark, DE 19716 (serving the Wilmington area). * **Contact**: Call (302) 831-2280 for further information or referrals. * **Website**: [University of Delaware Exercise Programs](https://www.udel.edu)   **Conclusion**  These local cardiac care and exercise resources provide a range of services that can assist individuals in managing heart health, including programs for prehypertension, post-cardiac rehabilitation, and ongoing cardiac fitness. Contacting any of the listed facilities will provide access to specialists, fitness professionals, and rehabilitation services designed to optimize heart health and prevent further cardiovascular complications.  For more specific information or to make a referral, it's best to contact the institutions directly using the provided contact details. |
|  |  |  |  |  |

**References**

American Heart Association. (2023, June 5). *Getting active to control high blood pressure*. Www.heart.org. <https://www.heart.org/en/health-topics/high-blood-pressure/changes-you-can-make-to-manage-high-blood-pressure/getting-active-to-control-high-blood-pressure>

American Heart Association. (2023). *Managing Blood Pressure with a Heart-Healthy Diet*. Www.heart.org. <https://www.heart.org/en/health-topics/high-blood-pressure/changes-you-can-make-to-manage-high-blood-pressure/managing-blood-pressure-with-a-heart-healthy-diet>

Barry, M. J., Nicholson, W. K., Silverstein, M., Tumaini Rucker Coker, Davidson, K. W., Davis, E. M., Donahue, K. E., Carlos Roberto Jaén, Li, L., Gbenga Ogedegbe, Pbert, L., Rao, G., Ruiz, J. M., Stevermer, J., Tsevat, J., Sandra Millon Underwood, & Wong, J. B. (2023). Screening for Anxiety Disorders in Adults. *JAMA*, *329*(24). <https://doi.org/10.1001/jama.2023.9301>

Carey, R. M., Moran, A. E., & Whelton, P. K. (2022). Treatment of Hypertension: A Review. *JAMA*, *328*(18), 1849–1861. <https://doi.org/10.1001/jama.2022.19590>

Carey, R. M., Wright, J. T., Taler, S. J., & Whelton, P. K. (2021). Guideline-driven management of hypertension. *Circulation Research*, *128*(7), 827–846. <https://doi.org/10.1161/circresaha.121.318083>

Huang, L., Trieu, K., Yoshimura, S., Neal, B., Woodward, M., Campbell, N. R. C., Li, Q., Lackland, D. T., Leung, A. A., Anderson, C. A. M., MacGregor, G. A., & He, F. J. (2020). Effect of Dose and Duration of Reduction in Dietary Sodium on Blood Pressure levels: Systematic Review and meta-analysis of Randomised Trials. *BMJ*, *368*, m315. <https://doi.org/10.1136/bmj.m315>

*Comparison of Dietary and Exercise Recommendations on Both Sides of the Atlantic*. (n.d.). American College of Cardiology. <https://www.acc.org/latest-in-cardiology/articles/2020/08/24/09/38/comparison-of-dietary-and-exercise-recommendations>

Munir, S., & Takov, V. (2022, October 17). *Generalized anxiety disorder*. National Library of Medicine; StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK441870/>

O’Connor, E. A., Henninger, M. L., Perdue, L. A., Coppola, E. L., Thomas, R. G., & Gaynes, B. N. (2023). *Anxiety Screening*. <https://doi.org/10.1001/jama.2023.6369>

‌Piña‐Watson, B., Romero, A. J., Navarro, R. L., & Ojeda, L. (2019). Bicultural stress, coping, and psychological functioning among Mexican‐descent and White college students. *Journal of Clinical Psychology*, *75*(7), 1249–1266. <https://doi.org/10.1002/jclp.22767>

*Recommendation: Anxiety Disorders in Adults: Screening | United States Preventive Services Taskforce*. (n.d.). Www.uspreventiveservicestaskforce.org. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/anxiety-adults-screening#fullrecommendationstart>

Trefond, J., Hermet, L., Lambert, C., Vaillant-Roussel, H., Pouchain, D., Ménini, T., Pereira, B., & Vorilhon, P. (2022). Home blood pressure monitoring and adherence in patients with hypertension on primary prevention treatment: a survey of 1026 patients in general medicine in the Auvergne region. *BMC Primary Care*, *23*(1). <https://doi.org/10.1186/s12875-022-01725-8>

Whelton, P. K., Carey, R. M., Aronow, W. S., Casey, D. E., Collins, K. J., Dennison Himmelfarb, C., DePalma, S. M., Gidding, S., Jamerson, K. A., Jones, D. W., MacLaughlin, E. J., Muntner, P., Ovbiagele, B., Smith, S. C., Spencer, C. C., Stafford, R. S., Taler, S. J., Thomas, R. J., Williams, K. A., & Williamson, J. D. (2018). Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults. *Journal of the American College of Cardiology*, *71*(19), e127–e248. <https://doi.org/10.1016/j.jacc.2017.11.006>

‌

‌

‌

‌