Implementing Health Behavior Change Consultations for Adult Patients in a Free Student-Led Interprofessional Community Clinic

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Abstract

In 2018, the behavioral health clinic within the Interprofessional Community Clinic, a student-led free clinic in Lake County, Illinois, expanded its mental health services by implementing health behavior change consultations (HBCCs) during primary care appointments. HBCCs are conducted by psychology graduate students and are designed to help patients implement behavior and lifestyle changes to improve overall health. Consults are requested by the medical team to assist patients with developing strategies for reasons such as weight management, increasing physical activity, and medication adherence. An HBCC consultant discusses current lifestyle behaviors, identifies motivations and barriers to making change, and assists the patient with goal-setting. Follow-up with patients often occurs during their subsequent medical appointments to monitor progress, reassess goals, and troubleshoot barriers. Since 2018, the utilization of HBCCs increased to an average of one out of six patients receiving an HBCC per clinic day. This descriptive report describes the implementation of HBCCs, a patient case example of an HBCC, and strategies to help student-led clinics implement similar services. Integrating behavior change appointments in student-led clinics through the use of HBCC can help reduce some of the burden on primary care providers and help patients better manage their health conditions.

Background

Primary care providers increasingly focus on disease prevention and health promotion to reduce healthcare costs and enhance patients' lives. About 40% of deaths in the United States are a result of modifiable lifestyle behaviors, including physical inactivity, nicotine use, or medication non-adherence.² Healthcare professionals help patients adopt healthy habits that may prevent disease or disease progression. Clinical health psychologists and other behavioral health providers are qualified to help patients identify maladaptive behaviors, enhance motivation, create goals, and address barriers to change in areas including diet, activity, sleep, substance use, and medication adherence since their training involves the intersection of health behavior change, mental health, and physical health. They may use techniques from cognitive behavioral therapy, acceptance and commitment therapy, motivational interviewing, mindfulness, or behavioral activation to help patients achieve their goals. Integrating behavioral health into primary care addresses patients' whole health needs and is recommended by the American College of Physicians.³

Student-led clinics provide free or low-cost primary care services to under- or uninsured individuals. Integrating behavioral health into student-led clinics and offering health behavior change consultations (HBCCs)⁴ may be particularly important because uninsured patients are at higher risk of engaging in maladaptive health behaviors⁵ and developing chronic health conditions.⁶ Though data does not currently exist on how many student-led clinics include behavioral health or other services (e.g., dietetics) to

facilitate health behavior change, 43% of primary care practices in the United States had co-located behavioral health providers as of 2018.⁷ This descriptive report aims to serve as a model for how to incorporate HBCCs in student-led clinics by describing their development, structure, and implementation while highlighting a patient case.

The Interprofessional Community Clinic and HBCCs

The Interprofessional Community Clinic (ICC) is a student-led free clinic affiliated with Rosalind Franklin University of Medicine and Science (RFUMS). It is funded through grants and donations and includes four clinics; primary care medicine, physical therapy, podiatry, and behavioral health, that meet one evening per week. Approximately 70% of the patient population identifies as Latino/a/x, and 67% of patients prefer speaking Spanish during encounters.8 Spanish interpreters provide services as needed. Some patients work non-traditional hours, have limited financial resources, or experience food insecurity, creating barriers to healthy behaviors. The behavioral health clinic has been co-located in the ICC since its inception in 2013. Five to seven clinical psychology doctoral and clinical counseling master's students provide outpatient psychotherapy and conduct consultations for patients with elevated scores on depression and anxiety screeners. Behavioral health attendings are integrated into the primary care clinic and attend the clinic's patient presentations to facilitate referrals to behavioral health. In Spring 2018, the behavioral health clinic formally expanded its services to include HBCCs, based on existing models of integrated behavioral health services in primary care clinics. HBCCs were designed to help patients identify barriers to lifestyle and/or behavioral changes, create goals, and implement change that targets physical and/or mental health. HBCCs are commonly requested to assist with weight management, establish healthier eating habits, increase physical activity, or improve medication adherence.

Structure of HBCCs

Typically, an HBCC referral comes from a primary care interprofessional team, consisting of three to five students across disciplines (e.g., medicine, pharmacy, psychology, podiatry, physical therapy). After a patient is seen in primary care, the interprofessional team presents the case to a huddle of attendings, including psychology, medicine, and pharmacy. A member of the team or an attending may indicate that the patient may benefit from a HBCC. The attending physician, behavioral health attending, or interprofessional team then notifies the behavioral health clinic that a consult is needed. A behavioral health student works with the interprofessional team to identify an appropriate time during the primary care appointment to conduct the HBCC. The behavioral health student is supervised by a behavioral health attending to ensure they address concerns and create an appropriate treatment plan. Up to five patients are seen in primary care during each clinic, and all can be referred for an HBCC.

An HBCC typically takes 20-30 minutes and includes shared decision-making in selecting behaviors to address, identification of motivations and barriers to change, and goal-setting. Cultural factors (e.g., culturally specific foods or customs) and social determinants of health (e.g., place of residence) that may impact the patient's health behaviors are also discussed. Behavioral health students consult with other disciplines (e.g., medicine, pharmacy, physical therapy) to use their expertise to support patients' behavior change and ensure that providers can reinforce goals. Goal-setting follows the specific, measurable, action-oriented, realistic, and timely (SMART) goal format.9 Collaboratively created SMART goals help identify steps for action and are associated with health behavior changes.9 During a HBCC, two SMART goals are created and recorded in the patient's preferred language using the "Goals Sheet" (Appendix A), which serves as a resource for patients and a guide for clinicians during follow-up visits. Follow-ups occur in conjunction with patients' next primary care appointments, usually one to three months later, to assess progress, goals, and barriers. Scheduling HBCCs with primary care appointments can

decrease attrition and increase convenience for patients. Patients receive three follow-ups, but additional follow-ups can be requested. Appendix B contains a flow chart of HBCCs, Appendix C includes the HBCC protocol, and Appendix D demonstrates a sample note. On average, one out of six patients seen in the ICC received an HBCC.

Case Example: Mrs. M

The case of Mrs. M*, a 58-year-old female, illustrates how HBCCs can be integrated into primary care appointments. Mrs. M presented to the ICC for routine care and was diagnosed with type II diabetes mellitus with a hemoglobin Alc (HbAlc) of 7.1%. Her blood pressure was 152/92 mmHg, and she weighed 155lbs (BMI = 27.5 kg/m²). She screened negative for anxiety and depression. Her primary language was Spanish, so an interpreter was used for all encounters.

The medical team discussed Mrs. M's options of starting pharmacological treatment for type II diabetes and offered her an HBCC, as she was initially hesitant about taking medications. A behavioral health student met with Mrs. M during her primary care appointment and assessed her understanding of diabetes, current diet and exercise behaviors, and motivations and barriers to making changes. She exercised three times per week, (e.g., walking, elliptical) and typically ate breakfast and lunch with occasional snacks, but often skipped dinner. The behavioral health student and Mrs. M collaboratively created two SMART goals: 1) eat three meals per day, and 2) add one additional day of walking weekly. The interpreter translated her Goals Sheet into Spanish and scheduled follow-up appointments with Mrs.

During her second HBCC, Mrs. M was only able to exercise two times per week, despite recently joining a gym. She endorsed difficulties managing portion sizes, consuming vegetables, and establishing regular mealtimes. The behavioral health student and Mrs. M discussed strategies to distribute portions over three meals and consume more vegetables, explored barriers to regular mealtimes, and worked collaboratively to

troubleshoot challenges with regular physical activity. Mrs. M's adjusted SMART goals included 1) exercising four days per week, and 2) eating one serving of vegetables daily.

Six months after her initial appointment, Mrs. M attended her third follow-up. She reduced her portion sizes and reported exercising four times per week. She noted that fatigue was a barrier to regular exercise, and her SMART goals were adjusted accordingly. She presented with improvements in her HbAlc (6.8%), weight (5 lb. loss, BMI = 26.7 kg/m²), and blood pressure (142/78 mmHg). Despite the improvements, her medical team recommended that she initiate Metformin to manage her diabetes.

Mrs. M's case illustrates how a primary care patient can benefit from an HBCC when managing a new diagnosis like diabetes. While medications were utilized to manage her diabetes, she selected her own lifestyle changes with assistance from the behavioral health student, and her efforts towards making lifestyle changes benefited her long-term (e.g., lower HbA1c levels). Because a new diabetes diagnosis can be stressful, behavioral health students can provide also provide emotional support as individuals diagnosed with diabetes are at a higher risk of developing comorbid depression and anxiety symptoms. 10,11,12 If Mrs. M had developed those symptoms, behavioral health could have helped her learn skills to manage the distress accompanying her diabetes diagnosis.10

*The de-identified data used in the case of Mrs. M received a "Not-Human Subjects Research" determination by Rosalind Franklin University of Medicine and Science's IRB on August 12, 2020. Details about Mrs. M's identity and care were changed to protect her identity.

Cultural and Social Determinants of Health Considerations

Cultural factors, like culturally specific foods, language barriers, racism, mistrust in healthcare, non-western ideas of health, and multigenerational households that may impact engagement in health behavior change must be considered during HBCCs. For example, behavioral health students may discuss buying fewer conchas, or sweet Mexican breads, each week or discuss

alternatives to white rice through substitutions and recipe modifications in a culturally sensitive way. Social determinants of health may also impact a patient's ability to engage in health behavior change. Many patients at the ICC have limited financial resources or live in a food desert, making gym memberships or healthy foods less accessible. North Chicago, where ICC is located, was considered a food desert for the last twenty years until a full-service grocery store opened in Fall 2021.¹³ Thus, the behavioral health students compiled lists of free or reduced-cost resources in the community to help patients work towards their health goals. Appendix E includes a list of important resources for patients in student-led clinics.

Language also impacts HBCCs, as most patients at the ICC speak Spanish. Interpreters are often native Spanish speakers, may be students at RFUMS, and undergo training to provide interpretive services within a psychotherapy context to ensure that accurate information is conveyed between behavioral health students and patients. Although most Spanish-speaking interpreters at the ICC are of Latino/a/x descent and can serve as cultural liaisons to patients, certain ideas may be lost in translation in an HBCC. For example, the translation may be accurate, but the meaning may be misinterpreted. Additionally, the way behavioral health services are provided may differ based on language.14 Thus, behavioral health students may inquire about the interpreters' perspective of the HBCC and whether there was a disconnect with the patient due to problems with translation.

Strengths and Challenges

When implementing HBCCs, we had support from supervisors and great interest from psychology students. Existing collaborations between the clinics facilitated implementation of HBCCs. There were no costs associated with implementing HBCCs, as all providers were volunteers, and the patient resources were informational rather than tangible. The initial challenge was increasing the awareness and utility of HBCCs. We approached other disciplines involved with the ICC with our plans, spoke about our services to ICC student volunteers, added HBCCs to volunteer

orientation training presentations, and had psychology students available at training sessions to answer questions. Another challenge included ensuring our service fit within the current flow of clinic operations. We worked directly with the ICC's officer of operations to identify appropriate times for HBCCs, allowing us to meet with patients uninterrupted while maintaining the pace of the clinic. All challenges were addressed from an interdisciplinary perspective to ensure the maintenance and use of HBCCs.

The coronavirus disease-2019 pandemic posed challenges to implementing HBCCs since in-person visits were suspended in March 2020. While the behavioral health clinic quickly transitioned to providing telehealth services, other clinics did not begin telehealth services until June 2020. With the ICC shifting to telehealth, communication between attendings across disciplines was limited as they were no longer on site or meeting as a team to discuss patients, and behavioral health providers were no longer attending case presentations. Thus, HBCC requests slowed down significantly. For example, ten patients were seen for HBCCs in all of 2021, as opposed to one of every six ICC patients prior to the pandemic. With telehealth visits, two behavioral health students are available and prepared to answer HBCC requests. Behavioral health students are notified of requests through a secure chat and conduct initial appointments using telehealth. Follow-up appointments are scheduled in conjunction with medical appointments at least one month after the initial appointment, however, patients are oftentimes a no-show to virtual appointments or wish to discontinue care, given that patients have challenges maintaining privacy in their homes, which is necessary for therapy. Thus, coordinating interdisciplinary care via telehealth necessitates patience and enhanced communication across disciplines.

Incorporating HBCCs into Other Student-Led Clinics

If a clinic does not have HBCCs or behavioral health clinicians, there are several ways to still provide HBCCs. If the university affiliated with a student-led clinic has a psychology department, members of the clinic may ask the department **Journal of Student-Run Clinics** | Implementing Health Behavior Change Consultations for Adult Patients in a Free Student-Led Interprofessional Community Clinic

chair if they are interested in collaborating to provide behavioral health services. Because of the increase in integrated behavioral health services in primary care clinics³, psychology departments may be inclined to have students gain experience in a multidisciplinary clinic.

Student-led clinics may not have graduate-level psychology students available, however, they may have access to outpatient psychology clinics in the local community. Those student-led clinics may consider asking community clinics for behavioral health attendings to train and supervise student volunteers to conduct HBCCs. If training and supervising students is not possible, student-led clinics may ask behavioral health attendings to volunteer and provide HBCC services themselves.

Student-led clinics could collaborate with students or faculty from other healthcare professions, such as pharmacy, dietetics, or physical therapy to support patients in improving medication adherence, diet, or physical activity. The student-led clinic may even serve as a referral source for other healthcare professionals who could offer health behavior change support through a sliding scale to patients, further incentivizing their participation in the clinic.

Physicians and other healthcare professionals trained in motivational interviewing may be willing to facilitate HBCC services, which would enable medical students to receive training on facilitating health behavior change. In addition to providing direct patient contact, student-led clinics could use technology such as text messages or phone apps to remind patients of their goals and provide positive reinforcement between appointments.^{13,15,16} Finally, student-led clinics can compile important resources for patients including substance use programs and local food pantries (see Appendix E for more resources).

Conclusion

Long-term, consistent engagement in behavioral interventions improves health outcomes among low income and uninsured patients.² In the future, HBCCs could expand to include annual check-ins for all patients who received at least one HBCC to allow an opportunity for additional support or review of goals. Including

standard follow-ups for HBCC may further reinforce goals and allow space for discussing new barriers. HBCCs are becoming widely recognized as a part of primary care¹⁷, and further research should evaluate strategies to ease the implementation of HBCCs in new clinics. The development and use of HBCCs at the ICC at RFUMS serve as a model for other student-led clinics to engage patients and interdisciplinary providers in a collaborative discussion of lifestyle changes to promote overall health.

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References

- Elder JP, Ayala GX, Harris S. Theories and intervention approaches to health-behavior change in primary care. Am J Prev Med. 1999;17(4):275-284. LINK
- Hooker SA, Punjabi A, Justesen K, et al. Encouraging health behavior change: Eight evidence-based strategies. Fam Pract Manag. 2018;25(2):31-36. LINK
- Crowley RA, Kirschner N. The integration of care for mental health, substance abuse, and other behavioral health conditions into primary care: Executive summary of an American College of Physicians position paper. Ann Intern Med. 2015;163(4):298-299. LINK
- Swartz MK. The contributions of student-run free clinics.
 J Pediatr Health Care. 2012;26(6):397. LINK
- Ahn S, Lee J, Bartlett-Prescott J, Carson L, et al. Evaluation of a behavioral intervention with multiple components among low-income and uninsured adults with obesity and diabetes. Am J Health Promot. 2017;32(2):409-422.
- Will JC, Galuska DA, Ford ES, et al. Cigarette smoking and diabetes mellitus: Evidence of a positive association from a large prospective cohort study. Int J Epidemiol. 2001;30(3):540-546. LINK
- APA Services Inc. Board of Directors. Resolution on psychologists in integrated primary care and specialty health care settings. 2019. Available from: www.apaservices.org/about/resolution-integratedcare.pdf. LINK
- Chen M, Scott C, Siddiqi N, et al. Integration of 4 co-located services for an underserved population in a student-led pro bono clinic. Poster presented at Integrative Medicine for the Underserved; August 2019; Santa Clara, CA.

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- Martin S, Heo M, Jimenez CC, et al. Personalizing the dietary guidelines: use of a feedback report to help adolescent students plan health behaviors using a SMART goal approach. Child Adolesc Obes. 2019;2(1):47-62. LINK
- 10. Bickett A, Tapp H. Anxiety and diabetes: innovative approaches to management in primary care. Exp Biol and Med. 2016;241(15):1724-1731. LINK
- 11. Ducat L, Philipson LH, Anderson BJ. The mental health comorbidities of diabetes. JAMA. 2014;312(7):691-692. LINK
- 12. Naicker K, Johnson JA, Skogen JC, et al. Type 2 diabetes and comorbid symptoms of depression and anxiety: longitudinal associations with mortality risk. Diabetes Care. 2017;40(3):352-358. LINK
- 13. Borica S. Lake & McHenry County Scanner. North Chicago no longer considered 'food desert' as new grocery store opens [Internet]. SJB Business Solutions, Inc.; 2021 October [Accessed 2022 January 24]. Available from: https://www.lakemchenryscanner.com/2021/10/08/north -chicago-no-longer-considered-food-desert-as-newgrocery-store-opens/. LINK
- 14. Herbst RB, Margolis KL, Miller AM, et al. Lost in translation: identifying behavioral health disparities in pediatric primary care. J Pediatr Psychol. 2016;41(4): 481-491. LINK
- 15. Aguilera A, Muñoz RF. Text messaging as an adjunct to CBT in low-income populations: A usability and feasibility pilot study. Prof Psychol Res Pr. 2011;42(6):472-478. LINK
- 16. Marko-Holguin M, Cordel SL, Van Voorhees BW, et al. A two-way interactive text messaging application for lowincome patients with chronic medical conditions: design-thinking development approach. 2019;7(5):e11833. LINK
- 17. Bodenheimer T, Handley MA. Goal-setting for behavior change in primary care: An exploration and status report. Patient Educ Couns. 2009;76(2):174-180. LINK