

Cooking to a Healthier Lifestyle

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Planning

Health Problem

The Healthy Living Center (HLC) is a facility that aims to increase health awareness and education in Norfolk. They teach three different classes based on which chronic condition category a participant falls under. These health problems are diabetes or pre-diabetes, obesity, and hypertension. The health problem that the participant has will place them in a four-week class that is based around the specific health needs on how to manage it, pick better food options, how to read a label, and what a normal serving size looks like. The specific problem that we encountered for the HLC was disorganization, compiling data, and coming up with a more effective flow of the class.

Health Planning and Needs

Our health planning needs have changed over the last six months of working with the center and the community. When we first started, we wanted to implement more resources for the participants that would enhance their learning and help them grasp the information by teaching it in different ways. We originally wanted to do a few virtual reality videos on how to read a label and how-to grocery shop while picking out healthy items. We learned that the information we suggested to the staff would be helpful but there was not enough time for the participants to watch.

Instead, we reassessed and learned that the health planning needs of the HLC was not to add in more interventions but to instead step back and help organize, help with data entry, come up with a more time-effective paperwork tracking system, and re-work the way participants are contacted about the class and surveys were collected. We came up with these interventions

because we assessed the center was disorganized in some aspects, the participants could not take the surveys before class making them take up class time, and the cooking menu needed to be rearranged depending on what week it was.

Our priority intervention was about organization; we enhanced the effectiveness of the class and the environment was less chaotic leading to more structure. We were able to enhance the time we had at the center by setting up boxes for the next class with all the necessities. These items included things such as spices, oils, utensils, and recipes. This made it easier for the staff who had to set up for that class by already having all the necessary supplies in one space. We also changed the menu selection to fit better with the classroom and end-of-class work that was included on that day. We did this by switching the breakfast day for the last class in order to get all the paperwork settled, final group picture, and reviews handed out which also made fewer dishes and cleanup for the staff. We placed the cabbage day for the third class since there were not any other responsibilities necessary for that day and the chopping and cleaning up was a longer process. Overall, our planning needs were to enhance the time we had at the HLC for the participants and finding a better organizational route. We also wanted to include the first intervention we implemented in the summer which was the HgA1c testing that was conducted on the last night of the class.

Alternative Interventions

During our time at the HLC, we were able to identify a few additional interventions that can be implemented to enhance the program. Alternate interventions include pre- and post-survey updates, HgA1c education, class reminders, and participant follow-ups. After our assessment of the HLC pre- and post-survey, we found a few deficiencies that should be corrected. The updates should be made to address the current reading level, grammatical errors,

and inconsistencies throughout the survey. Although we have implemented HgA1c testing, we have not formally implemented HgA1c education. After surveying 67 of the participants, 88.4% answered that class reminders would be helpful. Implementing a text message or email reminder system would be beneficial. Longitudinal studies are helpful when monitoring health outcomes, a participant follow-up should be done at 3, 6, 9, and 12-month intervals to assess continued compliance with a plant-based diet. This could include an additional HgA1c check at the 3-month interval.

Intervention

Implementation

Over the summer, we implemented a secondary health screening at the HLC. As we had access to a Hemoglobin A1c machine, we offered this screening for all participants on their last day of class. We implemented this project by first being trained by faculty on how to operate the machine. This included a 15-minute training session after our lecture class. We then scheduled dates for when we would need the machine and informed the HLC that we would be able to provide this screening for participants.

Once at the HLC, we determined an appropriate location for the placement of the machine. We chose a spot that was not near any of the food preparation and that provided a small amount of privacy. During the final class, when participants participated in the HgA1c screening, they checked in, had their vital signs checked, and then they had their finger pricked for the Hg1Ac test. The test took 7 minutes to complete. When the test was over the machine printed a slip of paper with the result on it. This result was highlighted and the paper was given to the participants.

The second intervention that we implemented was the focus of our second semester at the HLC. As mentioned above, the goal of this intervention was to streamline the organization of the paperwork process during the first class in order to enhance the learning experience. We did this by identifying the parts of the first class that were not streamlined. The area we identified for the most improvement was the paperwork that participants need to fill out before class begins. Participants are asked to arrive 30 minutes early to complete the paperwork which includes a 48-hour food recall, a photo release consent, the consent to participate in the program, a COVID screening questionnaire, and in some cases a pre-survey that takes approximately 10 minutes to complete. In addition to the paperwork, participants need to have their vitals checked this includes a weight, blood pressure automatic check and manual recheck if abnormal, waist circumference and BMI. As all of this information was essential to capture for consented participation and baseline data for the program, we did not want to modify the data captured, but we wanted to make the process more efficient.

Starting in September we implemented a telehealth intervention before participants came for their first class. This was completed by obtaining the class roster, assigning a student to call each participant and then calling each participant five to seven days before their first class. The phone calls took 10-15 minutes to complete. The intervention included checking to make sure participants had filled out the pre-survey online. If they had not filled out the survey then nursing students filled this out with the participants. Additionally, nursing students explained how to do a 48-hour food recall with the participants and answered any questions the participants had about what to expect when they arrived in class.

Literature Review

The HLC focuses on a plant-based cooking class to provide essential health information for those with chronic diseases like diabetes and hypertension. Cooking classes have proven effective in increasing the amount of fruits and vegetables consumed by participants (Metcalf et al., 2021). With some chronic diseases that tend to affect African Americans more like diabetes and hypertension, diet is a modifiable risk factor that can be addressed through education. Metcalf et al., saw that through a cooking class that used education, actually cooking the food together and produce allocation, fruit and vegetable consumption was increased in participants (2021). For participants with chronic disease, increasing their self-efficiency in the kitchen increases the variety of foods they consume, and it makes cooking a family activity which can lead to increasing health across generations (Metcalf et al., 2021). Based on the Metcalf et al. study, our recommendations for the HLC are to survey participants on what they want to learn to cook and to provide more plant-based recipes for them to integrate into their diet.

After participating in the HLC over the summer, we also learned more about how the program is structured and how this specific program came into existence. The HLC would not be functional without an interdisciplinary approach. Chefs, nurses, students, volunteers, and public health professionals are essential to the success of the HLC. A study done by Humbles et al., aimed to expose nursing students to these types of environments in order to help them understand how to manage care (2017). In this study students cared for patients with diabetes in the community and by the end they could identify the benefits of an interdisciplinary approach and incorporated these components into their course work (Humbles et al., 2017). This study helped to frame the reference for the work we completed at the HLC. We had to work with many different professions in an organized way in order to create an effective learning environment for

participants and to capture important data that helped the HLC maintain funding for future classes.

After assessing the interdisciplinary environment and how the program was currently running, we realized that the classes that required extensive paperwork to be completed had bottlenecks that took participants out of class, meaning they missed essential information and felt rushed. This, we noted, was not an effective learning environment. The HLC had to not only be an effective learning environment for participants, but had to also be effective for the nursing students. A study by Mash and Edwards, showed that adequate staff to participant ratios are essential for a learning environment and exposure to different specialities and an interdisciplinary approach is most effective for student nurse learning (2020). It was also found in this study that for effective learning to take place, constructive feedback needed to be ongoing (Mark & Edwards, 2020). This was present in the HLC with team huddles at the end of each class.

Finally, our research showed that nursing students were effective case managers and one on one education provided the most benefit for patients (De La Rosa et al., 2020). Because management of chronic disease is complex, studies have shown that one on one education improves patient satisfaction and self efficacy (Olayinka et al., 2020). Additionally, a study by De La Rosa et al., showed that nursing students could be utilized as effective case managers to answer questions of patients with chronic disease like hypertension (2020). This study showed that when nursing students acted as case managers, patients had lower cholesterol, less medications to manage their high cholesterol, and had better controlled hemoglobin A1c levels and blood pressure (De La Rosa et al., 2020). We utilized this one-on-one approach when we implemented our telehealth phone calls. Through calling patients before they arrived at class, a

majority of the paper was completed and questions were answered before participants arrived, this put them in the least rushed and most informed place to start the healthy cooking class and participate fully.

Barriers

Lack of time to collect data and to have a substantial amount of data is a barrier that the students working with the HLC face. The students do not have enough time to see the long-term effects of the interventions being implemented. Barriers within the class being provided at the HLC consists of the lack of time allotted to educate the clients on pertinent education regarding nutrition and healthy choices. Many clients have requested that the class run for longer than four weeks. Since the class is only for an hour, there is a short period of time for the information to be passed which clients have reported “can be overwhelming”. Several clients have had learning disabilities or intellectual disabilities, creating an additional barrier to those that may not be able to learn as quickly or effectively as other clients in the class.

Some barriers that the staff and students encountered were communication difficulties with the clients. This can be a result of the clients not having access to a phone, particularly a cell phone that makes them easy to reach. Access to the internet may also pose a barrier to those that would like to accept the additional paperwork such as surveys or signing up for benefit programs such as SNAP. This also created an inability to complete telehealth surveys, pre-class, and post-class surveys prior to the class meeting time. This however only affects a small portion of the group each month. Some dilemmas that affected the clients were that a few members did not have their voicemail boxes set up or an accurate telephone number to be reached at.

Transportation poses a barrier for those that do not have reliable transportation. Several clients

have coordinated rides to and from the facility. This posed an issue for some members that were unable to find a ride, therefore, unable to attend the class.

Evaluation

Plan

The evaluation for the Healthy Living Center focuses on the following objectives. What makes class a successful experience, determining how effective the class is in implementing knowledge and change, the interventions used and the success of those interventions. The students aimed to evaluate the effectiveness of the interventions that were aimed to create more of an organized system prior to the class starting to save class time and improve fluidity of the class itself. The students then assessed whether the clients had any questions prior to the class, would like a class reminder, and whether they want the surveys to be performed online or in person to increase communication and support. The students goal for the HLC was to prepare the clients before class to ensure class time is used effectively, this then allows for more time to be focused on education rather than filling out surveys and gathering information that can be done prior to the class starting. The plan was for the nursing students to gather as much information prior to the class to further assist the flow of the class and implement change through organization and preparedness.

A successful visit is one that allows for the client to get a full learning experience with reduced barriers. These clients are taught about how their diet affects their health and how changing to a plant-based diet provides them with the nutrients their body needs. Once the educational portion is completed and the cooking class starts, the client is then allowed to implement their recent knowledge gained on healthy food choices. The goal is that through this experience, the client will be confident with implementing this new way of eating and cooking

into their personal life. The success of the visit is determined by the impact the class has on each client and how effective it has been on encouraging lifestyle changes long term.

Determining the effectiveness of the class can be assessed through the completion of the class course by week four. If the client has consistently come to each class prepared and on time, it shows a pattern of consistency that supports that they are ready to learn and make change. Each week the clients bring their vitals card that tracks their progress through the weeks. A pattern of their weight, waist circumference, and blood pressure is then evaluated to see if there has been change. Clients' mood and behaviors are also monitored by the nursing students while the client gets their vitals completed. In each group, there are several clients who are determined to show physical changes with their weight and blood pressure who also speak of their increased exercise and diet changes. The clients' emotions were documented as they expressed their pride in change or disappointment with little change being evidenced through physical adjustments throughout the weeks. The effectiveness is also demonstrated by the amount of gratitude and encouragement from the clients throughout the course but especially on graduation night on the fourth week of class. One of the clients that took the class now volunteers to help facilitate the class because of the impact that it had on her life.

Some interventions that were implemented included HgA1c screening starting on the last class in June that gives the clients a baseline number of their blood sugar levels to evaluate whether their diet and exercise changes were effective in changing their HgA1c result. This also helped Doctor Newby and Doctor Wood evaluate whether the clients were within a normal range, pre-diabetic, or have diabetes mellitus type two. The students plan was to see a decrease in the range to something suitable for each client within their lifestyle. This range can decline from an indication of diabetes to prediabetes or to a normal A1c level through health changes.

The students also conducted fifty-four HgA1c tests obtained from June to October 2022. More time would be needed to assess a change in HgA1c levels over a span of three months.

The plan was to close the gap between the clients that are participating in the telehealth pre class survey and those that are not able to be contacted. The next intervention implemented was the survey of staff for effectiveness of student participation. This allows the students to measure their effectiveness of preplanning and coordination through calling the clients prior to the class starting to answer telehealth questions. Four staff evaluations were conducted on student effectiveness. Themes from staff responses included “instrumental in preparation”, that the students “identified ways to improve the process of preparing for the next class” while also being “dedicated and committed to ensuring we had successful classes”.

Evaluation of the outcomes during our telehealth intervention needed revision during the initial survey to increase clarity. The statistics are as follows: 82.9% of participants received a phone call before class and 92.5% of participants agreed their questions about class were answered before they started. This is evaluated by the staff at the HLC to acquire qualitative data of the intervention implemented. The evaluation of the interventions and outcomes include the program participants (N = 43) who received a pre-class phone call and telehealth appointment with a nursing student during the months of October and November 2022.

Our rationale was supported by *Determinants of successful telemedicine implementations: a literature study* that evaluates the effectiveness of telehealth implementations. Our goal to implement telehealth phone calls that conduct various surveys and preparation for classes to include answering questions that the client has, is seen as a visionary approach that goes beyond tackling specific issues in a certain developmental phase of a program (2022). This was supported by 58.5% of the clients wanting to complete their surveys online

while 22% were undecided; 55% wanting to complete paper surveys and 30% undecided; and 92.6% of clients reported getting a phone call prior to class where 92.5% of the class felt that all of their questions were answered before arrival . Lastly, 88.4% of the members thought a class reminder would be helpful. This works alongside other efforts being conducted at the HLC to increase effectiveness of the class and was an achievable goal for the students to conduct in a short manner. These small efforts increase the probability of success with the start small- think big mindset (2022). This application of a new direction allows the HLC to expand in the future to a multifaceted telehealth approach to providing care in vast ways.

Limitation

To assess our intervention's effectiveness, we utilized the Likert scale as our surveying tool. The Likert scale requires subjects to respond to a series of statements to express a viewpoint. Subjects read each statement and select an appropriately ranked response. Response choices commonly address agreement, evaluation, or frequency (Fain, 2021). However, utilizing the Likert scale may be considered a limitation due to the survey group being unable to provide feedback or recommendations that would have improved their experience prior to attending their first class at the HLC.

Our community health group implemented our telehealth intervention during the middle of the fall semester, which only allowed us to evaluate our intervention at the HLC with the October and November class participants. Due to the small sample size, it may be difficult to determine if our intervention's outcome is a true finding. One improvement would be to prolong the evaluation of the intervention. This will allow for an increased sample size and improve the evaluation accuracy of the intervention. An additional limitation of the evaluation is that the initial telehealth post-survey was revised to increase clarity. This means that the groups who

were evaluated received slightly different surveys. These small changes may have altered the participants' responses to the survey.

Recommendations

Recommendations for further action based on evaluations would be to implement class reminders for participants during their four weeks of class at the HLC. As mentioned previously, 88.4% of participants surveyed answered that class reminders would be helpful. This would help ensure that all participants are aware of the class times and dates and may also prevent tardiness or missed classes. Students can create a form where participants can decide to opt into an email or text message reminder program during their four weeks at the HLC. Overall, implementing a reminder system may increase the efficiency of the class and improve the participants' experience.

An additional recommendation would be to implement our intervention in the summer semester. This would have allowed us to evaluate more classes with an increased number of participants. The telehealth post-surveys were given to the November and October classes during our fall semester. This affected the number of participants that received the survey, which limited the data that was collected. Increasing the length of the intervention would increase the total number of participants, which in turn, would allow for the results to be more accurate. Furthermore, it would allow for the results to be evaluated for the long-term effectiveness of the intervention.

During our time at the HLC, we would occasionally experience slight miscommunication issues between the staff and students. Students and staff members attended the classes on different days, which often led to this issue. A recommendation that would improve our communication and address this issue would be to hold monthly meetings to help discuss plans

of action and collaborate on improvements for future classes. By doing this, we can ensure that everyone works together to help the class run more effectively and provide a more efficient process for the participants.

Implications

This project helped to solidify our community assessment skills and our ability to work in a team environment, collecting and analyzing the effectiveness of a program. By taking the patient's Hemoglobin A1C and giving them that information at the beginning of their plant-based diet education, they can take that number to their provider and see if their lifestyle changes have been making a positive impact on their blood sugars. This number gives them an idea of their blood sugars over the last 3 months and is a great marker of the start of their health status related to their blood sugars at the beginning of their lifestyle change. If they take what they learned in class and implement a plant-based diet and an increase in exercise their hemoglobin A1C levels should drop.

Implications of the streamlining of the paperwork process during the first class in order to enhance the learning experience. We surveyed the staff at the HLC about how effective our streamlining process was. The feedback was overwhelmingly positive, and it was found that our implementation was successful.

Implications of telehealth intervention before participants came for their first class. This was completed by obtaining the class roster, assigning a student to call each participant and then calling each participant five to seven days before their first class. By us being able to call the participants prior to class, we saw an improvement in the flow on the first day of class. We were able to ensure that people had done their pre-surveys online before class and if they stated that they were unable to do that we were able to ask them the questions and fill it out for them. This

made the first day of class more enjoyable and less stressful for both the participants and the staff. By eliminating the pre-survey paperwork they were able to come in, get their vitals and be ready for class in a timely manner. Also, by us calling we were able to answer any questions they may have had prior to class, including setting up rides for those who need transportation to class. By doing this beforehand, it decreased the confusion of who needs a ride and increased attendance to class.

Reflection

Our time at the HLC was eye-opening. We were able to see the need for education. These cooking classes really opened the eyes for a lot of our participants on the impact of the processed foods they were often consuming. These classes showed them not only how to incorporate a plant-based diet into their life but also taught basic cooking skills. We focussed on knife safety and how to use the whole vegetable to reduce waste. We even had tools for people with arthritis who found using a knife to be painful. These building blocks are things that these participants will be able to take home and use to better their health by decreasing the amount of processed food consumed.

We were able to see the impact of our presence at the HLC. By us being there to help with preparation, taking vital signs and talking with the patients one-on-one we saw a greater positive impact on the participants' experience. By getting everyone checked in and vitals taken quickly they were able to be sat in class ready for Dr. Newby's presentation. We also have more time to talk with them one on one and identify other ways we could help in their lifestyle changes such as helping them apply for SNAP and giving them other resources about food banks and answering any questions about reading food labels.

The HLC's focus is on the benefits of a plant-based diet for diabetes, heart disease, and obesity. We have learned over the last two semesters about how cooking with the plant-based diet and educating on basic cooking techniques can really help the patients decrease their consumption of processed foods that are high in carbohydrates, salt and preservatives. We really saw the importance of teaching these cooking classes and saw the impact of the class. It was eye-opening to see the light bulb turn on in our participants when they tried a salad dressing that they made and realized how simple it was to make and even more delicious than a store-bought dressing. These small changes that they are learning in these classes can really make a large impact on better their health status.

References

- Broens, T. H., Huis in't Veld, R. M., Vollenbroek-Hutten, M. M., Hermens, H. J., van Halteren, A. T., & Nieuwenhuis, L. J. (2022). Determinants of successful telemedicine implementations: A literature study. *Journal of Telemedicine and Telecare*, 13(6), 303–309. <https://doi.org/10.1258/135763307781644951>
- De La Rosa, M., Pitts, S., & Chen, P.-H. (2020). An interprofessional collaboration of care to improve clinical outcomes for patients with diabetes. *Journal of Interprofessional Care*, 34(2), 269–271. <https://doi-org.proxy.lib.odu.edu/10.1080/13561820.2019.1643297>
- Fain, J.A. (2021). Reading, understanding, and applying nursing research (6th edition). Philadelphia, PA: F.A. Davis Company.
- Humbles, P. L., McNeal, G. J., & Paul-Richiez, D. (2017). Interprofessional Collaborative Practice in Nursing Education. *Journal of Cultural Diversity*, 24(2), 54–59.
- Mash, B., & Edwards, J. (2020). Creating a learning environment in your practice or facility. *South African family practice: official journal of the South African Academy of Family Practice/Primary Care*, 62(1), e1–e5. <https://doi.org/10.4102/safp.v62i1.5166>
- Metcalf, J.J. et al. (6 September 2021). Community-based culinary and nutrition education intervention promotes fruits and vegetable consumption. *Public Health Nutrition* 25(2) pgs. 437-449.
- Olayinka, O. D., Moore, S. M., & Stange, K. C. (2020). Pilot Test of an Appreciative Inquiry Intervention in Hypertension Self-management. *Western journal of nursing research*, 42(7), 543–553. <https://doi.org/10.1177/0193945919897077>

Appendix B

Honor Code

I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the Honor Code. I will report to a hearing if summoned.

Name	Signature	Date
Elizabeth Kiefer	<i>Elizabeth Kiefer</i>	12/01/2022
Tricia Souza	<i>Tricia Souza</i>	12/01/2022
Amanda Pugh	<i>Amanda Pugh</i>	12/01/2022
Briana Leinart	<i>Briana Leinart</i>	12/01/2022
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Sarah Wucher	<i>Sarah Wucher</i>	12/01/2022

Appendix C

Rubric

Criteria	Poor	Novice	Proficient	Excellent
Planning				
Identify health problem	Section missing or otherwise not addressed (0)	General health problems outlined. Lacks data to support (1-2)	Outlines health problems of aggregate. Data used to support (3-4)	Uses nursing diagnosis format to outline specific health problems of aggregate. Data used to support (5)
Health Planning/Needs (5)	Lacks identifies one priority Nursing Diagnosis which needs intervention. Provides generalized objectives. (0-2)	Identifies one priority Nursing Diagnosis which needs intervention. Provides generalized objectives (3-6)	Selects and discusses one priority Nursing Diagnosis which needs intervention. Provides specific, measurable objectives.(7-9)	Selects and discusses one priority Nursing Diagnosis which needs intervention. Provides specific, measurable objectives (10)
Alternative Interventions (10)	Does not discuss alternative interventions, does not include identification of resources. (0-3)	Identifies but does not discuss alternative interventions, does not include identification of resources. (4-6)	Includes description of alternative interventions necessary to fulfill objectives. Lacks full discussion of resources. (7-9)	Includes description of alternative interventions necessary to fulfill objectives. Discusses either existing, developing or resources. (9-10)
Intervention				

Implementation (10)	Implements intervention, but there is a mismatch between implantation and planning. (0-3)	Implement at least one level (primary, secondary, or tertiary) of planned intervention. (4- 6)	Implement at least one level (primary, secondary, or tertiary) of planned intervention. Explain the rationale for implementation,(7-9)	Implement at least one level (primary, secondary, or tertiary) of planned intervention. Supports rationale for implementation with data. (10)
Literature Review/Support for implementation	Articles are not current, of poor quality, or do not directly support the implementations identified in the paper.(0-1)	Less than 5 current research articles are presented to support the implemented project. (2-5)	Provides research articles to support implementation, but not all articles are either not current or do not directly align with the implementation. For example, some articles discuss background data of aggregate. (6-9)	Provides a minimum of 5 research articles to support implementation. Articles are current or landmark research (or literature reviews).(10)
Barriers	No barriers were identified (0)	Barriers identified but either not addressed or no alternative approach offered in discussion (1-5)	Barriers not well addressed or the process for addressing the barriers is not well discussed (6-9)	Describe barriers encountered during the implementation phase. Includes discussion of how they were addressed. If possible barriers were identified in the planning phase and employed to mitigate issues, discuss this here.(10)
Evaluation				

Evaluation Plan	Missing evaluation plan or sections are not well developed with no discussion of rationale (0-1)	Develop a plan for evaluation of the project Includes some of the following (or not well developed) objectives, and expected outcome of interventions. Does not describe evaluation process, including rationale. (2-5)	Develop a plan for evaluation of the project Includes some of the following (or not well developed) objectives, and expected outcome of interventions. Describe evaluation process, including rationale. (6-9)	Develop a plan for evaluation of the project including: objectives, and expected outcome of interventions. Describe evaluation process, including rationale. Uses research support for rationale. Can include actual survey forms as appendix (10)
Limits of evaluation	Not discussed 0	Limitations of the evaluation process do not refer back to the process of evaluation. For example, citing limitations related to barriers of implementation or related to the aggregate or community agency (1-2)	Limited discussion of limitations of evaluation process or of tools used. (3-4)	Discusses limitations of the evaluation process or the tool/survey used. Discusses improvements if applicable (5)
Recommendations	Not addressed (0)	Recommendations are not aligned with planning needs of aggregate or do not demonstrate accountability of students (1-2)	Recommendations are not feasible or are not measurable. (3-4)	Make recommendations for further action based on evaluation (5)

Implications	Implications for aggregate, population health, and nursing not poorly addressed or missing OR implications are inappropriate in context of aggregate or public health (0-1)	Implications for aggregate, population health, and nursing not well addressed or missing components (2-4)	Discusses some of the following (or not fully developed)- implications for aggregate, population health, and nursing (5-7)	Discusses implications for aggregate, population health, and nursing (8)
Conclusion				
Reflection	Conclusion missing (0)	No reflection (0)	General statement that reviews learning about health issues of aggregate (1)	Includes self reflection of lessons learned, impact on personal practice, and learning about specific health issues of aggregate (2)
Writing Style	3 or more APA, formatting, spelling, grammatical, syntax errors. Inconsistent or missing the use of transitional sentences. Writing is choppy and difficult to follow. Writing is not professional. Fails to define terms. Skips rationale/logic. Uses colloquialisms. (0-2)	3 or more APA, formatting, spelling, grammatical, syntax errors. Inconsistent use of transitional sentences. Writing is targeted at the instructor. Fails to define terms. Skips rationale/logic. (3-5)	2-3 APA, formatting, spelling, grammatical, syntax errors. Uses transitional sentences. Writing is targeted at correct audience (see guidelines above) (6-9)	0-1 APA, formatting, spelling, grammatical, syntax errors. Uses transitional sentences. Writing is targeted at correct audience (see guidelines above) (10)

Total (if you scored along a single column)	0-13	24-48	60 - 85	100
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