

Master of Public Health Applied Practice Experience

by

Megan Joan Katt

MPH Candidate

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

Graduate Committee:

Dr. Weiqun Wang
Dr. Linda Yarrow
Dr. Kelly Whitehair

Applied Practical Experience Site:

Tammy Walker Cancer Center | Salina, KS
May 2024-March 2025

Applied Practical Experience Preceptor:

Melanie Leepers RN, BSN

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2025

Table of Contents

Chapter 1 - Portfolio Products	2
Table 1.1 Summary of Portfolio Products	2
Table 1.2 Portfolio Products and Competency Addressed.....	4
Chapter 2 - Competencies	10
Table 2.1 Summary of MPH Foundational Competencies	10
Table 2.2 MPH Foundational Competencies Course Mapping	11

Chapter 1 - Portfolio Products

The Tammy Walker Cancer Center, situated at 511 S. Santa Fe in Salina, Kansas, is a comprehensive facility dedicated to delivering advanced cancer treatments and compassionate care. As part of the Salina Regional Health Center, the center offers cutting-edge radiation and chemotherapy technologies, complemented by essential support services such as rehabilitation, nutritional and dietary support, counseling, and support groups. This multidisciplinary approach ensures that patients receive holistic care tailored to their individual needs.

Table 1.1 Summary of Portfolio Products

Portfolio Product		Description
1	Dietitian Info Card	This handout has become the most widely utilized and well-received resource from my project. With few exceptions, such as patients with kidney failure, the majority of my patients have increased protein requirements. Research indicates that up to 80% of cancer patients experience some degree of malnutrition, with inadequate protein intake being a primary concern (Arends et al., 2017). Protein is essential for maintaining lean body mass, supporting immune function, and improving treatment tolerance, yet many patients struggle to meet their needs (Baracos et al., 2018). While I frequently encourage patients to incorporate more protein into their diets, I recognized that some may not be fully aware of which foods are rich sources of protein. Studies suggest that providing patients with simple, visually engaging educational materials can improve dietary adherence and nutritional outcomes (Bauer et al., 2011). To address this, I developed a clear, easy-to-read handout designed for patients to keep readily accessible—such as on their refrigerators—providing a comprehensive list of protein-rich foods and beverages. This resource helps bridge the gap between dietary recommendations and practical application, empowering patients to make informed nutritional choices during treatment.
2	Protein Food and Drink Handout	This handout has become the most widely utilized and well-received resource from my project. With few exceptions, such as patients with kidney failure, the majority of my patients have increased protein requirements. Research indicates that up to 80% of cancer patients experience some degree of malnutrition, with inadequate protein intake being a primary concern (Arends et al., 2017). Protein plays a critical role in preserving lean body mass, supporting immune function, and enhancing treatment tolerance (Baracos et al., 2018). Additionally, muscle loss associated with malnutrition can lead to increased treatment toxicity, reduced quality of life, and poorer clinical outcomes (Cederholm et al., 2017). While I frequently encourage patients to incorporate more protein into their diets, I recognized that some may not be fully aware of which

		foods are rich sources of protein. Studies show that patient education materials that are simple, visually appealing, and easy to understand improve dietary adherence and overall nutritional status (Bauer et al., 2011). To address this, I developed a clear, easy-to-read handout designed for patients to keep readily accessible—such as on their refrigerators—providing a comprehensive list of protein-rich foods and beverages. By equipping patients with practical tools to meet their protein needs, this resource has the potential to improve nutritional intake, treatment tolerance, and overall health outcomes at my facility.
3	The Power of Protein Presentation	In my role as a dietitian, I am frequently invited to deliver presentations for a variety of audiences, including healthcare providers, patients, caregivers, and community members. This PowerPoint presentation was created to provide an overview of the key educational content covered during the Power of Protein series. It includes information on the benefits of protein for cancer patients, the different types of protein, and practical strategies for increasing protein intake to meet the unique nutritional needs of individuals undergoing cancer treatment. Presenting this material to patients as part of Tammy Walker Cancer Center's monthly support group was an enriching experience. Research supports that cancer patients often have significantly higher protein requirements due to the catabolic effects of the disease and its treatments (Arends et al., 2017). Protein intake is critical for maintaining muscle mass, supporting immune function, and improving treatment outcomes, yet studies suggest that many cancer patients do not consume sufficient protein (Baracos et al., 2018). Educational initiatives such as this one are vital for addressing these gaps and empowering patients to make informed dietary decisions.
4	Recipes and Sampling	One common stereotype of dietitians is that we are “foodies” who love cooking and preparing elaborate meals. While this may be true for some, I have found myself to be the exception to this stereotype, as I do not particularly enjoy meal preparation or cooking. This personal experience allows me to empathize with my patients who are often fatigued from treatments, frequently out of the house for appointments, or simply too unwell to dedicate time or energy to preparing complex meals. Similarly, I relate to the caregivers who are juggling the demands of caring for their loved ones while managing their own busy lives. Through my work, I have observed that while there is an abundance of cookbooks available for cancer patients, many of these resources do not meet the practical needs of individuals who may not have the energy or time to prepare complicated meals. In fact, studies show that cancer patients often face significant barriers to adequate nutrition, including fatigue, loss of appetite, and the lack of time or energy to prepare meals (Bauer et al., 2011). This is particularly concerning given that cancer patients have increased nutritional needs, and protein plays a critical role in maintaining lean body mass, supporting immune function, and enhancing treatment tolerance (Baracos et al., 2018). Recognizing the gap in available resources, I aimed to provide my patients with simple, high-protein meal and snack ideas that require minimal ingredients and preparation. This approach not only addresses their nutritional needs but also makes the process of eating feel more

		manageable during a challenging time. To further encourage participation, I offered samples of the featured recipes, as research suggests that providing tangible, hands-on experiences can increase patients' confidence in trying new foods (Mann et al., 2013).
5	Educational Booth	To promote the Power of Protein series and engage not only patients and caregivers but also other healthcare providers at our clinic, I developed an educational display at the entrance of Tammy Walker Cancer Center. The display featured bright colors and visually appealing graphics, with concise and easy-to-understand information designed to capture attention. In addition to offering educational content, I included samples and giveaways as incentives to encourage visitors to stop and interact with the booth. My initial plan was to staff the booth for an hour each day, providing an opportunity to personally introduce myself to patients I hadn't yet met and address any questions they might have. However, I quickly realized that this was not feasible on a consistent basis due to time constraints. Despite this, I still had meaningful interactions with individuals who stopped by the table when I was present. Research has shown that interactive displays and hands-on engagement can significantly enhance patient education and improve the retention of health-related information (McDermott et al., 2016). Furthermore, healthcare providers who engage directly with patients in a friendly, approachable manner can foster better communication and improve patient satisfaction (O'Neill et al., 2016). These interactions provided valuable opportunities to increase awareness of the importance of protein in cancer care and to reinforce key messages about nutrition.

Table 1.2 Portfolio Products and Competency Addressed

	Portfolio Product	Number and Competency Addressed
1	Dietitian Info Card	1- Apply epidemiological methods to the breadth of settings and situations in public health practice - The dietitian info card is a tool that can be used across multiple public health settings (e.g., hospitals, clinics, and home health). It's informed by epidemiological data about the nutritional needs of cancer patients, particularly the importance of protein intake for recovery and overall health. 7- Assess population needs, assets and capacities that affect communities' health - This product is created based on my understanding of the specific needs of cancer patients who may struggle with meeting their protein needs. The card focuses on a need that's prevalent among this population, which was identified

		through an assessment of their nutritional challenges through both literature reviews and professional clinical experience 9- Design a population-based policy, program, project, or intervention - The dietitian info card is part of the larger educational program designed to address the nutritional needs of cancer patients. It is a tangible, population-based intervention aimed at improving patient awareness of the importance of protein intake for recovery and health. The card offers a straightforward way for patients to access essential nutrition information, supporting a broader health initiative focused on cancer patient care and nutrition. 18- Select communication strategies for different audiences and sectors - By providing a quick-reference tool, the card is an ideal strategy for reaching patients in healthcare settings, where time and attention are limited. It ensures that even after their consultation, patients have something to refer back to. 19- Communicate audience-appropriate public health content, both in writing and through oral presentation. - The dietitian info card uses written content to convey essential nutrition information. This product complements other strategies (like presentations and handouts), ensuring a diverse approach to education and differing learning styles.
2	Protein Food and Drink Handout	1- Apply epidemiological methods to the breadth of settings and situations in public health practice - The handout addresses the nutritional gaps identified through epidemiological studies of cancer patients and the general population. It specifically targets protein needs based on what's known about cancer treatments and their effects on nutritional status. 7- Assess population needs, assets and capacities that affect communities' health - By focusing on food and drink options that can help meet protein requirements, this handout directly reflects an assessment of what cancer patients are likely to have access to and what they can feasibly incorporate into their diets. 9- Design a population-based policy, program, project, or intervention - The handout is a key component of the nutritional intervention program designed to help cancer patients

		increase their protein intake. It is a population-focused resource that complements the overall project by offering practical solutions for patients to meet their dietary needs. By providing a clear, easy-to-understand guide on food and drink options, this handout plays a crucial role in the intervention to improve patient outcomes through better nutrition. 18- Select communication strategies for different audiences and sectors • The handout works for patients who might not have time to attend educational sessions but can read and digest the information at their convenience. It's designed to provide easy access to actionable information, appropriate for a diverse audience with varying health literacy levels. 19- Communicate audience-appropriate public health content, both in writing and through oral presentation. • The handout complements the other strategies by offering a tangible resource for patients, allowing them to take the information home and refer back to it.
3	The Power of Protein Presentation	1- Apply epidemiological methods to the breadth of settings and situations in public health practice • The presentation is designed using epidemiological insights into the protein needs of cancer patients, as well as evidence on how protein intake affects recovery and overall health. The content of the presentation is informed by population-based health data and research- including my own professional clinical experience. 7- Assess population needs, assets and capacities that affect communities' health • The presentation is tailored to meet the educational needs of cancer patients, assessing what they may understand or be familiar with regarding protein intake. It is crafted to address their specific gaps in knowledge and reinforce their capacity to improve their nutritional habits. 9- Design a population-based policy, program, project, or intervention • The Power of Protein presentation is an educational intervention designed as part of the broader program to increase cancer patients' understanding of the importance of protein. It targets the entire patient population at the Tammy Walker Cancer Center, aiming to improve their dietary habits by delivering evidence-based information on how protein can positively affect their recovery and health outcomes. This presentation is part of a structured program aimed at shifting patient behavior toward better nutritional

		choices. 18- Select communication strategies for different audiences and sectors - The oral presentation format is selected because it allows for real-time interaction, addressing questions, and clarifying doubts, which is ideal for a healthcare setting where patients might have varied knowledge and understanding of their dietary needs. It was available for patients who were interested in a more in-depth look into the topic. 19- Communicate audience-appropriate public health content, both in writing and through oral presentation. - The presentation adds a dynamic, oral communication strategy to my outreach efforts. It engages patients in a group setting, adding to the mix of communication methods that also include written handouts and sampling.
4	Recipes and Sampling	1- Apply epidemiological methods to the breadth of settings and situations in public health practice - The recipes and sampling are informed by my own clinical experience showing that providing practical, hands-on examples of protein-rich foods helps to improve dietary adherence. It offers a real-world solution for cancer patients to incorporate protein into their meals. 7- Assess population needs, assets and capacities that affect communities' health - By assessing the population's need for simple, easy-to-prepare protein options and the barriers they face, such as time or limited knowledge about high-protein foods, recipes are selected to match their cooking capabilities and dietary restrictions. 9- Design a population-based policy, program, project, or intervention - The recipes and food sampling are integral parts of a comprehensive intervention to improve the nutrition of cancer patients. By offering practical, hands-on ways for patients to incorporate protein into their diets, this component supports the broader program's objective of helping patients make informed, healthier food choices. It's designed to influence behavior by demonstrating the ease and importance of including protein-rich foods in daily meals. 18- Select communication strategies for different audiences and sectors - This strategy reaches patients who may benefit from experiential learning, allowing them to see firsthand how

		protein-rich foods can fit into their diet. It also provides an opportunity for patients to ask questions and seek clarification, offering a more personal communication experience. 19- Communicate audience-appropriate public health content, both in writing and through oral presentation. • The recipes and sampling session create an interactive output, engaging patients in an immersive way. It adds an experiential learning component to the educational experience, supporting the effectiveness of other more passive resources.
5	Educational Booth	1- Apply epidemiological methods to the breadth of settings and situations in public health practice • The booth serves as a flexible, interactive setting where patients can receive information on protein needs, informed by data on the health challenges faced by cancer patients. It's a direct way to apply public health knowledge in a dynamic, real-world environment. 7- Assess population needs, assets and capacities that affect communities' health • The booth allows me to directly assess the needs of the population through informal interactions, providing insights into what cancer patients know or don't know about protein needs. It helps to identify gaps in their knowledge and areas where further education is needed. 9- Design a population-based policy, program, project, or intervention • The educational booth is a direct outreach effort aimed at engaging cancer patients and the public in learning about the importance of protein intake. It is a key part of the larger intervention that supports my nutrition education program. The booth allows patients to interact with the educational materials and resources in a more personalized way, reinforcing the population-based initiative designed to promote better nutritional practices and improve patient outcomes. 18- Select communication strategies for different audiences and sectors • The booth's interactive format is designed to engage patients who may not want to sit through a lecture or read handouts. It offers them a chance to engage actively with the content and ask questions in a more informal setting.

		19- Communicate audience-appropriate public health content, both in writing and through oral presentation. • The booth integrates a variety of outputs, such as pamphlets, food samples, and live interactions, allowing me to reach more patients with diverse communication strategies. This helps reinforce my educational messages through multiple channels
--	--	--

Chapter 2 - Competencies

Table 2.1 Summary of MPH Foundational Competencies

Number and Competency		Description
1	Apply epidemiological methods to the breadth of settings and situations in public health practice	Through the identification of a health issue (protein malnutrition in cancer patients), assessment of patient needs, and development of targeted interventions to improve nutrition, I have applied epidemiological methods in a public health practice setting. By focusing on the cancer patient population and tailoring my educational outreach, I have used key epidemiological principles to address a significant health concern.
7	Assess population needs, assets and capacities that affect communities' health	National and internal assessment, through literature reviews and professional clinical experience, of the effects of inadequate protein intake during cancer treatment.
9	Design a population-based policy, program, project or intervention	The Power of Protein, an educational outreach effort designed to target the nutritional needs of the cancer patients of the Tammy Walker Cancer Center consisted of outputs that will be available to patients during the month of February 2025 and beyond.
18	Select communication strategies for different audiences and sectors	Create a variety of outputs utilizing different communication strategies in order to effectively reach more patients, colleagues, patient caregivers, etc., with content (oral presentation, handouts, food sampling with recipes, educational booth, dietitian info card).
19	Communicate audience-appropriate public health content, both in writing and through oral presentation.	Create a variety of outputs utilizing different communication strategies in order to effectively reach more patients with content (oral presentation, handouts, food sampling with recipes, educational booth, dietitian info card).

○ **Table 2.2 MPH Foundational Competencies Course Mapping**

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		

Public Health and Health Care Systems					
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings		x			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	x

14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			
Communication					
18. Select communication strategies for different audiences and sectors	DMP 815, FNDH 880 or KIN 796				
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content		x			x
Interprofessional Practice					
21. Perform effectively on interprofessional teams		x			x
Systems Thinking					
22. Apply systems thinking tools to a public health issue			x	x	