

**Learning Outcome 6:** Apply knowledge of management principles and systems in planning, monitoring, and evaluating dietetic services and practice for effectiveness, efficiency, and cost-containment as part of quality improvement.

**NUTR:** 6003 Supervised Practice

**Artifacts:** Open Hand Rotation Evaluation, Plate Waste Study, and One-Week Healthy Balance Menu

My food service management rotation with Open Hand best represents my achievement of this learning outcome. Food service management provides Georgia State University (GSU) Coordinated Program (CP) students an opportunity to meet various competencies required to become eligible for the Registered Dietitian (RD) exam. This six to eight week, 180-hour rotation often provides students the only opportunity to meet competencies dealing with coordinating procurement and distribution of goods, developing and evaluating recipes and menus, participating in human resource management, working with budgets, and incorporating procedures to reduce waste and protect the environment. When I began my rotation with Open Hand, I envisioned food service as spending the majority of my time working in the kitchen. I was pleasantly surprised to experience a multitude of different projects, serve many different roles, and gain a broader understanding of how RDs are involved in a food service organization.

Being from out-of-state, I had never heard of Open Hand before starting the CP. I had only heard positive things from my peers and others in the community and I shortly found out the same for myself. Open Hand is a non-profit organization that helps to prevent or better manage chronic disease through comprehensive nutrition services, such as home-delivered meals, and nutrition education to low-income men, women and children who are dealing with a critical, chronic, or terminal disease. Open Hand has also partnered with Fulton County's Office of Aging and Fayette Senior Services in order to provide home-delivered meals to seniors and congregate meals for senior citizen centers. Open Hand provides a variety of meal plan options including: Healthy Balance, to prevent or control diabetes, high blood pressure, and heart disease, Renal for those with chronic kidney disease, Mechanically Soft for clients with difficulty chewing, and a Vegetarian meal plan for those who do not eat meat.

While working with Open Hand, I had a variety of written assignments to complete as part of the rotation. One of my assignments was to conduct a plate waste study that was appropriate to the practice setting in order to reduce waste and protect the environment. I was given the opportunity to go to Hapeville Senior Center and conduct a plate waste study in a congregate setting. I first researched methods and chose the quarter-waste method to measure the amount of waste remaining on each of the senior's plates. The quarter-waste method is a visual assessment to conclude if none,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , or all of each individual lunch menu item was wasted or consumed. The lunch menu Open Hand asked me to observe included roasted turkey breast, wild rice and apple pilaf, sautéed squash, pear and cranberry cobbler, and milk. Twenty-six seniors were served lunch the day of my study and I was able to include twenty-one of their plates in my results. The congregate centers are given two options for lunch each day and three seniors were excluded because they chose the meal I was not evaluating. Two other seniors were excluded because they threw their plates away in another location where I was unable to visually

evaluate the amount of waste remaining on their plates. While the seniors were receiving their trays I remained in the kitchen to observe how large each serving size was for each menu item for the meal I was observing. As the seniors began to finish eating I stood by the trash receptacle and greeted them individually and offered to throw away their plates for them in order to have time to visually assess each one. A couple of the seniors were apprehensive and quite a few were very inquisitive. Once I explained to them what I was doing and that I was a CP student at GSU, they became very interested in the study.

The least consumed menu item from the lunch I observed was the sautéed squash. 17.86% of all squash was left over on plates and thrown away. Many senior citizens complained the product was mushy, overcooked, and bland. Every senior citizen that took one carton of milk from the serving line consumed the entire carton (100%). Due to packaging, I was unable to visually evaluate how much milk was left. I picked up each carton as I was throwing the trays away and determined if there was any milk remaining. Only 7.14% of the turkey and 7.14% of the pear and cranberry cobbler were thrown away. Additionally, 4.76% of the wild rice and apple pilaf was discarded. The average for the total plate waste was 7.38% of the five menu items wasted. There were 14 participants with zero plate waste. After I presented my results to my preceptor, we discussed ways to improve this meal in order to prevent excess waste of the main culprit: the sautéed squash. My idea to decrease the sautéed squash waste was to use less liquid in the recipe and to possibly shorten the cooking time because the final product was mushy and overcooked. This was one of my favorite assignments during my foodservice rotation. I really enjoyed going into the community to interact with the senior citizens and gain feedback about their meals.

Another one of my assignments was to create a one-week Healthy Balance senior meal plan, which included breakfast, lunch, and dinner, and had to meet strict nutritional parameters as well as stay within the budget. The nutritional parameters that had to be met included calorie, carbohydrate, sodium, cholesterol, and fat content, as well as the percentage of fat coming from saturated fat. These targets were to be met per meal, per day, and per week. If one meal on any day was out of target in one or more categories but the three meals on that menu day averaged to meet each goal, you could keep the individual meal that went over or under the target range for a specific nutrient. Open Hand also evaluates the weekly nutritional averages to gain a bigger picture of the nutritional information they are consistently providing their clients. This assignment proved itself to be intricate and detailed and went through several revisions before I came up with the final version. Although my one-week menu met every nutritional target, I was over-budget by 0.10¢ for my weekly average (\$1.90 per meal vs the goal of \$1.80/meal). Although I did not add any new items to the menu I was able to create new combinations of foods to give the seniors a fresh spin on their current menu items.

Creating a one-week menu involved various management principles such as planning, organizing, target setting, and applying problem solving skills in order to meet the various nutritional and cost parameters of the organization. Possessing qualities such as these are key to being able to manage various tasks, teams, or even food service organizations. Organizations also “do” something such as transforming inputs into outputs. Considering organizational systems and recognizing various inputs (materials, money, food equipment), transformation (procurement, production, distribution), and outputs (quality of food, customer satisfaction, meal equivalents) of the environment are important when creating menus. The RDs at Open Hand are

very skilled with menu planning, management, and organizational systems, and helped guide me through the process along the way. I was pleased to hear my menu would be used in one of their upcoming cycle menus for the congregate centers.

Foodservice opened my eyes to many different experiences dealing with budgets, menu development, human resources, and evaluating practices for effectiveness and efficiency. Open Hand's mission statement is to help people prevent or better manage chronic disease through Comprehensive Nutrition Care™, which combines home-delivered meals and nutrition education as a means to reinforce the connection between informed food choices and improved quality of life. I enjoyed working with Open Hand and helping them strive to meet their mission statement. My preceptor was adamant about how the work I was doing would be directly used by their company. It's always a good feeling to know all of your efforts are appreciated and useful. Knowing the work I was doing really mattered gave me the confidence to take the lead on projects and the motivation to do my best work. While I was dreading foodservice initially, my 180 hours spent with Open Hand turned into a very rewarding experience.