


# Future Dimensions

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## A Message From the Chair



Wendy Phillips, MS, RD, CD,  
CNSC, CLE, NWCC, FAND  
CNM DPG Chair, 2019-2020

I hope everyone had a happy and safe holiday season! We are now headed into several important events for the nutrition community, including many spring meetings for dietetic practice groups and state affiliates. We know many of you are featured speakers and poster presenters, and we couldn't be more proud to call you friends and colleagues.

We also are excited about our upcoming clinical nutrition management symposium in Portland, OR on March 19-21, 2020! The theme is "Staying the Course: Nutrition Leadership in a Rapidly Changing Healthcare Environment". Our Chair-Elect, Kelly Danis, and Professional Development committee have organized many engaging, knowledgeable speakers from whom we can learn. We also had a record-

breaking number of submissions for our performance improvement poster session for our Quality/Performance Improvement committee to evaluate. The top ten submissions will be featured during the symposium, and others will be invited to share their projects with you all in different ways.

During this second half of the membership year, you will find the CNM DPG Executive Committee diligently working on our next three year strategic plan. We are proud to say that we successfully completed all of the items on the strategic plan that encompassed membership years 2018-2020, and we are well positioned to plan for the next three years. If you have ideas or something you would like to be sure is included, please contact me at

[wendyphillips@iammorrison.com](mailto:wendyphillips@iammorrison.com)  
or our Chair-Elect, Kelly Danis, at  
[daniska@upmc.edu](mailto:daniska@upmc.edu).

If you haven't already, check out the homepage of our website, [www.cnmdpg.org](http://www.cnmdpg.org), for pictures and a FNCE® recap! And while you're there, be sure to check out the practice articles in the archives of *Future Dimensions*!

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# Exploring Innovative Solutions to Food Insecurity in the Context of Malnutrition

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Food insecurity (FI) is “the limited or uncertain availability of nutritionally adequate, safe foods, or the inability to acquire personally acceptable foods in socially acceptable ways.<sup>1</sup>” In 2018, there were 14.3 million (11.1%) U.S. households that were food insecure, with 5.6 million (4.3%) falling in the very low food security category which is characterized by at least one household member experiencing a disruption in their food intake. FI as a whole affects almost 40 million people in the U.S.<sup>2</sup> Adults living alone, families with children especially single-parent families, racial and ethnic minorities,<sup>3,4</sup> older adults,<sup>5</sup> individuals with low income<sup>2</sup>, and members of the transgender/gender-nonconforming community<sup>6</sup> are examples of populations disproportionately affected by FI.

FI is associated with nutritional inadequacy, poor diet quality, and disrupted eating patterns.<sup>4,7</sup> Additionally, being food insecure presents a risk factor for various chronic diseases including, but not limited to, malnutrition, obesity, depression, diabetes, and hypertension.<sup>8,9</sup>

As Registered Dietitian Nutritionists (RDNs) and Clinical Nutrition Managers (CNMs), we are well-equipped to design and lead programs that can help foster improved food security amongst patients or clients in our service areas and beyond. We can also maximize outreach efforts by incorporating the intersection of malnutrition and FI into program development. This can be accomplished by creating programs that utilize malnutrition diagnoses as bridges to further investigate our patients’ food security status at home, and vice versa. In the following sections, methods of incorporating FI programs in the context of malnutrition are explored in community/outpatient, inpatient, and transition of care settings.

## Malnutrition

Malnutrition is prevalent in both the hospital and post-acute care settings, and one could argue that most times it starts in the community before the patient enters the hospital. While the issue of malnutrition isn’t new, hospitals have taken a giant leap toward tackling malnutrition in hospitalized patients over the last several years. We know that up to 50% of all patients are at risk for or are malnourished at the time of hospital admission<sup>10</sup> and only 7% are typically diagnosed with malnutrition during their hospital stay.<sup>11</sup> Between 31% and 38% of well-nourished patients experience nutritional decline during their hospital stay.<sup>12</sup>

Hospitalized adults with malnutrition have a 54% higher likelihood of being readmitted to the hospital within 30 days, compared to those who are well-nourished,<sup>13</sup> not to mention the negative effect malnutrition has on length of stay, post-operative complications, delayed wound healing, increased mortality, cost of readmission and the overall economic burden it presents.<sup>14-18</sup> A recent systematic review and meta-analysis<sup>19</sup> looked at the association of nutritional support and clinical outcomes among malnourished medical patients or patients at nutritional risk. The primary outcome associated with nutrition intervention was a decrease in mortality, followed by a decrease in rates of non-elective hospital readmissions, significantly higher provision of energy and protein intake, and a significant increase in body weight.<sup>19</sup>

## Screening for Food Insecurity

RDNs have become increasingly proficient in diagnosing malnutrition in their practice settings.<sup>20</sup> Just as malnourished patients are identified, patients should also be screened for FI within their households. Although malnutrition and FI can exist inde-

If the patient/client responds that either or both of the following statements are “often true” or “sometimes true” (versus “never true”), they would screen positive for household food insecurity.

1. *“Within the past 12 months (I/we) worried about whether (my/our) food would run out before (I/we) got money to buy more.”*
2. *“Within the past 12 months the food (I/we) bought just didn’t last and (I/we) didn’t have money to get more.”*

**Figure 1.** The Hunger Vital Sign™ Screening Tool<sup>24</sup>

pendently of one another, there is recent evidence in studies of older adults that the two conditions may also be interconnected.<sup>21,22</sup> Certainly one could hypothesize that those who are identified as malnourished in the hospital and are found to also be food-insecure, will likely have a very difficult time maintaining adequate nutrition status and thriving once discharged home. Interventions to combat FI

should involve as much diligence as is placed on malnutrition interventions and is most definitely within the RDN’s scope of practice.<sup>23</sup>

Screening for FI can easily be implemented in both inpatient and outpatient settings. The tool that is most commonly used in clinical settings is the Hunger Vital Sign™ a two-item screening tool.<sup>24</sup> This tool is often used because of its simplicity and it may be easily incorporated into electronic health record (EHR) systems. The Hunger Vital Sign™ scale includes the first two items from the 1997 18-item US Food Security Scale (USFSS)<sup>25,26</sup> and those items are displayed in Figure 1. The Hunger Vital Sign™ is valid in low-income urban households with a sensitivity of 97% and specificity of 83%.<sup>24</sup> In the case of identifying FI, a higher sensitivity (which would reduce the risk of false negatives) would be more important than having a high specificity (which would reduce the risk of false positives).<sup>26</sup> This tool has also been found to be valid in many other patient populations including youths and adolescents (88.5% sensitivity;

Program	Website
Supplemental Nutrition Assistance Program (SNAP)	<a href="https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program">https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program</a>
National School Lunch Program (NSLP)	<a href="https://www.fns.usda.gov/nslp">https://www.fns.usda.gov/nslp</a>
School Breakfast Program	<a href="https://www.fns.usda.gov/sbp/school-breakfast-program">https://www.fns.usda.gov/sbp/school-breakfast-program</a>
Women, Infants, and Children (WIC)	<a href="https://www.fns.usda.gov/wic">https://www.fns.usda.gov/wic</a>
Summer Food Service Program (SFSP)	<a href="https://www.fns.usda.gov/sfsp/summer-food-service-program">https://www.fns.usda.gov/sfsp/summer-food-service-program</a>
School Food Pantry Program	<a href="https://www.feedingamerica.org/our-work/hunger-relief-programs/school-pantry">https://www.feedingamerica.org/our-work/hunger-relief-programs/school-pantry</a>
Mobile Food Pantry Program	<a href="https://www.feedingamerica.org/our-work/hunger-relief-programs/mobile-food-pantry-program">https://www.feedingamerica.org/our-work/hunger-relief-programs/mobile-food-pantry-program</a>
Backpack Programs	<a href="https://www.feedingamerica.org/our-work/hunger-relief-programs/backpack-program">https://www.feedingamerica.org/our-work/hunger-relief-programs/backpack-program</a>
	<a href="https://www.actionforhealthykids.org/activity/backpack-programs/">https://www.actionforhealthykids.org/activity/backpack-programs/</a>
Feeding America Food Bank Locator	<a href="https://www.feedingamerica.org/find-your-local-foodbank">https://www.feedingamerica.org/find-your-local-foodbank</a>
Meals on Wheels	<a href="https://www.mealsonwheelsamerica.org/">https://www.mealsonwheelsamerica.org/</a>
Commodity Supplemental Food Program	<a href="https://www.fns.usda.gov/cfsp/commodity-supplemental-food-program">https://www.fns.usda.gov/cfsp/commodity-supplemental-food-program</a>
Senior Farmers’ Market Nutrition Program	<a href="https://www.fns.usda.gov/sfmnp/senior-farmers-market-nutrition-program">https://www.fns.usda.gov/sfmnp/senior-farmers-market-nutrition-program</a>

**Table 1.** Food Assistance Programs and Resources

84.1% specificity),<sup>27</sup> as well as general adult populations (>97% sensitivity; >70% specificity).<sup>28</sup>

### Connecting Patients with Community Programs

Once patients screen positive for FI it is important that they are, at the very least, provided with appropriate resources. Working in tandem with social workers and/or care managers, RDNs can provide many resources to food-insecure patients connecting them with available services in the community. Table 1 highlights some of the hunger relief and food assistance programs that may be available either nationally or locally in your service areas.

Local food pantries offer additional assistance to food-insecure households. It is important, however, to consider if programs will be effective not only in securing foods, but also providing patients and their families with wholesome and nutritious foods to maintain their health and well-being. Food pantries, in particular, may not present the most sustainable or mindful solution to FI. Although the intent of food pantries is to provide temporary support, many families become dependent on these charitable services on a more long-term basis.<sup>29,30</sup> In addition, the foods offered at many local pantries tend to include more convenience items and less fresh produce and lean proteins. In a recent review of nine studies that examined the nutritional value of foods provided from food pantries, insufficient supplies of foods rich in vitamins A and C, and calcium were consistently noted.<sup>31</sup> While food pantries serve as a very important part of solving immediate hunger needs in the community, they do not always offer the healthiest solution to malnutrition or FI.

### Innovative Approaches to Community Food Assistance

CNMs and RDNs can partner with key stakeholders at their organizations as well as connect with local farms, food banks/hubs, and other community resources. These partnerships can foster the collaborative development of programs that will assist patients in need to more easily access healthy foods. Program models highlighted in this section include fresh fruit and vegetable prescription programs, farmers' market incentive programs, and community supported agriculture models.

Nutrition incentive programs such as fresh produce prescription programs can offer food-insecure families a healthy supplement or alternative to food pantries. These types of programs are effective, but usually require support through grants or other funding sources. Healthcare providers generally identify patients who may benefit from these programs and provide them with a "prescription" for participation. Coupons or vouchers are provided for recipients to use at farmers' markets, grocery stores, and/or other retailers toward the purchase of fresh fruits and vegetables.<sup>32</sup> Matching programs such as *Double Up Food Bucks*<sup>33</sup> have become a more popular addition to food assistance programs. This involves incentivizing participants with a farmers' market voucher/coupon in a dollar-to-dollar match of federal benefits such as those from Supplemental Nutrition Assistance Program (SNAP) spent at the farmers' market.<sup>32,34,35</sup> Many of these programs also incorporate a nutrition education component to the program so that participants can understand the importance of fresh produce in their diet.<sup>32</sup>

Favorable outcomes of fruit and vegetable prescription programs have included increased intake of fresh produce,<sup>32,34,36</sup> as well as improvements in hemoglobin A1C and body mass index.<sup>32</sup> Additionally, Savoie-Raskos and colleagues<sup>34</sup> determined that participants using a *Double Up Food Bucks* program for four consecutive weeks reported significantly improved food security ( $P < 0.5$ ) using the US Household Food Security Survey Model. Durward and colleagues<sup>36</sup> found similar results with *Double Up Food Bucks* as there was a 15% increase in food security among their study participants after four weeks.

Another innovative approach to tackling FI in the community is the use of a community supported agriculture (CSA) model. CSAs are food subscription models in which the consumer pays a fee or installments to the farm prior to the harvest season and receives a weekly bounty of fresh produce based on what the farm is able to supply.<sup>37</sup> The CSA program allows the farmer to receive the financial support needed to grow the produce up front.

### Using a CSA Model

*Rush Copley Medical Center, Aurora, IL; Jen Waters*

At Rush Copley Medical Center, we collaborated with our local food hub (PKE Enterprises/Dream Distributors), Kane County, and local farmers to design a pilot CSA-model program called Fresh & Local Rx to increase fruit and vegetable intake amongst Rush Copley Family Medicine Residency outpatients experiencing household FI and/or those with comorbidities. This program was funded by two large grants: one from Telligon Community Initiative and another from a Catalyst grant from Food: Land: Opportunity (FLO). Local farmers who had not been otherwise producing for wholesale were trained to do so. Physicians and RDNs worked together with local farmers to choose the produce that would be available in the boxes. In the 2018 season, fifty enrolled participants received nine CSA boxes each. At each box pickup, they received nutrition education and viewed a cooking demonstration by an RDN using the items provided in the box. Their produce boxes also included the recipe that was prepared at the demonstration, a list of other ways to use the items in the boxes, a handout on storing the produce, as well as all the other non-produce items needed to prepare the recipe (i.e. can of beans, olive oil, etc).

After completion of the program, 91% of the participants (versus 64% at baseline) reported their health as “good” or “better” and their eating habits as “good” or “better” (versus 40% at baseline). In a post-program survey of the farmers involved in our program, 100% reported that they would be interested in participating in this type of program again in the future. Overall it was a successful pilot program, and expansion opportunities for future programming are currently being evaluated at our organization.

### Innovative Program for Promoting Food Security in Malnourished Patients Across the Care Continuum

*New Hanover Regional Medical Center in Wilmington, NC; Angela Lago*

It has been our experience at New Hanover Regional Medical Center (NHRMC) that many patients don't



**Figure 2.** Photograph of a typical food box at NHRMC



**Figure 3.** Photograph of a typical food box at NHRMC

have the means to follow their nutrition plan of care once they return home. This finding led us to take a deeper look into the social determinants of health that our patients are faced with, specifically FI. Families with very low food secure households experience a disruption in the normal eating habits of one or more household members and food intake is reduced at times during the year because of insufficient money or resources for food. In looking at state-level prevalence of FI, North Carolina is one of twelve states in the country with FI above the U.S. average.<sup>2</sup> Of note, North Carolina is also one of the top ten agriculture producing states in the country, preceded only by California, Iowa, Texas, Nebraska, Minnesota, Illinois and Kansas.<sup>2</sup>

In late 2018, NHRMC RDNs began screening each patient with a diagnosis of malnutrition for FI, using the Hunger Vital Sign™ screening tool. Initial assessment of FI prevalence among malnourished hospitalized patients at NHRMC showed little overlap with FI (12%). The clinical nutrition team realized the gap that existed with their patients in this area. How do you recommend food-related nutrition interventions when there is no food? How does one continue nutrition optimization when patients are faced with deciding whether to buy their medications or food to put on the table? We felt like we were only touching the tip of the iceberg and data we gathered during home visits supported just that.

Multiple interventions were designed to assist this patient population with meeting the nutrition plan of care, as set forth by the inpatient RDNs. The first intervention put into place was the design of a discharge food box to be sent home with FI, malnourished patients. When designing the box, Director of Food & Nutrition Services Wayne Strauss considered first and foremost the fact that these individuals go home to empty cupboards, have little energy to prepare food, and many times may not have the means to do any meal preparation beyond the basics. The box consists of staples such as granola bars, graham crackers, peanut butter, applesauce, pudding, bread, canned chicken, pasta, cheese, low-sodium turkey, oatmeal, grits, juice and condiments. Figures 2 & 3 are photographs of the contents of a typical box. Most items are shelf-stable, however when there is

no refrigeration available in the home, perishable items are removed. The boxes are currently paid for by the Food & Nutrition Department.

NHRMC is a large, 800 bed organization with many moving parts, therefore determining the best way to deliver the food boxes was initially challenging. To maintain freshness and the ability to provide various perishable items, the box needs to be delivered as close to discharge as possible. To achieve this, we collaborated with social work (SW) to come up with the best way to communicate patient discharge plans. When a malnourished, food-insecure patient is identified, an order is placed by the RDN for SW to contact the RDN when the patient is ready for discharge. This order sits in the SW queue in the EHR until the SW contacts the RDN. Once the contact is made, the specific time of discharge is discussed, and the RDN delivers the food box to the patient's room as close to that time as possible. On the production side, the ingredient clerks in the Food & Nutrition Department are responsible for keeping two food boxes ready in the refrigerator at all times. Over the last twelve months, an average of ten food boxes each have been given to malnourished, food insecure individuals.

The second intervention, implementation of a Clinical Outreach Registered Dietitian (CORD), began in late January 2019. All patients that are diagnosed with malnutrition during hospitalization at NHRMC receive a CORD referral from the inpatient RDN. Patients that do not qualify for the home visit include individuals that live outside of a 30-mile radius from NHRMC; patients that are tube fed; patients that are discharged to a skilled nursing facility, long-term care facility or inpatient treatment center; and patients that refuse the service or do not return the phone call.

Once the referral is received, the patients are triaged by the CORD. The CORD makes home visits to an average of 15 patients per week. He generally completes the first home visit within several days after discharge and up to 90-days post discharge. The goal of the home visits is to review the discharge nutrition plan of care with the patient, identify any social determinants that may keep the patient from con-

tinuing nutritional optimization, and connecting the patient with resources throughout the community that align with the individuals' needs. The patient receives a full nutritional assessment, including a Nutrition Focused Physical Exam during the initial and follow-up visits. Interventions include, but are not limited to, nutrition education, oral nutrition supplement recommendations and coupons, referrals to Meals on Wheels, SNAP and food pantries as well as referrals to transition of care case managers for more complex medical needs that are identified. FI was increasingly identified during the CORD home visits, at 40% compared to 12% inside the hospital.

Funding for the CORD position was provided by a generous grant from The Duke Endowment. The malnutrition transitions of care program is directly aligned with NHRMC's mission statement, Leading Our Community to Outstanding Health, as well as the organization's vision to establish Health Equity and address Social Determinants of Health for residents in and around New Hanover County. Additionally, it is well aligned with NHRMC's 2019 and 2020 goals, which include Access, Value, Health Equity, Quality, and Growth. All of these factors have allowed this program to flourish with minimal barriers.

One of the primary goals of this program is to decrease the 30-day readmission rate of malnourished patients. From January 2019, just prior to implementing the CORD home visits, to August 2019, there has been a 17% drop in the readmission rate of our malnourished patients. There was also a significant improvement in the malnutrition identification rate from 3.2% to almost 8% and we have been able to expand our staffing by three full time RDNs. Continuous performance data feedback from Malnutrition Quality Improvement Initiative participation has demonstrated value to the organization and has been an integral part of the success of the program.

Moving forward, the clinical nutrition team at NHRMC plans to expand the CORD staff to incorporate other disease states and/or patient populations, collaborate with transition care case managers within the accountable care organization (ACO) and continue sharing best practices with organizations across the country.

### *Lessons Learned and Words of Wisdom from NHRMC*

- **Establish buy-in from organization leadership**  
To gain leadership buy-in you have to align your program's vision and strategy with your organization's goals. It is imperative that you can articulate the need of the program and tell the story in a meaningful way so that others can connect to and share ownership of your cause. Early and solid support of your program from key stakeholders within the organization will be especially helpful when you hit bumps in the road.
- **Make sure the CORD is a good fit**  
In our case, the individual selected to be the CORD had done quite a bit of research and was well-versed on the available resources throughout our service area. We highly recommend you choose an RDN who has an interest in promoting food security, is comfortable conducting nutrition assessments in the patients' homes, and is knowledgeable about local programs and resources.
- **Consider establishing safety protocols for home visits**  
Because the CORD visits patients in their homes, it is important that this individual is not only comfortable with the process, but also that they are safe. Safety measures should be developed and established early on to ensure that CORDs are not placed in dangerous situations. Some homes and areas may not generally be thought of as safe and one needs to have awareness and be comfortable in determining the safety of each situation.
- **Stay organized and on top of your data**  
Data management early on is essential as the data can become a challenge later in the program. Your program will grow along with sample size and depending on the size of your patient population, can become so large that in the absence of a data analyst resource or data management program, summarizing results can be cumbersome. We recommend establishing a database using software such as Microsoft Access or Excel in order to minimize these difficulties.

## Conclusion

FI is clearly a significant issue in the United States.<sup>2</sup> RDNs and CNMs are uniquely positioned to help tackle this problem. As discovered in recent research,<sup>21, 22</sup> malnutrition and FI may have some degree of correlation; therefore it may maximize your outcomes by designing programs that encompass both conditions. Much like screening for malnutrition, utilization of the Hunger Vital Sign™ is a valid tool that is not burdensome to incorporate into everyday practice.<sup>24</sup> It is important to note that with the introduction of screening into your protocols, there must be an intervention that follows. Consider at the very least connecting your patients with available services and programs for hunger relief. Programs that go a step further and provide families with fresh and healthy foods as well as those that provide care and assessment beyond hospital discharge and through the continuum of care are ideal. Either way, you are taking a step in the right direction for the health of your patients and your community. As our past Academy President, Mary Russell, MS, RDN, LDN, FAND, has stated, “Let’s work together, locally and globally, to help every person and family achieve greater food security.”<sup>38</sup>

## References

1. Expert Panel. Core Indicators of nutritional state for difficult-to-sample populations. *J Nutr.* 1990; 120(11):1555–1600.
2. United States Department of Agriculture. Food Security in the U.S. [www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/](http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/). Accessed Feb 7, 2020.
3. Coleman-Jensen A, Rabbitt MP, Gregory CA, Singh A. *A Household Food Security in the United States in 2017*. Washington, DC: US Dept of Agriculture, Economic Research Service; 2018. Economic Research Service Publication no.ERR-256.
4. Leung CW, Tester JM. The association between food insecurity and diet quality varies by race/ethnicity: an analysis of National Health and Nutrition Examination Survey 2011-2014 results. *J Am Diet Assoc.* 2019;119(10):1676-1686.
5. Steiner JF, Stenmark SH, et al. Food insecurity in older adults in an integrated health care system. *J Am Geriatr Soc.* 2018;66(5):1017-1024.
6. Russomanno J, Patterson JG, Jabson JM. Food insecurity among transgender and gender non-conforming individuals in the southeast United States: A qualitative study. *Transgender Health.* 2019;4(1):89-99.
7. Holben DH, Marshall MB. Position of the Academy of Nutrition and Dietetics: Food insecurity in the US. *J Am Diet Assoc.* 2017;117(12):1991-2002.
8. Lundeen EA, Siegel KR, Calhoun H, et al. Clinical-community partnerships to identify patients with food insecurity and address food needs. *Prev Chronic Dis.* 2017;14(E113):170343.
9. Wetherill MS, Castleberry White K, Rivera C. Food insecurity and the Nutrition Care Process: Practical applications for dietetics practitioners. *J Am Diet Assoc.* 2018;118(12):2223-2234.
10. Wells JL, Dumbrell AC. Nutrition and aging: assessment and treatment of compromised nutritional status in frail elderly patients. *Clin Interv Aging.* 2006;1(1):67-69.
11. Weiss AJ, Fingar KR, Barrett ML, et al. Characteristics of hospital stays involving malnutrition, 2013. Statistical Brief #210. Sept 2016. Rockville, MD: Agency for Healthcare Research and Quality. Available at: <https://hcup-us.ahrq.gov/reports/statbriefs/sb210-Malnutrition-Hospital-Stays-2013.jsp>. Accessed Feb 7, 2020.
12. Braunschweig C, Gomez S, Sheean PM. Impact of declines in nutritional status on outcomes in adult patients hospitalized for more than 7 days. *J Am Diet Assoc.* 2000;100(11):1316-1322.
13. Fingar KR, Weiss AJ, Barrett ML, et al. All-cause readmissions following hospital stays for patients with malnutrition, 2013. HCUP Statistical Brief #218. Dec 2016. Agency for Healthcare Research and Quality, Rockville, MD. Available at <https://hcup-us.ahrq.gov/reports/statbriefs/sb218-Malnutrition-Readmissions-2013.jsp>. Accessed Feb 7, 2020.
14. Jensen GL, Mirtallo J, Compher C, et al. Adult starvation and disease-related malnutrition: a proposal for etiology-based diagnosis in the clinical



- cal practice setting from the International Consensus Guideline Committee. *Clin Nutr.* 2010;29(2):151-153.
15. Agarwal E, Ferguson M, Banks M, et al. Malnutrition and poor food intake are associated with prolonged hospital stay, frequent readmissions, and greater in-hospital mortality: results from the Nutrition Care Day Survey 2010. *Clin Nutr.* 2013;32(5):737-745.
  16. Fearon KC, Luff R. The nutritional management of surgical patients: Enhanced recovery after surgery. *Proc Nutr Soc.* 2003;62(4):807-811.
  17. Barker LA, Gout BS, and Crowe TC. Hospital malnutrition: Prevalence, identification, and impact on patients and the healthcare system. *Int J of Environ Res and Public Health.* 2011;8(2):514-527.
  18. Snider JT, Linthicum MT, Wu Y, et al. Economic burden of community-based disease-associated malnutrition in the United States. *JPEN J Parenteral Enteral Nutr.* 2014;38(S2):55-165.
  19. Gomes F, Baumgartner A, Bounoure L, et al. Association of nutritional support with clinical outcomes among medical inpatients who are malnourished or at nutritional risk. 2019. *JAMA Netw Open.* 2019;2(11):e1915138.
  20. Phillips W, Janowski M, Brennan H, Leger-LeBlanc G. Nutrition focused physical exam improves accuracy of malnutrition diagnosis. *J Acad Nutr Diet.* 2019;119(9,S2):S68.
  21. Grammatikopoulou MG, Gkiouras K, Theodoridis X, et al. Food insecurity increases the risk of malnutrition among community-dwelling older adults. *Maturitas.* 2019;119:8-13.
  22. Jung SE, Kim S, Bishop A, Hermann J. Poor nutritional status among low-income older adults: examining the interconnection between self-care capacity, food insecurity, and depression. *J Am Diet Assoc.* 2019;119(10):1687-1694.
  23. Academy of Nutrition and Dietetics: Revised 2017 Scope of Practice for the Registered Dietitian Nutritionist. *J Acad Nutr Diet.* 2018;118(2):141-165.
  24. Hager ER, Quigg AM, Black MM, et al. Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics.* 2010;126(1):e26-32
  25. Nord M, Hopwood H. Recent advances provide improved tools for measuring children's food security. *J Nutr.* 2007;137(3):533-536.
  26. Cutts D. Screening for food insecurity: short-term alleviation and long-term prevention. *Am J Public Health.* 2017;107(11):1699-1700.
  27. Baer TE, Scherer EA, Fleeger EW, et al. Food insecurity and the burden of health-related social problems in an urban youth population. *J Adol Health.* 2015;57(6):601-607.
  28. Gundersen C, Engelhard EE, Crumbaugh AS, et al. Brief assessment of food insecurity accurately identifies high-risk US adults. *Public Health Nutr.* 2017;20(8):1367-1371.
  29. Daponte BO, Lewis GH, Sanders S, et al. Food pantry use among low-income households in Allegheny County, Pennsylvania. *J Nut Educ Behav.* 1998;30(1):50-57.
  30. Neter JE, Dijkstra C, Visser M, et al. Food insecurity among Dutch food bank recipients: a cross-sectional study. *BMJ.* 2014;4(5):e004657.
  31. Simmet A, Depa J, Tinnemann P, et al. The nutritional quality of food provided from food pantries: A systematic review of existing literature. *J Am Diet Assoc.* 2017;117(4):577-588.
  32. Ridberg RA, Bell JF, Merritt KE, et al. A pediatric fruit and vegetable prescription program increases food security in low-income households. *J Nutr Educ Behav.* 2019;51(2):224-230.
  33. Double up food bucks. Accessed Feb 6, 2020 at <https://www.doubleupfoodbucks.org/>.
  34. Savoie-Roskos M, Durward C, Jeweks M, et al. Reducing food insecurity and improving fruit and vegetable intake among farmers' market incentive program participants. *J Nutr Educ Behav.* 2016;48(1):70-76.
  35. Freedman DA, Flocke S, Shon E, et al. Farmers' market use patterns among Supplemental Nutrition Assistance Program recipients with high access to farmers' markets. *J Nutr Educ Behav.* 2017;49(5):397-404.
  36. Durward CM, Savoie-Roskos M, et al. Double Up Food Bucks participation is associated with increased fruit and vegetable consumption and food security among low-income adults. *J Nutr Educ Behav.* 2019;51(3):342-347.

37. Harmon AH. Community supported agriculture: A conceptual model of health implications. *Austin J Nutri Food Sci.* 2014;2(4):1024.
38. Russell M. Food security for everyone: An Academy priority. *J Am Diet Assoc.* 2019;119(2):191.

**Angela Lago** is the Clinical Nutrition Manager at New Hanover Regional Medical Center in Wilmington, North Carolina, where she has worked since 2008. She is an active member of the Academy of Nutrition and Dietetics and a member of the Clinical Nutrition Management Dietetic Practice Group, serving on the Professional Development Committee this past membership year. Angela obtained her BS in Nutrition from East Carolina University in 1999 and completed her dietetic internship at Winthrop University in 2001. She earned her MS in Nutrition from East Carolina University in 2006 and has been a Certified Nutrition Support Clinician since 2009. Angela has been a part of the Malnutrition Quality Improvement Initiative (MQii) Learning Collaborative since 2017 and has focused on malnutrition throughout the continuum of care for the hospitalized patient, most recently shifting her focus to transition of care for the malnourished patient upon discharge. Angela and her team were awarded a Duke Endowment

*Grant to help further their work in the malnourished patient population and she was awarded The People's Choice Award at the 2019 Clinical Nutrition Manager Symposium for her poster titled Bridging the Gap from Hospital to Home: Implementation of a Malnutrition Transitions of Care Program.*

**Wayne Strauss** is the Sodexo Director of Food and Nutrition Services at New Hanover Regional Medical Center and has worked there since 2018, and 18 years for Sodexo. He obtained his BS in Dietetics in 1994 and MS in Food and Nutritional Sciences from Indiana University of Pennsylvania in 1996. His focus currently is on improving performance levels of all aspects of his 800 bed acute care hospital operation.

**Jen Waters, MS, RDN, CNSC, LDN** is a graduate of Northern Illinois University with a BS in Nutrition and Dietetics in 2004, and of Rush University in Chicago with a MS in Clinical Nutrition in 2006. Currently, she is the Clinical Nutrition Manager at Rush Copley Medical Center in Aurora, Illinois and is working toward her doctorate in Interdisciplinary Health Sciences. Jen and her team have developed and led several programs to encourage healthy eating and help combat food insecurity in their community.

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## CPE Instructions

1. Read the article titled "Exploring Innovative Solutions for Food Insecurity in the Context of Malnutrition"
2. Log on to the CNM DPG website at [cnmdpg.org](http://cnmdpg.org).
3. Click on Member Benefits > Professional Development > Self-Study CPEU
4. Take the exam and print your certificate.

*Please note: CDR now requires participants to complete a Critical Thinking Evaluation Tool prior to receiving the CPE certificate. The tool's questions will start immediately following the CPE exam.*

This article has been approved for 1 CPEU, Level 2; suggested Learning Needs Codes 4010, 4020, 4070, 8010 and Performance Indicators 8.2, 12.3, 12.4. This CPE is available until Feb 17, 2023.

## FNCE® 2019 Recap

By Kerry Clark, RDN, CD  
Member Services Chair

The 2019 Food & Nutrition Conference and Expo® took place this year in the city of LOVE Philadelphia, PA October 26<sup>th</sup>-29<sup>th</sup>. Academy President Terry J. Raymond, MA, RDN, LD, FAND opened the conference introducing members that represent diversity in the Academy stating “Just as nature brings together a vast mosaic of beauty, Academy members create a distinct, diverse and remarkable mosaic – a pattern of improbable beauty and unique qualities”. Under her leadership, she stated her goal is to help each of us maximize the endless opportunities that come with living and practicing in an era of nonstop and ever-accelerating change.

To support her goals, keynote speaker Dr. Marty Makary, surgeon / healthcare futurist and best-selling author of *The Price We Pay: What Broke American Health Care and How to Fix It*, used entertaining stories to bring to light the complexity of healthcare in the United States, and to illustrate the decisions that await policy makers and those receiving care. Dr. Makary highlighted both the exciting and positive changes in healthcare as well as concerning trends.

This year’s program included a track on diversity within our practice and Diversify Dietetics Co-Founder Tamara Melton, MS, RDN, CPHIMS was the recipient of the first-ever Excellence in Practice Diversity Promotion Award. The sessions were exceptional and too numerous to list but a trip to Philly would not be complete without a scientific session titled “Craft Beers: History and Sustainability in Healthy Kitchens”!!



L to R front row: Cassie Whiddon, Whitney Duddey, Ann Childers, Sandi Morris, Kelly Danis, Kathy Allen. L to R back row: Wendy Phillips, Kerry Clark, Angie Hasemann Bayliss, Deb Hutsler, Terese Scollard, Jennifer Doley, Gail Seche, Caroline Steele, Donna Belcher, Gisele Leger, Jennifer DeHart, Kirsten Godwin

Your CNM DPG Executive Committee met in the morning on Saturday Oct. 26<sup>th</sup> for one of our two in person meetings throughout the year. Much work centered on creating a CNM DPG product store within our web site, creating opportunities for an increase in CNM members wishing to volunteer within the DPG, and planning for the Symposium in 2020. We hope our stepped-up social media efforts kept our members up to speed with all that was happening at FNCE® this year on LI, FB, Twitter and Instagram (thank you to Communications Chair Cassie Whiddon)!



Christina Rollins & Wendy Phillips at CNM / DNS Member Reception

There was excellent attendance Saturday evening for our first ever joint CNM DPG and DNS DPG Member Reception! CNM DPG Chair Wendy Phillips and DNS DPG Chair Christina Rollins greeted friends and colleagues with a short program including recognition of award recipients from both DPGs. We were so pleased to have one of the five recipients of the 2019 Student Stipend from the Academy Foundation (supported by your CNM DPG to help offset student expenses in attending FNCE®) attend the reception. Amanda Krieger networked with some legends at the reception and paused for a photo op.



Amanda Krieger, recipient of an Academy Student Stipend

On Sunday at the CNM DPG Spotlight Session, members and leaders Wendy Philips, MS, RD, CNSC, CLE, NWCC, FAND along with Caroline Steele, MS RD, CSP, IBCLC, FAND and moderator Gisele Leger,



Caroline Steele and Wendy Phillips receiving their Excellence in Practice Awards

MS, RDN, LDN, CNSC, FAND presented “Influencing Leadership and Inspiring Change at Every Career Stage”. While both these professionals have had impressive careers and volunteer activities, their stimulating and thought-provoking information was validated by the fact that each received Academy recognition at the start of this session. Wendy was the recipient of the Excellence in Practice Management Practice Award and Caroline received the Excellence in Practice Clinical Practice Award.

Monday brought the DPG/MIG Showcase and Member Marketplace with lots of activity at the CNM booth. Hope you stopped by for your CNM swag and to see the many tools highlighted in our “Thyme to Grow your Career” themed booth.

If you missed the motivation, career development and catching up with colleagues this year, make plans now to attend FNCE® in Indianapolis, IN October 17-20, 2020!



Donna Belcher, Kerry Clark and Caroline Steele at the CNM booth at the DPG / MIG Showcase

# CNM DPG Announcements

## Quality Performance Improvement Sub-Unit Report

By Donna Belcher, MS, RD, LDN  
QPI Sub-Unit Chair

In the previous newsletter, a variety of QPI Top-Ten 2019 Award winning abstracts were featured. This issue focuses on 2019 abstracts on outpatient topics. We hope to see you at the 2020 CNM Symposium to look over and vote for People's Choice! It's never too early to get another project going, or to start writing one up for 2021... maybe these will give you some ideas. Check out the QPI Sub-Unit section of the CNM DPG website for more ideas and tips.

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### **Establishing an Outpatient Nutrition Referral Process to maximize Efficiency and Track Reimbursement** by Tara Eichert, RD, CNSC, LDN from Columbus Regional Healthcare System (Whiteville, NC)

After a review of outstanding outpatient nutrition referrals and community needs, it was decided that this should be a major focus for a quality improvement project. Columbus County, NC is ranked 98th in regards to most unhealthy counties. At that time, there were 21 outstanding referrals received from December 2017 to June of 2018. A review of previous processes was completed to verify how referrals were received and scheduled. A year-to-date review of charges and reimbursement from outpatient nutrition consults, using MNT 97803 and MNT 97802, was also completed. The surgical weight loss program at our facility had started experiencing growth, thus prior outpatient nutrition consults for this service were evaluated in the same capacity. Discussion with other disciplines to establish new practices was imperative and helped to facilitate effective strategies.

Once in place, a 5 month review was completed and it was found that charges had increased by 129% and reimbursement increased by 224%. Furthermore, the time between receiving a referral and patient appointment had reduced by 80%. We also found that surgical weight loss had grown to support 60-80% of outpatient nutrition revenue. Several barriers were found throughout this process, including higher than expected no show rates and non-covered visits. Through ongoing meetings with other disciplines, these concerns were worked through and ultimately an efficient process was established. We plan to continue monitoring this data and review community health reports as available.

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### **Improving Type 2 Diabetes Management Comprehension and Promoting Adherence in Patients with Uncontrolled Diabetes through Self-Care Behavior Education, the Teach-Back Method, and Motivational Interviewing**

by Ambika Chawla, MS, RD, CNSC from North Shore University Hospital, Northwell Health (Manhasset, NY)

Diabetes mellitus (DM) is a progressive disease that requires lifelong management to prevent or delay complications. While many factors may play a role in uncontrolled DM, knowledge deficit and limited adherence

to lifestyle changes are often involved; thus, diabetes self-management education (DSME) and support is encouraged. Studies show improvement in glycosylated hemoglobin and a decreased risk of complications in individuals who receive DSME. Despite this, many patients fail to follow up with healthcare providers, resulting in less stringent adherence to recommendations.

A QI project was developed to help fill gaps in both knowledge deficit and adherence to behavior modifications in T2DM patients with an HbA1c >8.0% admitted to two of Northshore University Hospital's cardiac units. Baseline comprehension and adherence to categories based on the AADE's 7 Diabetes Self-Care behaviors were assessed, and individualized education and motivational interviewing was provided by an RD, CDE on an initial and a follow-up visit. The "teach-back" method was used to ensure understanding, and a handout was developed that summarized individual recommendations, provided outpatient contact information, and encouraged SMART GOAL setting.

Results revealed an improvement in comprehension by an average of 2.6 self-care categories, with significant improvements shown in regards to healthy eating, glucose monitoring, and problem solving. Addressing these gaps in knowledge and adherence may lead to improved glycemic control and ultimately less hospital re-admissions, along with increased patient satisfaction and better understanding of their individual management goals. Similar methods can be used hospital-wide to provide more comprehensive DSME for improved outcomes.

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### **Implementing Virtual Health to Increase Outpatient Nutrition Clinic Completion Rates**

by Amy Holcombe, MS, RD, LD from Children's Health (Dallas, TX)

Children's Health outpatient nutrition clinic had a low visit completion rate of 46%, trailing a hospital average of 60% in 2018. An opportunity existed to leverage virtual visits to provide families a more convenient method of connecting to a dietitian.

The Clinical Nutrition Manager (CNM) worked with the Virtual Health team to create a Clinical Nutrition "practice" in the existing virtual health platform. The Virtual Health team trained the dietitians on using the platform. The CNM created a guide for the clinic schedulers and dietitians on how to sign in and see patients. The dietitians completed mock visits to practice and troubleshoot the platform. The CNM marketed the virtual visits to referring clinics and instructed on how to refer for a virtual visit.

Implementing virtual visits resulted in an increased completion rate for virtual vs in-clinic visits (70.2% vs 45.8%). For 2018, virtual visits were 1.4% of the total appointments scheduled. The three-month rolling completion percentage increase for total appointments was 0.76%. This number will continue to rise as virtual visits increase.

Virtual visits were initially implemented for diet educations, but we learned all types of visits, e.g. g-tube evaluations, worked well. One barrier being worked on is having the platform in Spanish. Referrals and appointment completion rate are expected to increase as we continue marketing this service to referring providers. This will increase dietitian productivity and revenue. As the organization continues to grow, virtual visits will allow dietitians to support remote clinics without having to send staff off campus.

# Research Committee Report

By Barbara Isaacs Jordan, MS, RDN, CDN, Research Committee Co-Chair

CNM's Research Committee continues to participate and collaborate with the Academy's Nutrition Research Network for the ***Malnutrition Clinical Characteristics (MCC) and Staffing Optimization Study***. This study will validate the Academy/ASPEN's malnutrition clinical characteristics. The study will also examine the amount and level of registered dietitian nutritionists' care needed to improve patient outcomes, both overall and in the context of malnutrition.

The research study protocol, data collection and consent forms were developed, and IRB approval was granted. Recruitment was initiated, with informational webinars conducted. The goal is to recruit up to 135 sites: 60 adult and 60 pediatric acute care sites for the main study, and up to 15 additional sites for the NFPE inter-rater reliability measurements.

Here is status of the study, as of January 28, 2020:

- Currently onboarding 100% (60) of adult and 83% (50) of pediatric sites for the main study.
- Of these sites, 28% have IRB approval and 54% have fully executed site agreements.
- Fifty of 120 (42%) research RDNs have been trained. The remainder of the study trainings are planned for spring/summer 2020.
- Data collection is in progress at 23 sites (15 adult + 8 peds).
- So far, 175 adult patients (94 in MCC subgroup) and 111 peds patients (55 in MCC subgroup) have been enrolled.

REDCap and ANDHII databases for the study have been created, tested and are being actively used. Preliminary descriptive statistics have been completed on small subsets of data.

CNM would like to thank the sites that have volunteered to participate in this study to date. The Research Committee will continue to update CNM members as the study progresses.

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# Reimbursement Committee Report

Sandi Morris, RD, CDN, FAND, Reimbursement Chair

The Reimbursement Committee is continuing work on a Pocket Guide for Outpatient RDNs. The pocket guide will be a general tool to include assessment principles for a variety of diagnoses, counseling techniques, sample NCP/PES statements, measuring outcomes, predictive equations, and a guide to other resources. It is meant to be short and concise, and an easy-to-use resource. Our plan is to have it ready to submit to the Academy for publication this year.

If you have questions about implementing or improving a profitable outpatient medical nutrition therapy program, take advantage of the resources available on the CNM website under the Resource Library / Reimbursement, as well as on the Academy website [eatrightpro.org](http://eatrightpro.org) under the Payment tab. Another valuable tool is the *MNT Provider*, published by the Academy and free to all Academy members.

Increasing access to care means being reimbursed for the valuable services your facility provides to your patients. Contact Sandi Morris if you would like more information on how to get involved:

[smorris@goshenhealth.com](mailto:smorris@goshenhealth.com).

## Featured Member: Byron Richard, MS, RD, CDE



### Briefly describe your current job and relevant past positions/jobs.

I have been the CNM for University of California San Diego Health for 6 years. I worked as a Food Service Director for 8 years in Houston, TX and a Diabetes Management Coordinator, and a Patient Services Manager in New Orleans, LA and a clinical RD.

### What do you love most about your job?

The ability to create and manage a group of amazing RDs and Diet Techs. UC San Diego Health is a teaching institution and I have the ability to work with many outstanding professionals. Research is at our fingertips and we are involved in many committees that implement new programs and processes.

### What is the most challenging part of your job?

I have so many irons in the fire it is difficult to keep up at times. There are so many service lines and ancillary groups that I work and this vast amount of knowledge and people to keep up with can be challenging.

### What advice do you have for dietitians new to management, or for those interested in becoming managers?

Go for it. Listen twice as much as you speak. Have regular meetings for feedback and an opportunity for staff to share concerns/thoughts. Ask for help with your elders, you don't know everything and never will. Hire the best – all my staff are far smarter than me. Be truthful. Don't get caught in minutia if it derails your time or project. Squirrel away some quiet time and time to think about the big project.

### Describe what you think the ideal role of the RD should be 30 years from now. What do you think we need to do as a profession to get to that point?

The advent of NFPE allows us to be a more hands-on profession. I think the more hands-on we become secures our future. If we could all place NG tubes, place diet orders, etc. this would help the profession. We cannot be simply nutrition educators in the inpatient setting, we have to be integrated into the whole system. This is vague but there are so many opportunities. Why couldn't we have Wound Care RDNs? We could take care of the whole wound.

### If you couldn't be a dietitian anymore, what profession would you choose?

I'd run a no-kill shelter for animals or work with foster kids. I have an adopted son.

#### Future Dimensions In Clinical Nutrition Management

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Interested in contributing an article to the newsletter? Topics of interest include leadership, management, innovations in clinical practice, research and outcomes, nutrition legislation and public policy, reimbursement and coding, informatics, healthcare reform, and many others. If interested, please contact an editor.

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