



## Optimizing the Electronic Health Record for Safety in the Parenteral Nutrition Workflow

The Electronic Health Record (EHR) requirement began in 1991 when the Institute of Medicine called for transition to EHR within 10 years. This was a mandate to transition the patient health record from paper to an electronic format with the goal of improving the quality and safety of patient care. The intent was to make the patient's health record information more accessible to physicians, providing medical decision-making support in real time and allowing patients and providers to communicate regularly and securely. Some of the major events that followed include Health Insurance Portability and Accountability Act (HIPAA), introduced 1996, to standardize electronic healthcare transactions and national identifiers for providers. In 2004, a National Coordinator for Healthcare Information Technology was appointed by then President Bush, and was charged with developing and implementing an interoperable Health Information Technology (HIT) infrastructure. A goal was set to have all Americans treated with EHR by 2014. In 2009, the Health Information Technology for Economic and Clinical Health (HITECH) Act established incentives for providers and hospitals to implement EHRs. Then in 2015, the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) switched reimbursement calculations to a Value-Based Care Payment System based on EHR data.

A survey launched from ASPEN in 2012<sup>1</sup>, which helped to measure the safety and effectiveness of using the EHR to complete nutrition documentation; and order oral diets, oral nutrition supplements, tube feedings and parenteral nutrition. Results showed that only 58% of healthcare organizations had precautions in place to prevent errors and patient harm associated with parenteral nutrition (PN). As a result of the survey, in 2014, ASPEN's Clinical Informatics Committee was formed, and later published the [Parenteral Nutrition Safety Consensus Recommendations](#), advising that PN should be prescribed using standardized electronic orders via a computerized provider order entry (CPOE) system.<sup>2</sup> This Safety Consensus served as a wake-up call to EHR vendors, programmers, implementation teams, and nutrition clinicians, that the nutrition content of current EHRs needed to be improved, and nutrition clinicians needed to be involved. A follow-up ASPEN survey in 2014-2015<sup>3</sup>, after the

PN Safety Consensus Recommendations were published, showed little improvement in using to EHR to safely and effectively order PN.

Additional efforts to optimize the electronic health record for the PN ordering process followed in 2015, with the formation of a work group consisting of experts in the fields of PN, EHR technology, CPOE functionality and Health Information Technology. This work group published [A Call to Action for Optimizing the Electronic Health Record in the Parenteral Nutrition Process](#) in October 2018.

The work group's consensus statement included five key functionalities necessary for EHRs to safely provide PN.<sup>4</sup>

1. The PN order and label should be standardized.
2. Systems should incorporate clinical decision support with requirements and warnings for macronutrient and micronutrient dosing, toxicity, and incompatibilities in PN.<sup>3</sup>
3. EHR interfaces, interoperability, and workflows should involve automated compounding devices (ACDs) to improve safety and minimize the risk for errors.
4. EHRs should include the functionality to order cyclic PN.
5. EHRs should include the functionality to transition patients from hospital PN orders to home PN orders and vice versa.

The following is a *summary* for EHR PN ordering best practices:

1. The PN order and label should be standardized.
  - a. In 2007, ASPEN published a statement on PN standardization that advocated for a standardized process to reduce variation and promote uniformity among healthcare organization and clinicians.<sup>5</sup> Standardization is an error-prevention strategy for creating lasting system changes for the safe use of PN and medications.<sup>5</sup> Standardized processes for PN ordering, labeling, nutrition requirements, screening, administration and monitoring are recommended. Standardized PN orders and matching bag labels are supported by Institute for Safe Medication Practices ([ISMP](#))<sup>6</sup>, ASPEN 2004

Safe Practices<sup>7</sup>, [ASPEN 2007 Statement of on PN Standardization](#)<sup>5</sup>, and the [ASPEN 2014 Consensus Recommendations](#).<sup>2</sup>

- b. The ASPEN PN Safety Consensus Recommendations stated that all PN ingredients shall be ordered as amounts/day for adult patients and amounts per kilogram per day in pediatric and neonatal patients.<sup>2</sup>
  - c. PN bag labeling should match the sequence of ingredients in the PN order template within the EHR order form.<sup>8</sup>
    - i. See examples PN Orders and labels: [e4-e9 in A Call to Action for Optimizing the Electronic Health Record in the Parenteral Nutrition Workflow](#)
2. Systems should incorporate clinical decision support with requirements and warnings for macronutrient and micronutrient dosing, toxicity, and incompatibilities in PN. The following metrics are from ASPEN guidelines:
- a. Adult daily doses for macro and micronutrients in PN admixture:
    - i. See Table 1, p. e11 <https://doi.org/10.1002/ncp.10095>
  - b. Neonatal and pediatric daily and maximum doses of macro and micronutrients in PN admixtures:
    - i. See Table 3, p. e13-14 <https://doi.org/10.1002/ncp.10095>
  - c. Adult limits for daily dose, final concentration or infusion rates for macronutrients and micronutrients for 2-in-1 and 3-in-1 PN admixtures to prevent toxicities or solubility incompatibilities:
    - i. **Table 2.** Adult Limits for Daily Dose, Final Concentration, or Infusion Rates for Macronutrients and Micronutrients for 2-in-1 (Dextrose and Amino Acids Only) and 3-in-1 (Dextrose, Amino Acids, and Lipid Emulsion Altogether) Parenteral Nutrition Admixtures to Prevent Toxicities or Solubility Incompatibilities p. e12 <https://doi.org/10.1002/ncp.10095>
  - d. Stability – acceptable amounts of divalent cations (calcium and magnesium) prevent destabilizing 3:1 infusion.
    - a. See Table 2, p. e12 <https://doi.org/10.1002/ncp.10095>
  - e. Compatibility – prevent precipitation with the minimum of calcium-phosphorus 8 mEq/L and 15 mMol/L respectively.
    - a. See Table 2, p. e12 <https://doi.org/10.1002/ncp.10095>
  - f. Point or prescribing – real time alerts to prescriber at the time of order entry and verification/review process.
    - a. Ensuring delivery of adequate nutrients
    - b. Avoiding nutrient deficiencies
    - c. Preventing excessive daily doses and concentration of nutrients
    - d. Prevent nutrient toxicities
    - e. Prevent PN solution instabilities
  - g. PN admixture formula included on the electronic medication administration record.

**TABLE 2.** Adult Limits for Daily Dose, Final Concentration, or Infusion Rates for Macronutrients and Micronutrients for 2-in-1 (Dextrose and Amino Acids Only) and 3-in-1 (Dextrose, Amino Acids, and Lipid Emulsion Altogether) Parenteral Nutrition Admixtures to Prevent Toxicities or Solubility Incompatibilities

|  |
|--|
| 1. <b>Amino Acids</b> –  |
| √ Final Concentration Limits –   |
| • 2-in-1 PN – no specific limits   |
| • 3-in-1 PN – should be greater than or equal to 4% to avoid destabilizing the admixture <sup>7,20,21</sup>  |
| √ Daily Dose – no specific limits  |
| √ Infusion Rates – no specific limits  |
| 2. <b>Dextrose</b> –   |
| √ Final Concentration Limits –   |
| • 2-in-1 PN – no specific limits   |
| • 3-in-1 PN – should be greater than or equal to 10% to avoid destabilizing the emulsion <sup>7,20,21</sup>  |
| √ Daily Dose – no specific limits  |
| √ Infusion Rates – generally less than or equal to 4 mg/kg/min for critically ill patients and less than or equal to 7mg/kg/min in stable patients, <sup>1</sup> but infusion rates need to be based on patient’s individual needs and co-morbidities  |
| √ Maintain blood glucose levels less than or equal to 180 mg/dL <sup>1</sup>   |
| 3. <b>Fatty Acids</b> –  |
| √ Final Concentration Limits –   |
| • 2-in-1 PN – not applicable (infused separately from PN admixtures with available products of 10% or 20% ILEs) <sup>17</sup>  |
| • 3-in-1 PN – should be greater than or equal to 2% to avoid destabilizing the emulsion <sup>7,20,21</sup>   |
| √ Daily Dose –should not exceed 60% of total energy or 2.5 g/kg/day <sup>17</sup>  |
| √ Infusion Rates – should be administered at a rate less than or equal to 0.11 g/kg/hr to avoid overload of the reticuloendothelial system, which can cause pulmonary, hepatic, and platelet dysfunction; <sup>10,21-23</sup> to minimize the risk of infection, individual ILE containers should not hang any longer than 12 hours, while ILE within 3-in-1 PN can hangup to 24 hours a day. <sup>10,21</sup> |
| √ Maintain serum triglyceride levels less than or equal to 400 mg/dL <sup>1</sup>  |
| 4. <b>Mineral</b>  |
| √ Calcium <sup>b</sup> – final concentration of calcium is limited by calcium/phosphorus stability curve, but a safe limit is 8 mEq/L;to avoid instability for 3-in-1 PN admixtures, the final concentration of the combination of magnesium and calciumshould not exceed 20 mEq/L. <sup>20,21</sup>   |
| √ Phosphorus <sup>b</sup> – a safe final concentration is 15 mmol/L, but higher limits could be administered based on thecalcium/phosphorus solubility curves for the PN components being used. <sup>20,24</sup>   |
| √ Magnesium – final concentration of the combination of magnesium and calcium should not exceed 20 mEq/L to avoid instability in 3-in-1 PN admixtures. <sup>20,21</sup>  |
| 5. <b>Electrolytes<sup>a</sup></b>   |
| √ Potassium –  |
| • Final Concentration – should not exceed 100 mEq/L <sup>25,26</sup>   |
| • Rate:  |
| ○ Not on cardiac monitor – should not exceed 10 mEq/hr <sup>26</sup>   |
| ○ on cardiac monitor – should not exceed 20 mEq/hr <sup>26</sup>   |
| √ Sodium – final concentrations of potassium and sodium combined should not exceed 150 mEq/L to avoid instabilityof 3-in-1 PN admixtures; <sup>20,21</sup> while there are no specific limits for 2-in-1 admixtures, exceeding 154 mEq/L of sodiumwill result in a hypertonic admixture and should be avoided.   |
| √ Acetate – no specific limit  |
| √ Chloride – no specific limit.  |
| 6. <b>Vitamins and Trace Elements</b> – see Table 1  |
| 7. <b>Osmolarity</b> – no specific limits if administered via central venous catheter but should be less than or equal to 900 mOsm/L if administered via peripheral vein <sup>7,15,26,27</sup>   |

- a. EHR interfaces, interoperability, and workflows should involve automated compounding devices (ACDs) to improve safety and minimize the risk for errors.
- b. EHR and ACD should be fully integrated with no manual transcription PN orders, (including handwritten, verbal or fax transmission) preventing any re-entry of PN data. EHRs should also accommodate outsourcing PN compounding without requiring manual transcription of PN orders.
- c. A standardized additive sequence with ACD compounding, including calculations of total ingredients should match the EHR PN order and PN bag label.
- d. An alert should occur when formulation issues are identified. Modifications of PN order should be made in ACD software. Such modification should be electronically transmitted back to the EHR for prescriber approval and signature.
- e. Systems should give the ability to quickly change compounding products based on availability and shortages to prevent the ordering of unavailable products.
- f. Barcode scanning technology should be incorporated so PN orders are retrieved in the ACD by scanning the PN label barcode, as well as, hanging and exchanging products used on the ACDs to compound PN admixtures.
- g. **Clinical decision support (CDS)** is a computer application that analyzes data to help healthcare providers make decisions and improve patient care. The CDS should be configurable and used in both the EHR and the ACD, allowing for hard and soft stops, requiring mandatory fields, using drop down menus and providing calcium and phosphate warnings and solubility curves. Auto-population of previous days formula is helpful as well.
- h. EHRs should include the functionality to order cyclic PN with the ability to taper up and/or down as well as the ability to customize taper regimens.
  - a. Different manual taper-up and taper-down regimens should be available with the EHR.
- i. Table 4. Different Manual Taper-Up and Taper-Down Regimens That Should Be Available Within the HER. p.e19 <https://doi.org/10.1002/ncp.10095>
- j. EHRs should include the functionality to transition patients from hospital PN orders to home PN orders and vice versa. This would include transmitting a PN order electronically without the need for manual transcription.
  - a. See Figure 7 on p. e10 <https://doi.org/10.1002/ncp.10095>
  - b. Incorporating the above functionalities to the PN therapy workflow can improve the safety for patients receiving PN. Optimization of the EHR and CDS does not replace the requirement that the clinicians and caregivers need to be involved in the PN workflow must be adequately educated, trained and experienced in PN therapy.<sup>2</sup>

**TABLE 4.** Different Manual Taper-Up and Taper-Down Regimens That Should Be Available Within the EHR

| Taper Regimens | Taper Up  |   | Taper Down   |   |
|----------------|---|---|--|---|
|                | Time period   | Rate adjustment   | Time period  | Rate adjustment   |
| 1 hour/1 step  | <ul style="list-style-type: none"> <li>• Start infusion</li> <li>• 1 hour after start infusion</li> </ul>                                   | <ul style="list-style-type: none"> <li>• 1/2 full rate</li> <li>• Full rate + difference to make up for taper</li> </ul>                          | <ul style="list-style-type: none"> <li>• 1 hour to end of infusion</li> <li>• End of infusion</li> </ul>   | <ul style="list-style-type: none"> <li>• 1/2 full rate</li> <li>• Stop infusion</li> </ul>                          |
| 1 hour/2 step  | <ul style="list-style-type: none"> <li>• Start infusion</li> <li>• 30 minutes after start infusion</li> <li>• 1 hour after start</li> </ul> | <ul style="list-style-type: none"> <li>• 1/3 full rate</li> <li>• 2/3 full rate</li> <li>• Full rate + difference to make up for taper</li> </ul> | <ul style="list-style-type: none"> <li>• 1 hour prior to end of infusion</li> <li>• 30 minutes to end of infusion</li> <li>• End of infusion</li> </ul>    | <ul style="list-style-type: none"> <li>• 2/3 full rate</li> <li>• 1/3 full rate</li> <li>• Stop infusion</li> </ul> |
| 2 hour/2 step  | <ul style="list-style-type: none"> <li>• Start infusion</li> <li>• 1 hour after start infusion</li> <li>• 2 hours after start</li> </ul>    | <ul style="list-style-type: none"> <li>• 1/3 full rate</li> <li>• 2/3 full rate</li> <li>• Full rate + difference to make up for taper</li> </ul> | <ul style="list-style-type: none"> <li>• 2 hours prior to end of infusion</li> <li>• 1 hour prior to end of infusion</li> <li>• End of infusion</li> </ul> | <ul style="list-style-type: none"> <li>• 2/3 full rate</li> <li>• 1/3 full rate</li> <li>• Stop infusion</li> </ul> |

## Author Biography

**Connie Brewer, RPh, BCNSP** is a 1983 graduate of The Ohio State University College of Pharmacy. She joined the Nutrition Support Service at Mount Carmel West in 1986, and was board certified in Nutrition Support in 1994. Connie has held offices in OSPEN including newsletter and pharmacist-at-large. She has also participated in ASPEN's Nutrition Support Review Course committee for several years. Connie currently practices at Mount Carmel Grove City hospital and is involved with the TPN Task Force for the EPIC build scheduled for 2020.

## Bibliography

1. Vanek VW. Providing nutrition support in the electronic health record era: the good, the bad, and the ugly. *Nutr Clin Pract.* 2012 Dec;27(6):718-37.
2. Ayers P, Adams S, Boullata JL, Gervasio J, Holcombe B, Kraft MD, et al. ASPEN parenteral nutrition safety consensus recommendations. *JPEN.* 2014;38(3):296-333.
3. Vanek VW, Ayers P, Charney P, Kraft M, Mitchell R, Plogsted S, et al. Follow-up survey on functionality of nutrition documentation and ordering nutrition therapy in currently available electronic health record systems. *Nutr Clin Pract.* 2016;31(3):401-15.
4. Vanek V, Ayers P, Kraft M, Bouche J, Do V, Durham C, et al. A call to action for optimizing the electronic health record in the parenteral nutrition workflow. *Nutr Clin Pract.* 2018;33(5):e1-e21.
5. Kochevar M, Guenter P, Holcombe B, Malone A, Mirtallo J. ASPEN statement on parenteral nutrition standardization. *JPEN.* 2007;31(5):441-8.
6. Institute for Safe Medication Practices (ISMP). *ISMP Targeted Medication Safety Best Practices for Hospitals*; 2017. <https://www.ismp.org/guidelines/best-practices-hospitals>
7. Mirtallo J, Canada T, Johnson D, Kumpf V, Petersen C, Sacks G, et al. Safe practices for parenteral nutrition. *JPEN.* 2004;28(6):S39-S70.
8. Boullata JL, Gilbert K, Sacks G, Labossiere RJ, Crill C, Goday P, et al. ASPEN clinical guidelines: parenteral nutrition ordering, order review, compounding, labeling and dispensing. *JPEN.* 2014;38(3):334-77.



## SAVE *the date!*

### 2019 Fall Nutrition Symposium

#### NUTRITION SUPPORT COMING INTO FOCUS FOR 2020!

*St. Elizabeth Hospital, Youngstown, Ohio*

Thursday, 10/3/2019, 8:15 a.m. to 12 noon

This year's symposium will include a variety of topics including:

- **From Liver Failure to Transplantation: Exploring the Role of Nutrition**  
Jeanette Hasse, PhD, RD, LD FADA, CNSC
- **Whole Food Tube Feeding – a Review of the Options**  
Lisa Epp, RDN, LD, CNSC
- **Evaluating and Treating Eating Disorders**  
Dennis Gibson, MD, FACP, CEDS, and Meghan Marie Foley, RD

*Cleveland Clinic, Intercontinental Hotel, Cleveland, Ohio*  
Friday, 11/15/2019

- **Cutting Edge Updates in Malnutrition**  
This program will present the latest information on assessing malnutrition, evaluating sarcopenia, frailty, documentation, coding, and updated on government regulations. Click [here](#) more information and to register online.

You won't want to miss it so mark your calendar today!

### ASPEN CE/Educational Program Offering Updates

#### 1 ASPEN Collaborates with the American Society of Hospital Pharmacists (ASHP) to Develop Nutrition Support Certificate Program

A new continuing education program — designed for pharmacists, physicians, and nurses — teaches the fundamental concepts related to nutrition support care for adult patients.

##### Highlights of the Nutrition Support Certificate:

- 11 education modules providing 100% online learning
- Topics include: nutrition screening and assessment, nutrition requirements, nutrition support access, parenteral and enteral nutrition (ordering, preparation, distribution), nutrition support complications, monitoring and error reporting, and nutritional requirements for adults receiving nutrition support
- 19.25 credit hours for pharmacists, physicians and nurses

This is a great program to share with your non-nutrition expert colleagues to help them understand the basics of nutrition support and support ASPEN's mission to provide appropriate nutrition care to all patients. For more information, click [here](#).

#### 2 Webinar Programs for 2019 Malnutrition Awareness Week™

See our webinar section for the list of ASPEN's Malnutrition Awareness Week (MAW) webinars, September 23-27, 2019. For more information, visit ASPEN's MAW [webinar schedule](#). In addition to educational CE webinars, there will be on-demand videos and other support resources.

**Become an ASPEN Malnutrition Awareness Week Ambassador** and help us raise awareness of malnutrition and educate healthcare professionals on early intervention. Ambassadors get free access to our 2019 MAW webinars. Learn more at [nutritioncare.org/MAWpartners](http://nutritioncare.org/MAWpartners).

*Malnutrition Awareness Week™ is a mark of the American Society for Parenteral and Enteral Nutrition (ASPEN)*

### 3 Upcoming ASPEN Webinars

#### SEPTEMBER 23, 2019

##### Malnutrition Across the Spectrum: A Case-Based Approach from the Acute to the Chronic Critically Ill Patient

###### Learning Objectives

1. State and explain the differences in malnutrition between the acutely malnourished patient and the chronically ill malnourished patient.
2. Discuss the changing focus on how malnutrition is addressed through the stages of recovery, including during transitions of care.
3. Address the recommendations for re-assessing nutrition status through recovery.
4. List the Medicare requirements for nutrition care in both long-term care and home care settings with regards to available resources.

###### Faculty

David Evans, MD, FACS, Trauma Surgeon, Ohio Health Trauma Services, Columbus, Ohio

Suzanne Cryst

Antoinette Neal RN, BSN, CRNI, VA-BC, CNSC, Center for Connected Care Infusion Pharmacy at Home; Cleveland Clinic, Independence, Ohio

#### SEPTEMBER 24, 2019

##### Improving Nutrition Status in the Cancer Patient with Nutritional and Pharmacological Therapies

###### Learning Objectives

1. Identify candidates for nutrition support therapy.
2. Discuss options for acute care and home care nutrition therapy.
3. Define pharmacological therapies and how they may be used in malnourished patients.

###### Faculty

Todd Mattox, PharmD, BCNSP, Medical and Surgical Clinical Pharmacist, Moffitt Cancer Center, Tampa, Florida

Mary Marian, DCN, RDN, CSO, FAND, Assistant Professor of Practice/DPD Director, Department of Nutrition Sciences, University of Arizona, Tucson, Arizona

## SEPTEMBER 25, 2019

### Implementing Nutrition Screening: Lessons Learned in Facilitating Practice Change

#### Learning Objectives

1. Describe lessons learned implementing and evaluation a nutrition screening program.
2. Outline how to facilitate practice change in the context of nutrition care and activities.
3. Apply nutrition screening and practice changes.

#### Faculty

Heather Keller, PhD, RD, Schlegel-University of Waterloo Research Institute for Aging, Research Chair Nutrition & Aging, Professor, Department of Kinesiology, University of Waterloo, Waterloo, Ontario, Canada

Jack Bell, PhD, AdvAPD, Advanced Dietitian, Conjoint Principal Research Fellow & MRFF Translating Research into Practice (TRIP) Fellow. School of Human Movement and Nutrition Sciences, The University of Queensland & Allied Health, The Prince Charles Hospital, Metro North HHS, Chermside, Queensland, Australia

## SEPTEMBER 25, 2019

### Pediatric Feeding Disorders: Identification and Interventions

#### Learning Objectives

1. Define different types of feeding disorders, including food aversion, and why they develop.
2. List methods for early identification and diagnosis of feeding disorders.
3. Discuss the importance of a multi-disciplinary health care team, including psychological and behavioral health in managing feeding disorders.
4. Explain how feeding disorders have direct effects on all family members involved in the care of the patient.

#### Faculty

Sarah Edwards, DO, CNSC, Pediatric Gastroenterologist; Medical Director - Interdisciplinary Pediatric Feeding and Swallowing Program; Medical Director - Ready, Set, Grow Clinic; Associate Professor, Department of Pediatrics at University of Missouri-Kansas City School of Medicine; Division of Pediatric Gastroenterology, Hepatology and Nutrition at Children's Mercy Kansas City, Kansas City, Missouri

Victoria Hackerd, RD, Regional Director of Operations, Compass One Healthcare, Chicago, Illinois

Laura Slosky, PhD, Licensed Psychologist, Divisions of Developmental and Behavioral Sciences and Gastroenterology, Children's Mercy Kansas City; Assistant Professor of Pediatrics, University of Missouri-Kansas City, Fairway, Kansas

## SEPTEMBER 26, 2019

### Moving Beyond the Malnutrition Diagnosis: A Multi-Disciplinary, A Case-Based Approach to Implementing Nutrition Interventions

#### Learning Objectives

1. Discuss how nutrition clinicians can start the conversation with the medical team/physician in order to implement nutrition interventions, specifically enteral and parenteral nutrition.
2. Identify key members of a multi-disciplinary team who should be involved during implementation.
3. Debunk the myth that parenteral nutrition carries more risk than benefit in malnourished patients who are appropriate candidates for parenteral nutrition.

#### Faculty

Mark DeLegge, MD, Professor of Medicine; Medical University of South Carolina; Partner: DeLegge Medical, Awendaw, South Carolina

Carol McGinnis, DNP, APRN-CNS, CNSC, Clinical Nurse Specialist for the Nutrition Support Team; Sanford USD Medical Center, Sioux Falls, South Dakota

Andrea K Jevonn, MEd, RD, LD, CNSC, Nutrition Support Dietitian, Advanced Practice II; Nutrition Support Team; Cleveland Clinic, Cleveland, Ohio

Angela Bingham, PharmD, BCPS, BCNSP, BCCCP, Associate Professor of Clinical Pharmacy; PGY2 Critical Care Residency Program Director; Philadelphia College of Pharmacy; University of the Sciences, Philadelphia, Pennsylvania

## SEPTEMBER 27, 2019

### Addressing Food Insecurity in the Malnourished Patient

#### Learning Objectives

1. Define food insecurity and list possible etiologies.
2. Explain how food insecurity can lead to malnutrition.
3. Address for whom, when, and in what settings food insecurity should be screened.
4. Discuss how health care providers can partner with community resources to combat food insecurity and malnutrition.

#### Faculty

Lorrie Young, MS, RD, LDN, CNSC, Clinical Nutrition Manager at Boston Medical Center; Instructor of Medicine at Boston University School of Medicine, Dedham, Massachusetts

Kim Madsen, MEd, RD, Director, Nutrition Services, Project Open Hand, San Francisco, California

## ASPEN General Updates

*Taken from ASPEN's Announcements*

### ASPEN's 2019-2020 Board of Directors



On June 1, Lingtak-Neander Chan, PharmD, BCNSP, took office as ASPEN's 43rd president. Dr. Chan is a board-certified nutrition support pharmacist and dedicated educator. He holds a number of integrated faculty and mentorship positions at the University of Washington. Dr. Chan's

primary research focus is on the absorption kinetics of micronutrients and drugs after bariatric surgery and other GI tract repairs. Read more about Dr. Chan.

Assuming the duties of president-elect is Todd Rice, MD, MSc; and Gail A. Cresci, PhD, RD, LD, CNSC, joins the board as vice president. Phil Ayers, PharmD, BCNSP, FASHP, continues to serve as secretary/treasurer. Nilesh Mehta, MD, provides continuing leadership as immediate past president.

Also continuing to serve on the board are members Leah Gramlich, MD; Cindy Hamilton, MS, RD, LD, FAND; Kris Mogensen, MS, RD, LDN, CNSC; and Pat Worthington, MSN, RN, CNSC; along with ex-officio member ASPEN Rhoads Research Foundation President Marion Winkler, PhD, RD, LDN, CNSC, FASPEN. Joining the board are Ryan T. Hurt, MD, PhD; and Anne M. Tucker, PharmD, BCNSP.

Leaving the board are ASPEN Past President, M. Molly McMahon, MD, FASPEN; Michael L. Christensen, PharmD; and Renay Tyler, DNP, ACNP. ASPEN is grateful for their years of leadership and support.

## Have You Considered Becoming More Active as an O.S.P.E.N. Member?

Looking for a way to spend some extra time with people who speak your language (professionally)? Do you have some knowledge or skills in nutrition support you would like to share with others? Would you like to meet others that can help you grow professionally and might even help brainstorm solutions to some of your most irksome challenges?

If you answered "YES!" to any of those questions, consider joining a committee or assisting as a board member for O.S.P.E.N.! Getting involved is easier than you think – simply contact a member of any committee, or even the president, for more information (roster is located at the end of this newsletter). Time commitments for committees and board positions vary, but many volunteers find options that easily fit into their current schedules.

## O.S.P.E.N. is on Facebook!



If you have not done so yet, please make sure to check us out on *Facebook* (<https://www.facebook.com/ospen.chapter>) and send us a friend request! Also, feel free to contact us directly via our O.S.P.E.N. email address at [ospenwebsite@gmail.com](mailto:ospenwebsite@gmail.com) if you do not have a *Facebook* account. We are looking forward to hearing from you!

## Job Advertisements

REGISTERED DIETITIAN — Gastroenterology  
Cincinnati Children's Hospital

06/13/2019

REGISTERED DIETITIAN - 37 hours pr/wk  
WIC

Richland Public Health  
Mansfield, Ohio

07/1/2019

NUTRITION SUPPORT DIETITIAN  
Bioscrip Inc.

The *O.S.P.E.N.* Access is produced by the Ohio Society for Parenteral and Enteral Nutrition.

### Managing Editors:

Ashley Bronston, MS, RDN, LD  
Kristen Roberts, PhD, RDN, LD  
Alaa Naway, RD, LD, CNSC  
Jaclyn Geitz MS, RDN, LD  
Andrea Kozak Jevenn, RD, LD, CNSC

### Layout and Design:

Carol Stokes

**ospen** | OHIO SOCIETY FOR PARENTERAL  
AND ENTERAL NUTRITION  
A Chapter of the American Society for Parenteral and Enteral Nutrition



# O.S.P.E.N. BOARD & COMMITTEE MEMBERS 2019

## **PRESIDENT**

Tiffany Rhoads, RD, LD, CNSC  
[tiffany.rhoads@abbott.com](mailto:tiffany.rhoads@abbott.com)

## **PRESIDENT-ELECT**

Cassie Fackler, RD, LD, CNSC  
[cassie.fackler@osumc.edu](mailto:cassie.fackler@osumc.edu)

## **PAST PRESIDENT**

Jill Fisher, RD, LD, CNSC  
[fisherj2@ccf.org](mailto:fisherj2@ccf.org)

## **SECRETARY**

Susan Meyer, MS RDN-AP, CNSC  
[meyers@ccf.org](mailto:meyers@ccf.org)

## **TREASURER**

M. Petrea Cober, PharmD, BCNSP, BCPPS  
[mcober@akronchildrens.org](mailto:mcober@akronchildrens.org)

## **DIETITIAN-AT-LARGE**

Ainsley Malone, MS, RD, LD, CNSC  
[Ainsleymalone1@gmail.com](mailto:Ainsleymalone1@gmail.com)

## **NURSE-AT-LARGE**

Antoinette M. Neal, BSN, RN, CRNI, VA-BC, CNSC  
[neala@ccf.org](mailto:neala@ccf.org)

## **PHARMACIST-AT-LARGE**

Connie Brewer, RPh, BCNSP  
[cbrewer@mchs.com](mailto:cbrewer@mchs.com)

## **PHYSICIAN-AT-LARGE**

Maurice-Pierre Pagé, MD  
[momastermind@gmail.com](mailto:momastermind@gmail.com)

## **COMMITTEE MEMBERS**

### **PROGRAM PLANNING COMMITTEE**

Vince Vanek, MD, FACS, FASPEN  
[vince\\_vanek@mercy.org](mailto:vince_vanek@mercy.org)

Ainsley Malone, MS, RD, LD, CNSC  
[Ainsleymalone1@gmail.com](mailto:Ainsleymalone1@gmail.com)

Megan Meek, RD, LD  
[mmeek@mercy.com](mailto:mmeek@mercy.com)

Michelle Tansy, RD, LD, CSP  
[Michelle.Tansy@nationwidechildrens.org](mailto:Michelle.Tansy@nationwidechildrens.org)

Monica Schaefer, MS, RD, LD, CNSC  
[monica.schaefer@osumc.edu](mailto:monica.schaefer@osumc.edu)

Berri Burns, RD, CNSC, LD  
[Burnsb3@ccf.org](mailto:Burnsb3@ccf.org)

Jean Campana, BSN, RN  
[jeantcampana@yahoo.com](mailto:jeantcampana@yahoo.com)

Sandy Austhof, MS, RD, LD, CNSC  
[austhos@ccf.org](mailto:austhos@ccf.org)

### **MEMBERSHIP COMMITTEE**

Jodie Turosky, RPh  
[jodie.zlotnik@stvincentscharity.com](mailto:jodie.zlotnik@stvincentscharity.com)

Jenni Keating, RD, LD, CNSC  
[Jennifer.Keating@mchs.com](mailto:Jennifer.Keating@mchs.com)

Kim Orben, MS, RD, CSO  
[orben@ohio.edu](mailto:orben@ohio.edu)

Marcia Nahikian-Nelms, PhD, RDN, LD, CNSC  
[Marcia.nahikian-nelms@osumc.edu](mailto:Marcia.nahikian-nelms@osumc.edu)

### **SCHOLARSHIP COMMITTEE**

Jamie Davila, RD, CNSC  
[davilaj2@ccf.org](mailto:davilaj2@ccf.org)

Denise Jezerski, RD, LD, CNSC  
[jezersd@ccf.org](mailto:jezersd@ccf.org)

Joy Lehman, PharmD, BCNSP  
[joy.lehman@osumc.edu](mailto:joy.lehman@osumc.edu)

### **NEWSLETTER AND WEBSITE COMMITTEE**

Ashley Bronston, MS, RDN, LD  
[ashley.bronston@abbott.com](mailto:ashley.bronston@abbott.com)

Kristen Roberts, PhD, RD, LD, CNSC  
[kristen.roberts@osumc.edu](mailto:kristen.roberts@osumc.edu)

Jaclyn Geitz, MS, RD, LD  
[Jaclyn.geitz@osumc.edu](mailto:Jaclyn.geitz@osumc.edu)

Alaa Nawaya, MS, RD, LD, CNSC  
[Nawayaa@ccf.org](mailto:Nawayaa@ccf.org)

Steve Plogsted, PharmD, BCNSP, CNSC  
[steve.plogsted@nationwidechildrens.org](mailto:steve.plogsted@nationwidechildrens.org)

Cassie Fackler, RD, LD  
[cassie.fackler@osumc.edu](mailto:cassie.fackler@osumc.edu)