Accreditation Council for Education in Nutrition and Dietetics

Academy of Nutrition and Dietetics

## Rationale for Future Education Preparation of Nutrition and Dietetics Practitioners

February, 2015 Updated: July, 2015 Updated: August, 2015 Updated: January, 2017 Updated: March, 2017 Updated: November, 2017 Updated: August, 2018

### **Focus: Input on Future Education Model**

- <u>Stakeholder Input on Future Education Model Recommendations</u>
- <u>Appendix A (Frequently Asked Questions Information Sheet)</u>
- <u>Appendix B (Input on Proposed Future Education Model Questionnaire)</u>

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#### STAKEHOLDER INPUT ON FUTURE EDUCATION MODEL RECOMMENDATIONS

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#### **EXECUTIVE SUMMARY**

Findings from the content analysis of the ACEND Future Education Model Feedback Survey are presented. Resultant themes varied widely, though more concerns were expressed than benefits. The most common perceived benefits of the proposed model were increased prestige among dietitians, elevation of the field to match the requirements of peer professions, increased knowledge and skill, and new career pathways. Prime concerns included compensation issues, job and internship availability, lack of justification for new requirements, cost to students and institutions, blurred delineation between levels, and adverse impact. Considerations and limitations based on the nature of the data are briefly discussed. A Frequently Asked Questions (FAQ) document to address questions and concerns in included in <u>Appendix A</u>

#### PURPOSE

The purpose of this project was to gather information from various stakeholders to determine reactions to the recommended future education model.

#### METHODOLOGY

ACEND<sup>®</sup> conducted an online survey to gather stakeholder comments related the recommended future model for an associate's degree program for nutrition health associates, a bachelor's degree program for nutrition and dietetics technicians, and a master's degree for dietitian nutritionists. A copy of the questionnaire is included in <u>Appendix B</u>. A total of 7,366 comments were reviewed; 3,671 from (50%) nutrition and dietetics practitioners, 2,150 (30%) from educators, 688 (9%) from students/interns, 460 (6%) employers, and 397 (5%) education or healthcare administrators.

Responses were assigned codes and grouped together, listed under either *Benefits* or *Concerns* within one of four topics: the *Master's Degree for Dietitian Nutritionist*, the *Bachelor's Degree for Nutrition and Dietetics Technician*, the *Associate's Degree for Community Nutrition and Health Assistant* (now termed Nutrition Health Worker), or the entire model. Major and minor themes were identified, with "major" defined as 25 or more weighted responses, and "minor" as between 5 and 25 responses. General "*perceived strengths*," "*concerns*," and "*additional comments*" were coded distinctly at first but later grouped in with the first three topics, as all significant themes identified under them were redundant with those previously listed. Groupings were re-analyzed and subdivided or consolidated as more and more data was reviewed (deductive and inductive analysis).

Given that the overall response rate was much higher among the "Educator of Nutrition and Dietetics Practitioner" and "Nutrition and Dietetics Practitioner" groups, it was necessary to include weighted adjustments when comparing response prevalence per theme. Despite this, the small sample sizes of the "Healthcare Administrator" and "Education Administrator" groups all but precluded identification of any themes. Additionally, it is difficult to say whether themes associated with Educators and Practitioners are truly specific to those groups or would otherwise have been emphasized by other groups as well. Sample bias may have colored the results obtained from this survey. Many of the responses were emphatic and polarized, indicating that only those with strong opinions participated—a large number of others who may have been pleased or unconcerned with the proposed changes may simply have not bothered to complete the survey. Other unknown factors may also have limited the sample of respondents, though this is impossible to ascertain without additional information.

Additional biases may have affected results, including response bias stemming from elements or cues within the preceding webinar. Some respondents also expressed confusion and misunderstanding of the material presented.

#### RESULTS

#### **Overview of Findings**

The responses analyzed were thoroughly mixed in terms of opinion, level of detail, and enthusiasm. The majority included concerns instead of benefits, and many focused on the master's degree prepared dietitian nutritionist rather than the bachelor's degree prepared nutrition and dietetics technician or the associate's degree prepared community nutrition and health assistant (now termed nutrition health worker), positions. Concerns were generally lengthier and expressed in more detail than perceived benefits. The most popular themes were often counterbalanced by less popular, complementarily opposing ones (e.g. predictions that salaries would increase versus others predicting they would not).

The most salient theme by far was concern for compensation levels, and the negative impact (or lack of positive change) the model would have in this regard. This was part of a larger monetary concern including cost of education; increased costs without future return on investment was predicted to lead to loss of talent and fewer dietitian nutritionists overall, raising additional concerns over adverse impact (the field would be limited to "affluent white women"). Respondents also suggested that current low levels of job and internship availability would be exacerbated by implementation of the model.

The most cited benefit of the new master's requirement was increased respect by other allied healthcare professions. Many alluded to these other fields as having set a necessary precedent, and encouraged dietetics to follow suit. The anticipated education requirements were viewed as a benefit to many, elevating the expertise throughout the field; others claimed they are unnecessary, and that experience is more valuable than time in the classroom. Some stated that master's level practitioners should be specialized instead of "generalists," and a few suggested doctoral degree prepared as specialists in addition to the proposed model. Educators expressed concern over implementation at their institutions, referencing high cost and a dearth of qualified instructors.

Competition among the three new roles was a recurring concern, related to employer (and public) confusion as to what the different skill sets and requirements of each would be. Lack of clarity raised the issue of job creation/availability, and employment of newly available under-qualified individuals (which would cost employers less) instead of Registered Dietitian Nutritionists (RDN). Respondents called for increased marketing efforts in an effort to solve this problem. Critics predicted dilution of the field and reliance on inadequate expertise.

Some saw the overall model as beneficial, providing new roles that would fill identified needs and job demand, as well as a logical career pathway. More, however, doubted that this would be the case, predicting competition between roles, friction between professionals with the same position but different levels of education and experience, and many of the issues previously mentioned. Difference in response prevalence among stakeholders is noted below each description.

#### **Master's Degree for Dietitian Nutritionist**

#### **Benefits (Major Themes)**

**Respect, Credibility, Prestige.** The most prevalent benefit noted was the increased credibility gained by a master's degree requirement. Respondents indicated that other healthcare professions do not respect them as experts in the field, and that elevating the profession by mandating higher education would rectify this. Emphasized by *all groups, especially Students*.

**Comparison with Other Fields.** Highly related to the theme above, many respondents cited effectiveness of similar models in other healthcare professions, particularly nurses and physical therapists. Emphasized by *Educators, Employers and Practitioners*.

**Increased Knowledge.** Respondents indicated that a broader level of knowledge would be a beneficial product of the new degree requirement. Emphasized across *all groups*.

**Specific Graduate Degree Skills.** Responses included certain skills that graduates would gain from a master's level education. Most commonly mentioned were research skills, followed by critical thinking skills, management skills, and communication skills. Emphasized by *Educators and Practitioners*.

**Increased Salaries.** A significant number of respondents anticipated higher salaries following the master's requirement. It should be noted that more responses indicated doubts that this would be the case. Emphasized by *Practitioners, Students and Educators.* 

#### **Benefits (Minor Themes)**

**Reduce Crowded Field.** Some respondents indicated that the new master's degree requirements would "reduce the influx of RDNs," regulating some of the high demand for jobs and internships and, in turn, possibly leading to higher salaries in the long run. Interestingly, an almost equal number of responses predicted negative consequences of this outcome. Emphasized by *Practitioners*.

**PhD Recommended for Specialists.** A portion of participants who applauded the current model recommended that a doctoral degree be required for specialists in the field, following the example of other healthcare professions (e.g. physical therapists). Emphasized by *Educators, Practitioners.* 

#### **Concerns (Major Themes)**

**Compensation Issues.** The most common theme among concerns of the new model centered on compensation issues: that is, worries about current and future salary levels. Respondents expressed doubts that salaries would increase commensurate with higher qualifications, as well as expressing dissatisfaction with current salary levels. Heavily coinciding with "Cost of Degree," the two themes combine into an overarching concern for Return on Investment of the degree. Some also cited concern

over lack of reimbursement under the current model, which may not improve (or worsen) post-changes. Emphasized across *all groups*.

**Cost of Degree.** Both the expense and time required for the master's concerned a large portion of respondents. Emphasized across *all groups*.

**Adverse Impact.** Concerns that higher education requirements would prevent minorities from entering the field were most common for the master's degree section. Predictably, these responses highly coincided with concerns over the cost of the degree. The dietetics field was repeatedly cited as being dominated by white women. Concerns that the requirements would deter men from the field were also expressed, though much less common. Emphasized by *Educators, Practitioners*.

**Educational Institution Concerns.** These concerns centered on problems with implementation of the new master's program at educational institutions. The most common concerns were availability of qualified instructors at the doctoral level and available funds. Additional concerns included: impact on existing undergraduate programs, institutional buy-in, closure of programs, and time required for implementation. Emphasized almost exclusively by *Educators, Educational Administrators*.

**Job Availability.** Respondents expressed concern that there would be low demand for the new master's degree position as described. Many also indicated that, as the new position would demand a higher salary, employers are likely to hire less qualified (i.e. bachelor degree) job candidates instead. Emphasized most by *Employers, Practitioners.* 

**Diluting the Field.** Responses related concern that requiring a generalist master's degree would both devalue current practitioners at the master's level, and water down the degree (related to concern that the degree should be specialized instead of general). Institutions would be forced to condense too much material into a two year curriculum. Emphasized most by *Educators, and some Practitioners*.

**Internship Availability.** Many expressed concern that the already scarce number of internships would be in even higher demand under the new model. Some decried use of distance internships, and worried that widespread use of this would allow unqualified professional into the field. Emphasized most by *Educators*.

#### Concerns (Major Themes) (cont.)

**Master's Unnecessary**. The concerns expressed under this category represented a number of interrelated subthemes. Primary among them, respondents indicated that a master's level professional should specialize in a particular area rather than work as a generalist, which is appropriate for the bachelor's level. Specialization would make the position more attractive to employers. Some raised concerns that the master's degree and bachelor's degree prepared RDNs would essentially be the same. It was noted that the general nutrition master's degree would be appropriate for those changing careers, though these individuals may be less qualified without the foundation of the bachelor's degree. Emphasized by *Educators, Employers, Practitioners, Students.* 

Another concern regarded the value of experience over education. One respondent put it succinctly: "a Bachelor's degree with experience is more beneficial than a Master's degree." Many cited the internship as more "valuable" than the master's degree. Some indicated that higher-level education is only needed for some RDN positions and not others; others claimed that needed skills, such as management skills, would not be provided by master's training. Emphasized by *Educators, Employers, Practitioners.* 

#### **Concerns (Minor Themes)**

**Fewer Dietitians.** Related to adverse impact, participants expressed concern that the new requirements would reduce the number of practitioners overall, pushing qualified students to pursue other career paths with better return on investment. Emphasized by *Educators, Practitioners*.

**Premature Career Choices.** Respondents raised concern as to whether it is wise to force students to begin their master's without having experience in the field first. Many stated that students should not be faced with the decision of what to specialize in straight out of their undergraduate program, as they would be less likely to make informed decisions that early in their career. Some also suggested that it would be better to mandate a master's degree while working in the field (i.e. within five or ten years), following other professions' examples. Emphasized by *Educators, Practitioners, Students.* 

**Title / Branding**. Many responses indicated concern that the new title itself would both confuse the public and undermine the value of the position. Emphasized by *Educators, Practitioners, Students* 

**CUP.** Some respondents suggested incorporation of Coordinated Undergraduate Programs, citing their effectiveness. Emphasized by *Employers, Practitioners.* 

**Degrees in Other Fields.** A small but significant number of responses indicated concern with accepting individuals with master's degrees in unrelated fields into programs, some adding that prerequisites should be mandated. Relatedly, others were confused as to whether such individuals would be accepted under the new model. Emphasized by *Employers, Practitioners*.

**Marketing Importance.** This was cited with regard to all three roles, and the model in general. Respondents stressed the importance of clearly defining and marketing the roles to employers, affiliates and the public. Emphasized by *Educators, Employers, Practitioners.* 

#### Concerns (Minor Themes) (cont.)

**Degree Creep.** Participants described the current situation using the term "degree creep," or the practice of requiring higher-level degrees for the same job. This was repeated with regard to the other positions as well. This is related to concerns over increased cost to student, adverse impact and restricting overall number of dietitians in the field. Emphasized by *Employers, Healthcare Administrators, Practitioners, Students.* 

#### Bachelor's Degree for Nutrition and Dietetics Technician

#### **Benefits (Major Themes)**

**Additional Career Options.** Respondents cited a wider array of possible career options, due to the new positions, as an important benefit of the new model. The bachelor's degree nutrition and dietetics technician position would be available to those who either could not or do not want to pursue an internship. Additionally, it would serve as another step in the "career ladder" within the field. Emphasized across *all groups.* 

**Increased Knowledge.** Similar to the theme identified regarding the master's requirement, participants stated more knowledge and higher general skill level would be a positive move for the profession. Emphasized by *all groups*.

#### **Benefits (Minor Themes)**

**Increased Salaries.** Similar to those indicating that the new master's requirement would correspond to increased salaries, some stated that the new bachelor's degree would lead to higher compensation. Emphasized across *all groups*.

**Bachelor's Requirement is Appropriate.** Respondents indicated that the degree requirement is generally appropriate given the nature of the role. Emphasized by *Educators, Practitioners, and especially Students.* 

**Better Support for RDNs.** Survey participants suggested that bachelor's degree nutrition and dietetics technician would provide better quality support for dietitians. Emphasized by *Employers, Practitioners*.

**Compensation Issues.** Responses regarding compensation issues described in the master's section above were echoed for this position. Some indicated that the bachelor's degree would make nutrition and dietetics technicians (identified by many as highly similar to current DTRs) overqualified for the low pay they would receive. Emphasized by *Educators, Employers, Practitioners, Students*.

**Job Availability, Hiring Issues.** Many listed concerns that employer demand for the bachelor's degree nutrition and dietetics technician would be low for various reasons. Some cited that facilities would not have the budget to include both an NDTR and RDB: thus, either NDTRs will not be hired, or will be brought on to replace RDNs. Emphasized by *all groups.* 

#### **Concerns (Major Themes)**

**Competitions Between Roles.** Related to the hiring issues noted above, competition among the new roles was a prevalent concern among responses. Apart from competition with RDNs, some were concerned that entry-level nutrition and dietetics technicians would compete with current NDTRs, eventually phasing out the profession altogether. Emphasized across *all groups*.

**Name / Branding.** Respondents expressed concerns over the name of the new position ("technician" was widely cited as inappropriate for a bachelor's degree holder). Additionally, the name and defined role were described as potentially confusing to the public and potential employers. This is related to concern over employers hiring lower level positions, who may be more likely to hire less expensive candidates if unclear regarding the expertise and function of the various new roles. Emphasized by *all groups*.

**Cost of Degree.** Highly related to compensation issues, and thus concern with overall return on investment of degree. Emphasized across *all groups*.

**Same as Current DTR**. Related to degree creep, many indicated that the bachelor's level nutrition and dietetics technician position as described would be the same as the current NDTR role. Others stated that a two-year degree was satisfactory preparation for this new role, as it is for the NDTR currently. Generally, there was some confusion regarding the bachelor's level nutrition and dietetics technician position job description, especially set alongside current RDNs and NDTRs (related to "competition among roles," above). Emphasized across *all groups* 

#### **Concerns (Minor Themes)**

**Independence from RDNs.** Concern was expressed as to whether bachelor's level NDTRs would work independent of RDN supervision. Some thought this should be mandated, though others indicated scope of responsibilities would vary by setting, circumstance, etc. Emphasized by *Educators, Practitioners*.

**Supervised Practice Availability.** Respondents were concerned with preceptor availability for supervised practice at this level, considering the current shortage. Emphasized by *Educators, Practitioners.* 

**Degree Creep.** Participants described the current situation using the term "degree creep," or the practice of requiring higher-level degrees for the same job. This was repeated with regard to the other positions as well. This is related to concerns over increased cost to student, adverse impact and restricting overall number of dietitians in the field. Emphasized by *Employers, Healthcare Administrators, Practitioners, Students.* 

**Diluting the Field.** Concern was expressed that bachelor's degree nutrition and dietetics technicians would replace RDNs in many settings, thus comprehensively lowering the qualifications of the dietetic workforce and weakening the profession. Emphasized by *Educators, Practitioners*.

## Associate's Degree for Community Nutrition and Health Assistant (now termed Nutrition Health Worker)

#### **Benefits (Major Themes)**

**New Role in Career Ladder.** Respondents stated this would be a beneficial addition to the dietetics career ladder for a number of possible reasons, including creation of more jobs, opportunities for lower-level graduates, and a pipeline to bolster the field overall. Emphasized across *all groups*.

**Increased Knowledge.** Many respondents indicated that the new education requirements are appropriate for the position. Emphasized by *Practitioners*.

#### **Benefits (Minor Themes)**

**Provide Needed Services**. Respondents suggested that the new community nutrition and health assistant (CNHA) role would provide much needed services, and thus serve as a beneficial addition to the model. Examples included work in healthcare settings (conducting preliminary health screenings), in food service systems, with WIC, and in schools. Emphasized by *Educators, Practitioners*.

#### **Concerns (Major Themes)**

**Role Clarity.** Survey participants expressed concern and confusion as to the definition of this role, in terms of what the job would look like in practice and what skill sets incumbents would have. Emphasized across *all groups*.

**Title / Branding.** Respondents were concerned that the CNHA title was "degrading." The term "assistant" is commonly used for those without degrees, and AS degree holders would be appropriately titled "technicians." Many others cited the title as "confusing" and "cumbersome." Emphasized by *Educators, Practitioners.* 

**Diluting the Field.** Respondents expressed concern that the role itself was "diluted," and that inclusion of a professional at this level would have a negative impact on RDNs and "water down the profession." This is related to scope of practice, and delineation/competition between roles. Emphasized by *Educators, Employers, Practitioners*.

**Too Many Levels.** Respondents indicated that inclusion of the CNHA position would bring too many levels to the dietetic career structure, confusing the public and employers as well as fostering competition among the newly created roles. Emphasized most by *Practitioners*.

**Job Availability.** Many participants related concerns that there would be no demand among employers for the new position. Emphasized across *all groups (except Healthcare Admins).* 

**Compensation Issues.** Corresponds to theme described above in the master's section. Emphasized across *all groups, especially Practitioners.* 

#### **Concerns (Minor Themes)**

**Competition Between Roles.** Participants expressed concern that positions would compete for scarce jobs: some believed that it would be difficult for CNHAs to compete with bachelor's degree holders, but most asserted that CNHAs would take the jobs of more qualified professionals as employers tried to cut costs. This is highly related to job availability. Emphasized by *Educators, Practitioners, Students.* 

**Role Should Require Bachelor's.** Respondents indicated that the CNHA role should require a four-year degree. Sending professionals with lower qualifications into the field to educate the public would serve to disseminate misinformation in an already largely misunderstood field. Others thought it would be better to require certification or licensure instead. Emphasized by *Educators, Employers, Practitioners, Students.* 

**RDN Supervision**. Some concern was noted regarding whether CNHAs would be under RDN supervision, for reasons similar to why others expressed they should need a Bachelor's degree (see above).

Appendix A

Frequently Asked Questions

#### FREQUENTLY ASKED QUESTIONS

#### Future Education Model Accreditation Standards for Programs in Nutrition and Dietetics

### Accreditation Council for Education in Nutrition and Dietetics

Academy of Nutrition and Dietetics

March, 2018

ACEND<sup>®</sup> began work several years ago to develop standards for future associate, bachelor's and graduate degree programs. This document is a compilation of the questions that have been asked about the *Future Education Model Accreditation Standards* and ACEND responses related to the future education model.

#### Future Education Model Rationale and General Questions

#### Question: What data support the Future Education Model?

**ACEND Response:** The *Rationale Document*, published by ACEND, provides the environmental scan information and summarizes data collected from a wide array of stakeholders that supports the future education model. The environmental scan included review of more than 100 relevant articles detailing research data, industry trends and the changing health care and business environments. In addition, four different data collection projects (focus groups, structured interviews, and two online surveys) were completed to gather information from stakeholder groups about future practice in nutrition and dietetics. More than 10,000 responses from practitioners, employers, educators, students, administrators and professionals working with nutrition and dietetics practitioners were evaluated. A competency gap analysis was completed to determine gaps between the current competencies and expected practice in nutrition and dietetics in the future. These gaps provided justification for a new education model that should be based on competencies to be demonstrated by future nutrition and dietetics practitioners. A multi-phase Delphi process, which involved educators, practitioners, employers and practitioners outside the profession of nutrition and dietetics, identified the needed competencies and performance indicators for future practice. The *Rationale Document*, which provides details on these results, can be viewed at www.eatrightprog.org/FutureModel.

### *Question: What do the data ACEND collected suggest for future practice of the registered dietitian nutritionist?*

ACEND Response: The data (environmental scan, focus groups, structured interviews, online surveys, competency development Delphi process) collected by ACEND revealed an emergence of non-traditional practice settings for the field of nutrition and dietetics, such as telenutrition. There is an expected expanding scope of practice for those working in the profession including an increased focus on disease prevention and integrative healthcare and the need for more knowledge in emerging areas such as genomics, telehealth, behavioral counseling, diet prescription and informatics. This work requires that health care professionals work more interprofessionally. Practitioners need to be able to read and apply scientific knowledge and interpret this knowledge for the public. Many of the stakeholders identified gaps in current competencies in areas of research, leadership/management skills, cultural care, basic food and culinary preparation and sustainability. Employers indicated the need for improved communication skills in nutrition and dietetics practitioners and an improved ability to understand the patient's community and cultural ecosystem. Employers also expressed a desire for stronger organizational leadership, project management, communication, patient assessment and practice skills. Employers indicated that more time might be needed in the preparation of future nutrition and dietetics practitioners to assure application of knowledge and demonstration of skills needed for effective practice. After thorough review of these data, ACEND believes that a minimum of a master's degree will be needed to adequately prepare graduates with the complexity, depth and breadth of knowledge, skill and judgement needed for future practice as a registered dietitian nutritionist.

#### Question: When do the Future Education Model Accreditation Standards go into effect?

**ACEND Response:** The Future Education Model Accreditation Standards for Associate (FA), Bachelor's (FB) and Graduate (FG) Degree Programs were released for adoption only by demonstration programs in 2017. They are not required of programs and no date has been set for when they may be required of all programs. ACEND will collect outcomes data from demonstration programs, graduates and employers before making decisions about implementation of the standards.

## Question: Is there a deadline by which Nutrition and Dietetic Internship Programs (DI) need to adopt the Future Education Model Accreditation Standards?

**ACEND Response:** No decision has been made to discontinue current DI programs accredited under the 2017 Accreditation Standards. The Future Education Model Accreditation Standards are only available currently for adoption by demonstration programs. Data will be collected from demonstration programs, graduates and employers before a decision is made by ACEND on whether to continue to accredit DI programs.

#### Question: What programs will ACEND accredit in the future?

**ACEND Response:** ACEND currently accredits six types of programs: didactic programs in dietetics (DPD), dietetic internships (DI), coordinated programs (CP), dietetic technician (DT) programs, foreign dietitian education (FDE) programs and international dietitian education (IDE) programs under the *2017 Accreditation Standards*. ACEND reviews and revises these standards (as required by USDE every 5 years) and will release new Standards in 2022.

ACEND recently released the *Future Education Model Accreditation Standards for Associate (FA), Bachelor's (FB) and Graduate (FG) Degree Programs in Nutrition and Dietetics.* ACEND will begin accrediting demonstration program under these standards in 2018. Thus, ACEND will be accrediting nine different types of programs for a period of time; the DPD, DI, CP, DT, FDE, and IDE programs will be accredited under the *2017 Accreditation Standards* and the FA, FB, and FG programs will be accredited under the *Future Education Model Accreditation Standards.* ACEND will collect data from these future education model programs and their graduates before making a decision on which types of programs to continue to accredit. At the time of that decision, ACEND will announce which program types it will continue to accredit in the future and which program types it will discontinue to accredit. If a decision is made to implement the *Future Education Model Accreditation Standards* for all programs, sufficient time (likely 10 years or more) would be given for programs to make the changes needed to come into compliance with these standards.

#### Question: Why were the master's degree standards changed to graduate degree standards?

**ACEND Response:** ACEND received many comments encouraging development of standards for doctorate degree programs and had several programs question whether they could develop a doctorate program under the *Future Education Model Accreditation Standards for Master's Degree Programs*. After much discussion, ACEND chose to add flexibility to the standards by identifying them as graduate degree standards and allowing both master's and doctorate degree demonstration programs to be developed. ACEND will collect data from these programs to inform the content and requirements in future standards.

## *Question: How will the associate degree prepared nutrition health associate differ from the current community health associate?*

**ACEND Response:** The competencies expected of the associate degree prepared nutrition and dietetics practitioner are included in the *Future Education Model Accreditation Standards*. The educational preparation for the nutrition health worker is planned as an associate degree and the competencies include specific foundational knowledge and practice skills in food and nutrition. Thus this practitioner will have more in-depth preparation and more knowledge specifically related to food and nutrition than community health workers who generally have many fewer hours of education, typically through a certificate program. There may be some overlap in the skill set between the two practitioners as it relates to health and cultural competency; the preparation that community health workers receive in earning a certificate may be able to be counted to meet some of the competencies required in the associate degree curriculum.

## Question: What information is available to help provide administrators with more knowledge of the benefits of being a demonstration program?

**ACEND Response:** The ACEND presentation that was given at FNCE in October 2017 includes discussion of *Future Education Model Accreditation Standards*, the demonstration program process, benefits offered to demonstration programs and competency-based education and assessment. This presentation can be viewed at <u>www.eatrightpro.org/FutureModel</u> and would provide an excellent overview for administrators.

# Question: The Future Education Model Accreditation Standards for Graduate Degree Programs do not specify the area of focus of the graduate degree. How does a degree in any field move the profession forward and protect the public?

**ACEND Response:** The Future Education Model Standards for Graduate Degree Programs do not specify the title of the degree (MS, MA, MBA, MPH etc.) or the focus area of the degree (nutrition, dietetics, public health, etc.). Programs are allowed to determine the title and focus of the graduate degree program they are offering. What the Future Education

*Model Standards* do specify are the required minimum competencies that must be achieved by graduates of the program. The competencies specified in the *Future Education Model Standards for Graduate Degree Programs* are at a higher level and are more comprehensive than the competencies in the *2017 Accreditation Standards* for the preparation of RDNs. ACEND believes that a higher level of competence will be needed for future practice and will better protect the public. ACEND expects that the graduate degree programs accredited under the *Future Education Model Standards* are structured to include the didactic and experiential learning needed to develop the required competencies regardless of the title or focus area.

#### Future Education Model Program Admission Criteria

## Question: Could future education model graduate degree programs admit students who have not completed an undergraduate nutrition and dietetics program?

**ACEND Response:** The *Future Education Model Accreditation Standards* do not stipulate any prerequisite requirements for students entering the program. Each program will set the prerequisite requirements for admission into its program and will be responsible for ensuring that its graduates achieve the competencies specified for that degree level program.

# Question: Under the Future Education Model Accreditation Standards can the hours of coursework or experiential learning from one degree level program be counted towards experiential learning of the next degree level?

**ACEND Response:** The *Future Education Model Accreditation Standards* require programs to have policies related to assessment of prior learning. The decision on whether previous course work or experiential learning will be recognized will be made by the program director.

## *Question: If future education model programs have different prerequisite requirements, will the quality of the graduates vary?*

**ACEND Response:** The *Future Education Model Accreditation Standards* specify the competencies that will be expected of each graduate and include example performance indicators that students may complete to demonstrate competence. Programs may choose from the list of example performance indicators or develop their own performance indicators; it is not necessary for every student to perform every performance indicate in order to demonstrate competence. All graduates of future education model programs will be expected to have achieved the same competencies. Program length may vary depending on the program's designed curriculum and the amount of time it takes to assure graduates meet all of the required competencies.

## *Question: Do students need a DPD verification statement to apply for the future education model graduate degree (FG) program?*

**ACEND Response:** The Future Education Model Accreditation Standards specify the competencies a student must demonstrate to complete the program but allows programs to determine the admission requirements to enter the program. Each of the future education model degree programs is intended to stand alone. ACEND did not set prerequisite requirements for any of the degree programs. Rather, individual programs would set their own admission requirements. A future education model master's degree program could for example, choose to require verification of completion of DPD or the future education model bachelor's degree (FB) program as a prerequisite, could require specific courses or supervised experiences as prerequisites or could choose not to require any prerequisites.

## Question: Is completion of one future education model degree program required to enter a higher degree level future education model program?

**ACEND Response:** Each of the future education model degree programs is intended to stand alone. ACEND did not set prerequisite requirements for each of the degree level programs. Rather, individual programs will set their own admission requirements. A future education model graduate degree program could for example, choose to require completion of the future education model bachelor's degree program as a prerequisite, could require specific courses as prerequisites or could choose not to require any prerequisites.

#### FEM Accreditation Standards Curriculum and Terminology

## *Question: What does it mean when ACEND says that the future education model programs will be competency-based?*

**ACEND Response:** The future education model standards for associate (FA), bachelor's (FB) and graduate (FG) degree programs will delineate the competence expected of program graduates and provide performance indicators that help define the level of expected performance. Knowledge domain statements will not be included in the future education model standards. Programs will decide what knowledge base is needed by students to help prepare them to be able to demonstrate the required competence.

#### Question: What is competency-based education?

**ACEND Response:** Competency-based education (CBE) is personalized learning where students advance based on their own skills and abilities working at their own pace rather than a timeline set by the program. The CBE approach is student-centered; different students may find different tasks challenging. CBE allows students to spend more time working to master the challenging tasks and less time on the tasks they find easier to learn. Students progress through the program by demonstrating that they have the required knowledge, skills and judgement (i.e., by meeting the competencies). A list of references of articles and books detailing the movement to competency-based education in other health professions is attached at the end of this FAQ.

## *Question: The future education model includes integrated experiential learning in each degree level program, what does that mean?*

**ACEND Response:** ACEND intends that the experiential learning components will be integrated with the didactic coursework to prepare students to demonstrate the competencies for each of the academic degree level programs (associate, bachelor's, graduate). ACEND will encourage innovation in how this experiential learning and its integration are done and will use the demonstration programs to help define options for how this integration might be accomplished. With integrated experiential learning, the previous model of completing a Didactic Program in Dietetics first before moving to a Dietetic Internship is no longer viable. Instead, experiential learning experiences are weaved throughout the program and they are purposefully planned to support didactic instruction.

## Question: There appears to be different terms used in the ACEND Future Education Model Standards as compared to the ACEND 2017 Accreditation Standards (i.e. supervised experiential learning vs supervised practice). Was that difference in terms intentional?

**ACEND Response:** The terminology used in the ACEND Future Education Model Standards does differ somewhat from the terminology in the ACEND 2017 Accreditation Standards. That difference was an intentional change in terminology. For example, the phrase "supervised practice" is used in the ACEND 2017 Accreditation Standards and the phrase "supervised experiential learning" is used in the ACEND Future Education Model Standards. The term was changed to better reflect competency-based education and the integrated nature of experiential learning occurring in the future education programs. Individuals in a future education model program are referred to as "students" not "interns"; interns are individuals enrolled in a nutrition and dietetics internship program accredited under the ACEND 2017 Accreditation Standards. The ACEND 2017 Accreditation Standards focus on the assessment of "student learning outcomes"; whereas the ACEND Future Education Model Standards focus on "competency assessment" to better reflect the competency-based education occurring in the programs.

# Question: The competencies for the future education model graduate degree program are preparing graduates for a higher level of practice; is it realistic to achieve all of those competencies in a two year master's degree program, for example?

**ACEND Response:** The Future Education Model Accreditation Standards for graduate degree programs identify the competencies required of graduates of that program. Programs are allowed to determine the prerequisites for students to enter their program and could require coursework or experiences that demonstrate some of those competencies be achieved prior to entering the program.

## Question: How will ACEND ensure quality in the future education model programs, if the number of hours of required supervised experiential learning is not specified?

**ACEND Response:** As ACEND moves to competency–based education with the *Future Education Model Accreditation Standards* for the demonstration programs, it will closely monitor each program's competency assessment plan and the student outcomes. Each program will document the actual hours of supervised experiential learning in professional work settings and alternate experiences of each student. ACEND is aware, based on reports from program directors and program reviewers, that the actual number of hours to be able to demonstrate competence currently varies among students. Use of this competency-based approach with the demonstration programs will allow programs flexibility in working with students, yet will provide ACEND with needed data on how many actual hours of supervised experiential learning are needed for students to demonstrate competence.

## *Question:* Why are concentrations not required in the Future Education Model Accreditation Standards?

**ACEND Response:** The Future Education Model Accreditation Standards are preparing graduates with a higher level of skills across various areas of practice. Because many of these skills are new, ACEND did not want to overburden programs with the expectation that they needed to go beyond these competencies with a concentration. Although the Future Education Model Accreditation Standards do not include the expectation that programs will have a concentration, programs can still have a concentration, if they choose.

#### Question: Graduate degrees often focus on a specific area rather than a general area, why do the Future Education Model Accreditation Standards include competencies across multiple rather than specific areas of practice?

**ACEND Response:** Because stakeholders expressed the need for future nutrition and dietetics practitioners to be prepared with a broad spectrum of skills (professional research and practice skills; teamwork and communication skills; clinical client care skills; community and population health skills; leadership, management and organization skills; and food and foodservice systems), ACEND included all of these skill sets in its graduate degree program

competencies. The *Future Education Model Accreditation Standards* do not specify the focus of the degree but do identify the competencies expected of graduates. Each programs will determine the focus and title of its graduate degree program.

## *Question: Will a program director need to assess all of the competencies and the performance indicators for a future education model degree program?*

**ACEND Response:** The Future Education Model Accreditation Standards for Associate (FA), Bachelor's (FB) and Graduate (FG) Degree Programs indicate that program directors will need to show, on their curriculum map, where the required competencies and any performance indicators that are included in the curriculum are being taught (Standard 4, Required Element 4.1). However, program directors will report assessment of only the required competencies in their Competency Assessment Plan (Standard 5, Required Element 5.1).

#### Future Education Model Program Completion and Graduation

#### Question: Can graduates of programs accredited under the Future Education Model Accreditation Standards for both Associate (FA) and Bachelor's (FB) Degree Programs take the CDR examination to become an NDTR?

**ACEND Response:** Only graduates of FB programs will be eligible to take the CDR examination to become an NDTR; graduates of FA programs will not be eligible to take the CDR examination to become an NDTR.

## Question: Are graduates of the Future Education Model Bachelor's Degree Programs (FB) eligible to apply to a Dietetic Internship (DI) program?

**ACEND Response:** Students applying to a DI program must have a verification statement from a DPD program. The curriculum for the FB program differs from that of the DPD program. Graduates of the FB program would be able to apply to the future education model graduate programs (FG), if they wanted to pursue further education to become a registered dietitian nutritionist. Graduates of FB programs who wanted to apply to a DI program accredited under the *2017 Accreditation Standards* would need to take the additional coursework needed to obtain a DPD verification statement to be eligible to apply to a DI program.

## *Question: Will there be verification statements for graduates of programs accredited under the Future Education Model Standards and if so, what is the intended use of the verification statement?*

**ACEND Response:** Programs accredited under the *Future Education Model Accreditation Standards* will issue verification statements to those who compete all program requirements. For graduates of the bachelor's (FB) and graduate (FG) degree programs, those verification statements will be submitted to the Commission on Dietetic Registration as part of the edibility requirements to take the credentialing exam to be a nutrition and dietetics technician, registered (NDTR) (FB verification) or registered dietitian nutritionist (RDN) (FG verification). Although the *Future Education Model Accreditation Standards* do not require the verification statement for admission to another program, some degree programs might require the verification statement of the lower degree level as part of their admission requirements, i.e. a bachelor's degree program might require a verification statement from an associate degree (FA) program.

#### Future Education Model Program Impact

# Question: The Future Education Model Accreditation Standards indicate preparation of nutrition and dietetics technicians at the bachelor's degree level; does that mean that associate degree Dietetic Technician (DT) programs will need to close?

**ACEND Response:** ACEND is not planning to discontinue any of the programs that it currently accredits. DT programs will continue to be accredited under the *2017 Accreditation Standards*. ACEND will test the *Future Education Model Accreditation Standards* with demonstration programs that voluntarily request accreditation under these standards. Outcomes data will be collected on the demonstration programs, graduates and employers. These data will be analyzed before ACEND makes decisions about implementation of the *Future Education Model Accreditation Standards* for all programs.

## Question: The Future Education Model has preparation of dietitian nutritionists occurring at the graduate level in the future; does that mean that bachelor's degree level Didactic Programs in Dietetics (DPD) will need to close?

**ACEND Response:** ACEND is not planning to discontinue any of the programs that is currently accredits. DPD programs will continue to be accredited under the *2017 Accreditation Standards*. ACEND will test the *Future Education Model Accreditation Standards* with demonstration programs that voluntarily request accreditation under these standards. Outcomes data will be collected on the demonstration programs and its graduates. These data will be analyzed before ACEND makes decisions about implementation of the *Future Education Model Accreditation Model Accreditation Standards* for all programs.

# Question: The future education model indicates that knowledge and experiential learning will be integrated in graduate level programs preparing dietitian nutritionists; does that mean free-standing Dietetic Internship (DI) programs will need to close or merge with a university program?

**ACEND Response:** ACEND is not planning to discontinue any of the programs that is currently accredits. DI programs will continue to be accredited under the *2017 Accreditation Standards*. ACEND will test the *Future Education Model Accreditation Standards* with demonstration programs that voluntarily request accreditation under these standards. Outcomes data will be collected on the demonstration programs and its graduates. These data will be analyzed before ACEND makes decisions about implementation of the *Future Education Model Accreditation Standards* for all programs. ACEND believes there may be many ways that future education model graduate degree programs might be organized. The key difference from the current DPD/DI model is that the future education model graduate degree programs will integrate the experiential learning with the didactic preparation to develop competencies. Students will apply once for a program that includes both components. The *Future Education Model Accreditation Standards* allow for multiple organizations to work in partnership to sponsor a program. One of the goals of the demonstration programs, that trial the *Future Education Model Accreditation Standards* and operations-based programs collaborate to prepare students. ACEND will share those models with educators.

## Question: Could a university partner with more than one institution offering supervised experiences to sponsor a future education model program?

**ACEND Response:** The Future Education Model Accreditation Standards do not specify a limit on the number of organizations/institutions that can be included in the partnership that sponsors a future education model program so a university and several institutions offering supervised experiences could form a single partnership to sponsor a program.

## Question: What is the difference between a partnership agreement referenced in Standard 1 and the affiliation agreements referenced in Standard 7 of the Future Education Model Accreditation Standards? When is each needed?

**ACEND Response:** Partnership agreements, discussed in Standard 1 of the *Future Education Model Accreditation Standards*, are needed when more than one organization is serving as a sponsor for a future education model program. The partnership agreement must detail the responsibilities of each sponsoring organization and the resources being provided by each. Affiliation agreements, discussed in Standard 7, are needed when one organization is sponsoring the program but has students doing supervised learning experiences at other sites. Affiliation agreements must delineate the responsibilities of both the program and the affiliating institutions/agencies.

## *Question: Our state licensure laws indicate a specified minimum number of supervised practice hours how will this work for programs under the Future Education Model Accreditation Standards?*

**ACEND Response:** Required Element 1.5 in the *Future Education Model Accreditation Standards* states that "The program must determine its length (in years) after taking into consideration didactic learning and required supervised experiential learning needed by students to demonstrate the required competencies and mandates from the program's administration or state legislation". A program accredited under the *Future Education Model Accreditation Standards* that is in a state with a required number of supervised practice hours would be expected to incorporate this state legislation mandate in their decision process for number of required hours of supervised experiential learning for their program.

## Question: What impact will the future education model have on the resources needed by institutions providing education for future nutrition and dietetics students?

**ACEND Response:** ACEND will gather information from the demonstration programs on the resources needed, steps involved in transitioning to the *Future Education Model Accreditation Standards* and the innovative ways resources were used to ensure that students had met the required competencies.

## Question: What impact will the future education model have on the cost of education for future students who want to become a registered dietitian nutritionist (RDN)?

**ACEND Response:** Currently most students spend at least five years to prepare to become an RDN. Approximately 40% of students completing coordinated programs and 25% of students completing dietetic internships currently pay tuition to complete a concurrent master's degree program, another 25% of internship students pay tuition to earn some graduate credit with the internship and many go on to complete their graduate degree. Less than 10% of students who complete an internship do not pay at least some tuition/fees to attend that internship. The exact cost of future education model programs is not yet known as demonstration programs have not yet been identified, but the cost of requiring a graduate degree for entry-level practice potentially may not exceed what students are currently paying to complete a master's degree in a coordinated program or with a dietetic internship.

### Question: Do faculty and those overseeing the experiential learning in the future education model bachelor's degree program need to be an RDN or NDTR?

**ACEND Response:** The Future Education Model Accreditation Standards for Bachelor's Degree Programs do not specify that faculty need be RDNs or NDTRs, the standards say that faculty and preceptors must be "qualified, appropriately credentialed and have sufficient education" but leave the decision to the program to determine what education and credentialing is needed to teach a course or preceptor experiential learning. The bachelor's degree program would need to ensure that the faculty and preceptors are qualified and have the necessary credentials to guide students in developing the competencies identified in the standards that will be needed to practice as future NDTRs.

## *Question: What impact will the future education model have on student diversity in nutrition and dietetics programs?*

**ACEND Response:** Ethnic diversity in student enrollment in ACEND accredited programs has increased over the past 10 years. Most notably, the number of Hispanic students has nearly doubled. ACEND talked with other health profession accreditors (Physical Therapy, Pharmacy, Occupational Therapy) who have moved their education requirements to a graduate level and learned that this change did not decrease student diversity in those professions. In pharmacy, for example, under-represented minority students (Black, Hispanic, Native American) were 10.6% of the student population in 1988, prior to implementing their practice doctorate degree requirement, and 11.4% in 2012 after implementation. Diversity of students currently enrolled in dietetic internships combined with a graduate degree (males = 10%; under-represented minorities = 9%) and in coordinated programs at the graduate level (males = 10%; under-represented minorities = 11%) is similar to the diversity of students in dietetic internship programs that do not offer a graduate degree (males = 8%; under-represented minorities = 9%). The future education model includes preparation for careers in nutrition and dietetics at associate, bachelor's and graduate degree levels allowing students many options for entry into future nutrition and dietetics careers and facilitating professional growth and development through subsequent degree levels. ACEND Standards encourage programs to foster diversity in their student selection process. ACEND currently monitors and will continue to monitor student diversity in all accredited programs.

## Question: Can the program director of a currently ACEND-accredited program (DPD, DI, CP, DT) also direct a future education model program?

**ACEND Response:** Both the 2017 Accreditation Standards and the Future Education Model Accreditation Standards indicate that a program director can only direct one ACEND-accredited program. If an existing ACEND-accredited program is being reorganized into a demonstration program, the director for both programs could be the same if it is one program reorganizing into another program with the initial program being phased out/closed after the reorganization. If the demonstration program is a new program and existing ACEND- accredited programs are continuing then there would need to be different directors for each accredited program.

#### **Demonstration Programs**

#### **Demonstration Program Application**

### *Question:* What are the criteria for becoming a demonstration program and how many will ACEND select?

**ACEND Response:** Organizations interested in sponsoring a demonstration program under the ACEND Future Education Model Accreditation Standards should submit the Demonstration Program Application to ACEND. The application form and information about the application process are available on the ACEND website: <u>www.eatrightpro.org/FutureModel</u>. Organizations do not need to currently have an ACEND-accredited program to apply. The ACEND Board plans to select a minimum of 60 programs total to be demonstration programs and is seeking a representative sample of programs in terms of geographic location, program size, and proposed program structure. Programs desiring to be a demonstration program must complete the demonstration program application, which describes how the program will be in compliance with the *Future Education Model Accreditation Standards*, must be willing to attend required ACEND training and work with ACEND to gather program and graduate outcomes data.

#### Question: Will there be more than one call for demonstration programs?

**ACEND Response:** ACEND anticipates having several cohorts of demonstration programs. The due date for applications is posted on the ACEND website: <u>www.eatrightpro.org/FutureModel</u>.

#### *Question: Can an application for a doctorate level program be submitted under the Future Education Model Accreditation Standards for Graduate Degree Programs?*

**ACEND Response:** Applications for doctorate degree demonstration programs can be submitted under the *Future Education Model Accreditation Standards for Graduate Degree Programs (FG).* 

### *Question: I have a site visit scheduled for my current program scheduled; will I still need to do that site visit if I am submitting an application to be a demonstration program?*

**ACEND Response:** Whether you have your scheduled site visit will depend on what is planned for your existing program. If that program is continuing as an ACEND-accredited program, then you will need to write the self-study report and host a site visit for that program to maintain its accreditation. If that program is being reorganized into a future education model program, then the timing of the site visit likely will change. The plans for your program should be described in your demonstration program application. ACEND will work with demonstration programs individually to finalize when their next self-study reports and site visit will occur.

## Question: Will it be possible to have a "phase out" time for an existing nutrition and dietetics program while simultaneously adopting the Future Education Model Accreditation Standards?

**ACEND Response:** Demonstration programs who are planning to reorganize or close an existing accredited program and start a program under the future education model would be expected to develop a teach out plan for the students in the existing program. That teach out plan time line could overlap with the launch of a future education model program.

## Question: If a program is not selected to be a demonstration program, can it request to be allowed to be accredited under the Future Education Model Accreditation Standards?

**ACEND Response:** No, only demonstration programs will be able to be accredited under the *Future Education Model Accreditation Standards*. All other currently accredited nutrition and dietetics programs (Coordinated Programs, Didactic Programs, Dietetic Internships, Dietetic Technician, Foreign Dietitian Education and International Dietitian Education Programs) will need to maintain compliance with the 2017 Accreditation Standards. ACEND will select demonstration programs to be accredited under the *Future Education Model Accreditation Standards* and will review program and graduate outcomes data from the demonstration programs before making decisions on whether to implement the *Future Education Model Accreditation Standards* with all programs. Thus, only those programs that are selected as a demonstration program will be able to be accredited under the *Future Education Model Accreditation Standards*.

## *Question: Could an existing master's degree program in nutrition or public health apply to be a future education model graduate degree demonstration program?*

**ACEND Response:** The Future Education Model Accreditation Standards do not specify in what the field the degree should be. The Standards do specify the competencies that students must demonstrate; demonstration programs will be allowed to specify the degree and it could be nutrition or public health.

#### **Demonstration Program Benefits**

#### Question: What support materials and training will be provided to demonstration programs?

**ACEND Response:** ACEND has developed several documents to assist programs in becoming a demonstration program. The ACEND website (<u>www.eatrightpro.org/FutureModel</u>) contains the application templates and Guidance Information, developed for each program type, to assist program directors. A webinar describing the application process also is available. Both online and in-person training on competency-based education and competency assessment will be provided/required for program directors of selected demonstration programs. ACEND staff are available at <u>ACEND@eatright.org</u> or 1-800-877-1600 x5400 to answer questions.

#### Question: What financial incentives are there for a program to become a demonstration programs?

**ACEND Response:** ACEND is providing a number of financial incentives to help offset the cost of establishing a program accredited under the *Future Education Model Accreditation Standards*. The program change fee (\$250), candidacy application fee (\$2,500) and one year's annual accreditation fee (\$1975) all are waived for demonstration programs. In addition, ACEND will cover registration and travel expenses for the program director to attend the in-person training session in early February, 2018.

#### Credentialing

#### Question: Will a credential be available for each degree level?

**ACEND Response:** The Commission on Dietetic Registration (CDR) ultimately has responsibility for credentialing decisions. CDR initiates new certifications based on surveys (practice audits) of nutrition and dietetics practice roles. The results of the practice audits are used to develop the certification examination content specifications. Graduates of the future education model graduate degree would be eligible to take the registration exam for dietitian nutritionists and graduates of the bachelor's degree would be eligible to take the registration exam for nutrition and dietetics technicians. Currently there is not a credential available for the nutrition health associate; CDR could explore creating a credential once sufficient numbers of these practitioners are in the workforce.

## *Question: Will students need to have a bachelor's degree to take the NDTR credentialing exam after January 1, 2024?*

**ACEND Response:** The Commission on Dietetic Registration (CDR) sets the criteria for eligibility to take the exam to become a nutrition and dietetics technician, registered. Currently students who have at least an associate degree and a verification statement from an ACEND accredited NDTR program and those who have a bachelor's degree and a verification statement from a DPD are eligible to take the NDTR credentialing exam. At this time, CDR has not made any changes to the eligibility requirements to take that exam. Complete information about eligibility requirements can be found on CDR's website www.cdrnet.org

## Question: How do ACEND's accreditation standards align with CDR's January 1, 2024 requirement that applicants taking the dietitian nutritionist registration exam will need a master's degree?

**ACEND Response:** CDR has released an information sheet about student options for meeting the master's degree requirement for taking the dietitian nutritionist registration exam after January 1, 2024 (see www.cdrnet.org). All of the options include graduation from ACEND accredited programs that provide the didactic and supervised practice preparation to become a registered dietitian nutritionist. Graduates with verification statements from ACEND accredited coordinated programs and dietetic internships that include completion a master's degree and graduates with a verification statement from the future education model master's degree programs will meet the 2024 RDN exam eligibility requirements. Graduates of ACEND accredited programs that do not include a master's degree will need to complete a master's degree in the field of their choice to meet the 2024 RDN exam eligibility requirements.

#### **References on Competency-Based Education (CBE) in Health Professions**

#### **Suggested Readings:**

Frank JR, Snell LS, Cate OT, Holmboe ES, Carraccio C, Swing SR, Harris T, Glasgow NJ, Campbell C, Dath D, Harden RM, Lobst W, Long DM, Mungroo R, Richardson DL, Sherbino J, Silver I, Taber S, Talbot M, Harris KA. Competency-based medical education: Theory to practice. *Med Teacher*. 2010; 32(8): 638-645.

Gravina EW. Competency-based education and its effect on nursing education: A literature review. *Teaching Learning in Nursing*. 2017; 12:117-121.

Koster A, Schalekamp T, Meijerman I. Implementation of competency-based pharmacy education (CBPE). *Pharm*. 2017; 5(10):1-16.

Norcini JJ, McKinley DW. Assessment methods in medical education. *Teach Educ*. 2007; 23(2007): 239-250.

#### **Additional References:**

Alen S, Waterfield J, Rivers P. An investigation of pharmacy student perception of competency-based education using the individual skills evaluation and development program. *Pharm Ed*. 2016;16:72-80.

Barr H. Competent to collaborate: Towards a competency-based model for interprofessional education. *J Interprof Care*. 1998; 12(2):181-187.

Bergsmann E, Schultes MT, Winter P, Schober B, Spiel C. Evaluation of competence-based teaching in higher education: From theory to practice. *Eval Plannng*. 2015; 52:1-9.

Carraccio C, Wolfsthal SD, Englander R. Shifting paradigms: From Flexner to competencies. *Acad Med*. 2002; 77:361–367.

Fullerton J T, Thompson J, Johnson P. Competency-based education: The essential basis of pre-service. *Midwifery*. 2013;29:1129-1136

Harris P, Snell L, Talbot M, Harden RM. Competency-based medical education: Implications for undergraduate programs. *Med Teach*. 2010; 32(8): 646-650.

Holmboe ES, Sherbino J, Long DM, Swing SR, Frank JR. The role of assessment in competency-based medical education. *Med Teacher*. 2010; 32:676-682.

Institute of Medicine. *Health professions education: A bridge to quality*. 2003; Washington, DC: The National Academies Press.

Kenkel MB, Peterson RL (ed.). *Competency-based education for professional psychology*. 2010; Washington, DC: American Psychological Association

Marrelli AF, Tondora J, Hoge MA. Strategies for developing competency models. *Adm Policy in Mental Health*. 2005; 32 (Nov 5/6):533-561.

Mungroo-Frank JR, Ahmad R, Wang, M. Toward a definition of competency-based education in medicine: A systematic review of published definitions. *Med Teach*. 2010; 32: 631-637.

Reeves S, Fox A, Hodges BD. The competency movement in the health professions: Ensuring consistent standards or reproducing conventional domains of practice? *Adv Health Sci Educ Theory Pract*. 2009;14(4):451-3.

Van der Werf JJ, Dekens-Konter J, Brouwers, J.R. A new model for teaching pharmaceutical care services management. *Pharm Educ*. 2004; (4):165-169.

Wascavage E. Competency-based education and its effect on nursing education: A literature review. *Org for Ass Degree Nursing*. 2017;12(2):117-21

Yip HK, Smales RJ. Review of competency-based education in dentistry. *Br Dental J*. 2000; 189(6):324-326.

Appendix B Input on Proposed Future Education Model Questionnaire

### Education Model Feedback 2015

#### **Model for Future Education**

Please provide your comments in the spaces provided.

## \*1. From what perspective are you providing input on the recommended model for future education in nutrition and dietetics

- O nutrition and dietetics practitioner
- O educator of nutrition and dietetics practitioners
- C employer of nutrition and dietetics practitioners
- C educational administrator
- C healthcare administrator
- C student/intern
- Other (please specify)

#### 2. What type of nutrition and dietetics education program does your response represent?

- C didactic program in dietetics
- C dietetic internship
- C coordinated program
- C dietetic technician program

**3. The recommended model for future education in nutrition and dietetics includes preparation of a** *generalist dietitian nutritionist at the master's degree level*; what do you see as benefits and concerns with this recommendation?

**4.** The recommended model for future education in nutrition and dietetics includes **preparation of an** *enhanced nutrition and dietetic technician at the bachelor's degree level*; what do you see as benefits and concerns with this recommendation?

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### Education Model Feedback 2015

**5.** The recommended model for future education in nutrition and dietetics includes preparation of a *community nutrition and health assistant at the associate's degree level*; what do you see as benefits and concerns with this recommendation?

## 6. Please share what you perceive as strengths of the overall recommended model for future education in nutrition and dietetics.

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### Education Model Feedback 2015

7. Please share what concerns you have about the overall recommended model for future education in nutrition and dietetics:

**8.** Please add any additional comments you have about recommended model for future education in nutrition and dietetics

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