

Rationale for Future Education Preparation of Nutrition and Dietetics Practitioners

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Focus: Executive Summary

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INTRODUCTION AND PURPOSE OF REPORT

The Accreditation Council for Education in Nutrition and Dietetics (ACEND®) serves the public by establishing and enforcing standards for the educational preparation of nutrition and dietetics practitioners and by recognizing nutrition and dietetics education programs that meet these standards. The educational preparation of dietitian nutritionists and nutrition and dietetics technicians includes didactic and supervised practice components completed through ACEND-accredited programs. The educational preparation of nutrition and dietetics technicians is at the associate degree level and the preparation of dietitian nutritionists is typically at the bachelor degree level, combined with or followed by a supervised practice experience. Some master and doctoral level programs also exist.

In 2012, ACEND began discussions on future education needs and the potential of developing degree-based standards. Also in 2012, the Academy of Nutrition and Dietetics' Council on Future Practice released a visioning document recommending that the level of educational preparation for dietitians be elevated to a graduate level to provide a greater depth of knowledge and skills needed for future practice in the profession. In 2013, ACEND began work with a visioning group to explore future practice and the education required to prepare students for this practice. ACEND collected data from key stakeholders and conducted a thorough environmental scan to inform its review of the current standards for nutrition and dietetics education and is recommending a new model of education that includes moving the educational preparation of entry-level dietitian nutritionists to the graduate degree level, moving the educational preparation of entry-level nutrition and dietetics technicians to the bachelor's degree level and creating a new program preparing nutrition health associates at the associate degree level.

In 2015, ACEND began a multi-phase process to develop the competencies needed of practitioners at each degree level. Development of the Accreditation Standards detailing expectations of programs preparing future practitioners also began. The draft standards with the competencies were released for two rounds of public comment and changes were made based on input received. In 2017, the *Future Education Model Accreditation Standards for Associate, Bachelor's and Graduate Degree Programs in Nutrition and Dietetics* were released for adoption by demonstration programs.

The application process to become a demonstration program is a multi-phase process that involves programs submitting reports documenting compliance with the *Future Education Model Accreditation Standards* and program directors attending required training on competency-based education and competency assessment. A research logic model was developed to guide the evaluation of the demonstration program project.

The purpose of this report is to summarize data collected in the multiple projects conducted with stakeholders, share information collected and recommend a model for future education of nutrition and dietetics practitioners.

UPDATES TO RATIONALE DOCUMENT

ACEND updates this *Rationale Document* as new information becomes available and new decisions are made about the recommended future education model in nutrition and dietetics. Updates that have been added to the document include:

- February, 2015 Release of the original Rationale Document
- July, 2015 Summary of stakeholder comments on the recommended model section
Title of associate's degree practitioner changed to Nutrition Health Worker
- August, 2015 Additional data collection about Nutrition Health Associate section
- January 2017 Evaluation of the 2012 Accreditation Standards
Development of competencies and performance indicators
- March 2017 Summary of public comments on the draft *Future Education Model Accreditation Standards for Associate, Bachelor and Master Degree Programs in Nutrition and Dietetics*
- November 2017 Summary of public comments on the revised *Future Education Model Accreditation Standards for Associate, Bachelor and Master Degree Programs in Nutrition and Dietetics*
Development of the practice illustrations
Infographic and potential skill sets and job descriptions for graduates of future education model programs
- August 2018 Description of the demonstration program project
Research Logic Model

ENVIRONMENTAL SCAN

The environmental scan included review of more than 100 relevant articles detailing research data, industry trends and the changing health care and business environments. Data collected revealed an emergence of many non-traditional practice settings for the field of nutrition and dietetics and an expanding scope of practice for those working in the profession. The scan highlighted an increased focus on disease prevention and integrative healthcare and the need for more knowledge in emerging areas such as nutritional genomics, telehealth, nutritional pharmacology, case management, behavioral counseling, prescriptive authority, coding and reimbursement, evidence-based practice and informatics. The growing importance for health care professionals to be educated to work more interprofessionally was supported by the environmental scan data. A graduate degree represents the entry level professional practice degree for most of the health professions and all of the health professions require supervised practice (or its equivalent) as part of their overall training and education.

STAKEHOLDER INPUT ON FUTURE PRACTICE IN NUTRITION AND DIETETICS

Four different data collection projects were completed to gather information from stakeholder groups (employers, practitioners, educators, administrators, professionals working with nutrition and dietetics practitioners and students) about future practice in nutrition and dietetics.

A total of 10 structured interviews were held with representative stakeholders to elicit their views for future practice. Stakeholders interviewed indicated that communication skills, the ability to understand and work with patients in their cultural ecosystem and patient assessment skills are under developed or lacking in current graduates. They stated that graduates of the future will need to be able to effectively work in interprofessional and interdisciplinary teams, interpret and apply scientific knowledge and have strong organizational leadership and project management skills. Stakeholders voiced that bachelor degree graduates are needed in positions of health and wellness, management and marketing. They viewed the master's degree as the ideal minimum for dietitian nutritionists.

Two questionnaires were developed to collect data on skills in six skill set categories: 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. These categories were developed based on input collected in the stakeholder interviews and skills were identified within each category. One questionnaire was designed to collect data from a broad base of stakeholders (practitioners, employers, educators, administrators, students and professionals working with RDNs and NDTRs) that requested respondent opinions on the importance of 79 skills for future practice in nutrition and dietetics on a four-point importance scale; 9,477 stakeholders responded. Results indicated most (89%) of the 79 individual skills were important (i.e. mean score > 3 on a four-point scale) for future practice in nutrition and dietetics; 40% of the skills were rated greater than 3.5 suggesting they were very important. All six skill set categories were scored as important for future practice with teamwork and communication skills receiving the highest mean score (M=3.64) and leadership, management and organizational skills the lowest mean score (M=3.15). Differences in mean scores were found based on respondent's work setting, education level and years of work experience.

The second questionnaire was designed specifically to collect additional information from employers on how essential 69 different skills were for employability in nutrition and dietetics practice in the future on a four-point essential scale; 300 employers provided their perceptions. Results indicated most (86%) of the individual skills were essential (i.e. mean score >3 on a four-point scale) for employability in future nutrition and dietetics practice. All six skill category sets were scored essential for future employability in nutrition and dietetics practice with teamwork and communication skills receiving the highest mean score (M=3.52) and community and population health skills the lowest mean score (M=3.03). Few differences were found in mean scores based on respondent's demographic information.

Focus groups were held with four groups of educators, practitioners, preceptors and employers (27 total participants) to explore gaps in the current competencies in the *ACEND 2012 Accreditation Standards*. Several themes emerged from the focus group discussions: Master degree education for RDNs was well supported; more time was needed for application of knowledge and demonstration of skills (practical

experience) in the programs; inconsistency existed in the program and internship expectations; undergraduate programs must include transferable skills for other professional direction (e.g. leadership, business, management); graduate level could offer specialization; and need for an increase number of RDNs teaching the programs. Gaps were identified in the current competencies in areas of research, communication, leadership/management skills, cultural care, interprofessional work, basic food and culinary preparation and sustainability.

RECOMMENDATIONS FOR FUTURE EDUCATION

The environmental scan, stakeholder and employer interviews, focus groups, and survey data documented the need for increased knowledge, more complex decision making, and a broader array of skills for future practice in nutrition and dietetics. As a result, ACEND is recommending:

- A minimum of Master's degree preparation for entry-level, generalist, registered dietitian nutritionists.
- Bachelor's degree preparation for entry-level food and nutrition practitioners eligible to take the registration examination to become nutrition and dietetics technicians, registered.
- Associate's degree preparation for nutrition health associates.
- Each degree level has competencies identified.
- Experiential learning integrated into each degree program.
- Each degree level prepares graduates for employment.
- Completing one part of the educational model would not be a requirement to enter a program at a higher degree level in the model, but each degree level would build on the preceding degree level knowledge and competence.
- Future exploration of high school and doctoral level programs.

Based on this data, ACEND announced plans to develop new standards for associate, bachelor and graduate degree level programs and release them for multiple rounds of public comment. Once revisions were made and the new standards and competencies were finalized, ACEND indicated plans to release them in 2017 for voluntary adoption by demonstration programs. Outcomes data on graduates of these demonstration programs will be collected and analyzed before ACEND makes a decision about implementation of the recommended future model for all programs. ACEND will work with the Commission on Dietetic Registration to define credentialing options for those completing these new degree programs. Additional information is available at www.eatrightpro.org/FutureModel.

These recommendations will not change the current ACEND accreditation standards. Currently accredited programs will continue to be accredited under the *2017 Accreditation Standards*. Programs will be given the opportunity to choose whether to voluntarily adopt the new *Future Education Model Accreditation Standards* when these standards are released in the future.

STAKEHOLDER INPUT ON RECOMMENDATIONS

ACEND collected nearly 7,400 comments from stakeholders about the recommended future model for education through an online survey, reviewed survey results collected by other educators, and attended

area meetings of the Nutrition and Dietetics Educators and Preceptors. Themes of benefits and concerns were identified through qualitative analysis of responses. Informational materials and webinars were developed to help address questions and concerns raised about the recommended future education model.

ADDITIONAL INFORMATION ON NUTRITION HEALTH ASSOCIATE

After the release of the *Rationale Document*, many questions were raised about the role of the associate's degree prepared practitioner in the community setting. To better understand this potential future role, ACEND hired a consultant to conduct focus groups with RDNs who work in community and public health practice and in depth interviews with leaders in community support worker programs. Results of the data collection confirmed the role for a community worker who could provide support for compliance, acceptance and management of nutritional, physical and mental health concerns in community settings. The role and the training for this practitioner currently is not standardized and can range from a high school diploma (for the most part) to a certificate or AA in a health related field.

ASSESSMENT OF THE 2012 ACEND® ACCREDITATION STANDARDS

ACEND worked with a consultant to gather information from various stakeholders to determine potential changes that might be made to improve on the *2012 ACEND Accreditation Standards for Programs in Nutrition and Dietetics*. A total of 407 individuals responded to the survey about the 2012 Standards; most were nutrition and dietetics program directors (53%) or educators (22%).

Based on a review of the quantitative and qualitative comments, several changes were recommended including: publish the standards alone in one document; publish a separate document for the guidance material; differentiate what is the standard and what is supporting material; use term "evaluation" for the measurement of program objectives and "assessment" for the measurement of the attainment of student learning outcomes and combine and streamline the standards.

DEVELOPMENT OF COMPETENCIES AND PERFORMANCE INDICATORS

ACEND contracted with a consultant to conduct a multi-round Delphi study to gather input from a broad base of stakeholders to gain consensus on professional and clinical competencies for future entry-level nutrition and dietetics professionals. Entry-level competencies (knowledge, skill and judgment) needed upon graduation from an accredited nutrition and dietetics education program for early years of practice were identified.

The first round involved a group of 15 experts termed subject matter experts (SME). The SMEs determined a competency framework, developed a competency outline, determined desired complexity of competency topics for each academic degree and wrote competencies and performance indicators for future practitioners prepared at the associate, bachelor and master degree levels.

The second step of the Delphi process was a first line review by a group of educators and practitioners who participated in online focus groups. A total of 98 individuals participated in one of 10 focus group sessions to review the draft competencies and performance indicators and offer suggested changes to content and assigned academic level.

A third step in the process involved completion of an online questionnaire. More than 1,000 nutrition and dietetics practitioners, educators, employers and professionals from outside the field of nutrition and dietetics rated importance to future practice for the competencies and performance indicators.

A consensus panel reviewed the Delphi study findings and reached consensus on the final competency and performance indicator statements. Decisions were made on the wording and inclusion of each competency and performance indicator based on the input received. As a result, the total numbers of competencies and performance indicators included in the draft Future Education Model Standards were 20 competencies and 121 performance indicators for the associate degree, 38 competencies and 216 performance indicators for the bachelor degree and 41 competencies and 278 performance indicators for the master degree.

PUBLIC COMMENTS ON THE DRAFT *FUTURE EDUCATION MODEL STANDARDS*

ACEND finalized the first draft *Future Education Model Standards for Associate, Bachelor and Master Degree Programs* and released them for public comment. Input on the draft standards was received from more than 1,200 individuals who provided input to an online survey, more than 200 provided input at the Educator Roundtables at FNCE and nine organizations provided written and telephone input on behalf of their groups. Responses were received from program directors, faculty members, preceptors, practitioners, employers, students/interns and some from outside the profession. There were a wide array of opinions, often conflicting opinions, which were received. ACEND made several major changes in the draft standards as a result.

PUBLIC COMMENTS ON THE REVISED DRAFT *FUTURE EDUCATION MODEL STANDARDS*

ACEND reviewed stakeholder comments on the first draft *Future Education Model Standards for Associate, Bachelor and Master Degree Programs* and revised the Standards based on the input received. ACEND released the revised standards for a second round of public comment. Input on the revised standards was received from more than 200 individuals who provided input to an online survey, more than 300 individuals at the regional Nutrition and Dietetics Educators and Preceptors meeting. ACEND made a few additional changes in the draft standards and released the final version of the *Future Education Model Accreditation Standards for Associate, Bachelor's and Graduate Degree Programs in Nutrition and Dietetics*.

DEVELOPMENT OF PRACTICE ILLUSTRATIONS

ACEND developed practice illustrations (examples to illustrate day-today performance of competencies) to supplement the guidance materials being developed for demonstration program directors. The practice illustrations were developed from examples provided by more than 1000 individuals who completed an online survey. The draft practice illustrations were reviewed and revised by a group of 12 educators and practitioner through a focus group process. The practice illustrations are included in the *Guidance Document for the Future Education Model Accreditation Standards for Associate, Bachelor's and Graduate Degree Programs in Nutrition and Dietetics*.

INFOGRAPHIC AND POSITION DESCRIPTIONS

ACEND used data collected through the environmental scan and stakeholder interviews, focus groups and online surveys to develop descriptions of potential positions for graduates of future education model degree programs. These descriptions were used to develop an infographic to convey the skills of future education model program graduates.

DEMONSTRATION PROGRAM PROJECT

ACEND developed a multi-phase application process for programs interested in serving as demonstration programs for the *Future Education Model Accreditation Standards*. The process includes submission of reports detailing compliance with the standards, required attendance at training sessions on competency-based education and competency assessment and approval of the applications by the ACEND Board.

RESEARCH LOGIC MODEL

ACEND developed a research logic model to conceptualize and articulate components of the demonstration project for the *Future Education Model Accreditation Standards*. The research logic model is a two page document that includes the overall aim, goal, objectives, activities and expected outcomes of the demonstration program project. Data will be collected to measure achievement of these outcomes