During last summer and into fall 2011, the Council on Future Practice promoted and disseminated the Dietetics Career Development Guide for practitioners as a model reflecting advanced practice credentialing and the continuum of practice. The Council on Future Practice (CFP) with support from the House Leadership Team (HLT) convened a joint meeting of the Commission on Dietetic Registration (CDR) and the Accreditation Council for Education in Nutrition and Dietetics (ACEND). As a result of these discussions, the HLT believes the HOD, as leaders in the Academy, should have a better understanding of the Dietetics Career Development Guide and continuum of education and credentialing in order to assist in the education of the membership on these two issues. The Council on Future Practice has been instrumental in helping the HLT frame this dialogue session, which will consist of a two day discussion on one mega issue: Continuum of Professional Progression and Growth.

Concrete action steps have been implemented by the Academy in the course of the last two years to address such issues as the current internship shortage, marketplace relevance, and the future of the profession. The focus of the dialogue of the 2012 Spring Meeting will be to synthesize the work that is currently in motion and to dialogue about the future of the profession as it relates to utilizing the Dietetics Career Development Guide and the need to provide recognition for advanced practice.

Backgrounders for the House of Delegates inform the readers on the mega issue and provide answers to the following questions throughout the document:

1. What do we know about the needs, wants and expectations of members, customers and other stakeholders related to this issue?
2. What do we know about the current realities and evolving dynamics of our members, marketplace, industry, profession, which is relevant to this decision?
3. What do we know about the capacity and strategic position of the Academy in terms of its ability to address this issue?
4. What ethical/legal implications, if any, surround the issue?

To prepare the HOD for the discussions on “Continuum of Professional Progression and Growth”, this Backgrounder provides information in relation to the four questions for each day’s dialogue separately.
Day 1 Mega Issues Question: *What is needed for nutrition and dietetics practitioners to better understand the continuum of professional preparation to progress throughout their careers?*

**Expected Outcomes:** Participants will:
1. Reach a common understanding of the opportunities for growth represented by the continuum of professional preparation.
2. Create a better understanding of the “Dietetics Career Development Guide” and how it guides practitioners to grow into new opportunities.
3. Identify tools and resources for delegates to use to communicate common understanding across the profession.

Day 2 Mega Issues Question: *How do we create understanding among practitioners of the importance of advanced practice as essential to the future of the profession? Why should we care?*

**Expected Outcomes:** Participants will:
1. Establish understanding of the importance of advanced practice to the future of the nutrition and dietetics profession.
2. Create a vision for the future of the nutrition and dietetics profession that includes advanced practice.

Knowledge-based Strategic Governance is a mechanism for consultative leadership. It recognizes that “strategy” is the necessary and appropriate link in the Board’s role to govern the organization, the House’s role to govern the profession and the staff’s role to manage implementation. To assist you in thinking about the issue to be addressed, four key background areas are presented as standard questions used for each Mega Issue. These questions create an environment of awareness of what we know and what is unknown. A wide range of resources have been used to provide you with what is known.
**Question #1:** What do we know about the needs, wants and expectations of members, customers and other stakeholders related to this issue?

During the Spring 2011 House of Delegates Meeting, certain topics identified as potential mega issues began to address the continuum of professional progression and growth. These topics help identify the needs, wants and expectations of members related to the continuum of professional progression and growth. The background information that follows is structured keeping these topics in mind, while following a chronological time line of important events that have occurred to address the issue of continuum of professional progression and growth (See Appendix A: Spring Meeting Brainstorm Of Mega Issues).

**2008 Phase 2 Future Practice and Education Task Force**

In 2006, the Phase 2 Future Practice and Education Task Force was appointed by the Academy of Nutrition and Dietetics* (Academy) House of Delegates (HOD). One of the charges for the task force was to describe the preferred future practice roles for the Dietetic Technician, Registered (DTR); the Registered Dietitian (RD); Specialist RDs; and Advanced Practice RDs in the year 2017 and beyond. Once the preferred future roles were envisioned, then the broad knowledge and skills needed to fulfill those roles were identified. Finally, the Task Force was asked to recommend the education and supervised practice requirements for entry to the profession to assure quality practice and the broad skill sets for specialist and advanced practice (which is beyond entry to the profession).

In 2008, the Phase 2 Task Force reported on the compilation of its work between 2006-2008, building off the work initiated in 2003-2005 by the Dietetics Education Task Force. Although time has passed, many dietetic education plans still have the same basic challenges, such as teaching the best skills, having the best resources, and staying competent and competitive as knowledge explodes. What has changed is the fact that the profession of dietetics is growing and evolving. Such a phenomenon is a two-edged sword. While opportunities abound, the foundation knowledge and skills needed to function professionally is not able to grow at the same rate. As RDs and DTRs are sought out for new positions and develop new areas of expertise in practice, the resources to educate and train these budding professionals become more and more limited. How do we educate, train, mentor, nurture, and polish the almost 19,000 students in today’s dietetic education programs? A look at the environment in which these changes are taking place is essential.

The task force agreed to focus Academy resources on defining and supporting advanced and specialist practice education and credentialing in order to position future nutrition and dietetics practitioners to assume more practice autonomy, manage valued resources and embrace higher risk in decision-making. This would entail different continuing education requirements for practitioners at different points of their career; along with the opportunity to achieve recognition for this education beyond entry.

Continuing education for newly credentialed practitioners must be more rigorous and more focused. A constant flow of high quality, professional education opportunities must be provided, using all available technology and delivery methods to facilitate movement up the career ladder and support the growth and development of specialist and advanced practice.

**2010 Dietetic Career Development Guide**

The Dietetic Career Development Guide (See Appendix B) was created by the Council on Future Practice (CFP) and was approved in fall 2010 after a number of discussions and input from various Academy organizational units and members. The Guide is accompanied by a set of definitions for each practice level and serves as the foundational framework for specialist and advanced practice. These definitions are noted in the following section.

*Formerly American Dietetic Association*
Overview of Terminology

The terms used in the Guide are based on the Dreyfus Model of Skill Acquisition (1). The model suggests that as a person acquires and develops a skill, s/he “. . . usually passes through at least five stages of qualitatively different perceptions of his task and/or mode of decision-making as his skill improves.” The stages are: novice, advanced beginner, competent, proficient, and expert. The skill-acquisition process has been studied in a number of settings, including the acquisition of nursing skills (2).

In the first two stages of skill acquisition (novice and advanced beginner) the individual is learning the foundational facts or “rules” of practice. Decision-making and problem-solving tend to be formulaic and rather rigid in these stages. Competent practitioners (third stage) are adding context to the “rules” and refining their ability to prioritize, weigh alternative approaches, and exercise judgment considering several factors.

The proficient practitioner (fourth stage) has had sufficient experience to approach practice situations as a whole, rather than component parts, and can see how the situation fits into the broader picture and goals. “Experience, as the word is used here, does not refer to the mere passage of time or longevity. Rather it is the refinement of preconceived notions and theory through encounters with many actual practical situations that add nuance or shades of differences to theory (2).” For the full definitions, please refer the appendix.

Additional experience, or “encounters with many actual practical situations,” may lead to the expert stage. Here the practitioner is immersed in skilled performance and responds intuitively rather than in an analytic manner. For normal situations, the practitioner’s vast experience has developed a sense of what works, and that is the course of action taken. The expert certainly can and does use analytical tools, but s/he seldom needs to in the area of expertise.

Relevant to the mega issue question for Day 2 discussion, it is important to reference the guide’s content on advanced practice. To have a successful dialogue one must be able to distinguish the differences between “expert” and “advanced practice” as they are not interchangeable. It is also important to note, that, although the profession MUST embrace advanced practice, not every practitioner will achieve the expert skill level in dietetics or practice at an advanced level. Developing an advanced practice credential or recognition for different areas of practice will recognize the individuals practicing at this level.

2010 Council on Future Practice (CFP) -- Definitions

It can sometimes be daunting and/or confusing to make sense of the term specialist practice or advanced practice and what it means. Is it having higher levels of educational degrees (Masters, practice doctorate, PhD)? Or is it having a wealth of knowledge based on experiences in practice? To help clarify for the purpose of the Spring 2012 dialogue session, the definition from the 2010 Council on Future Practice Visioning Report will be used to guide the content of this backgrounder.

Focus Area of Dietetics Practice

Definition: Defined area of dietetics practice that requires focused knowledge, skills, and experience.

Rationale: The term focus area is adopted based on feedback from members to the Council and relates to how a practitioner specializes in a specific area of practice (i.e., diabetes, community health).

Specialist

Definition: A practitioner who demonstrates a minimum of the proficient level of knowledge, skills and experience in a focus area of dietetics practice by the attainment of a credential.
Rationale: The term specialist requires a credential and is defined by the ADA Standards of Practice in Nutrition Care (SOP) and Standards of Professional Performance (SOPP) or other criteria established for a focus area of dietetics practice. A specialist performs at the proficient level.

See Appendix C for the criteria and characteristics of Specialist.

Advanced Practice
Definition: The practitioner demonstrates a high level of skills, knowledge and behaviors. The individual exhibits a set of characteristics that include leadership and vision, and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes.
Rationale: The term advanced practice is used after a careful review of Academy’s Standards of Practice (SOP) and Standards of Professional Performance (SOPP) in the various focus areas of dietetics practice and the literature for other professions.

See Appendix C for the criteria and characteristics of Advanced Practice.

To elaborate further, the Council developed future practice scenarios to demonstrate the application of the Dietetics Career Development Guide. Please refer to Appendix D for a few example scenarios.

The CFP’s Visioning Report explains the Foundation Practice Elements and Characteristics and then provides a vision for the RD in 2020 in the following focus areas of dietetics practice: Health Promotion/Disease Prevention, Public Policy, Research, Clinical Healthcare, Systems and Services Management/Administration, Higher Education, and Executive Positions. The details can be found in Appendix E.

Accreditation Council for Education in Nutrition and Dietetics (ACEND) formerly CADE-- Accreditation 101 Report
Furthermore, an Accreditation 101 report released by ACEND included a review of the data on the demand for dietetic internships in relation to the number of available positions. Demand for internships rose to a peak from 1993 to 1997, followed by a downturn that bottomed out in 2001. Since then, the demand has been rising and now exceeds the 1997 high with no significant increase in the number of internship positions since 2003. Data on the April 2009 First-Round Match suggest no change in this trend. As a result, competition for internships is intense and qualified candidates sometimes leave the profession in pursuit of other careers. More recent data from the 2011 match year indicate that didactic programs in dietetics are continuing to enroll students in even greater numbers; however, demand for internship sites from students enrolled in those programs has declined since 2009. In addition, the number of internship positions began rising in 2008 and continues to do so.

2010-2011 Alternative Supervised Pathways Workgroup
The Alternative Supervised Pathways Workgroup was appointed by the Academy’s 2010-2011 Board of Directors and was charged to facilitate the establishment of multiple supervised practice pathways to credentialing and a new credentialing framework. The Board of Directors requested that ACEND, CDR, and the Education Committee make solving the supervised practice problem their number one priority in FY2011. One result from this workgroup was the establishment of the Independent Supervised Practice Program (ISSP) in fall 2011. During the Academy’s Board meeting on January 21-22, 2012, the Board provided input to a report on a potentially new credential for DPD graduates who are not matched for internships, do not pursue the RD credential via internship, or wish to work for a period of time before pursuing an internship and/or advanced degree beyond the baccalaureate degree to become a RD. This new credential will be an interim step between the DTR and RD. The credential will be available for the DPD graduate and potentially to graduates of non-accredited nutrition and dietetics education programs. This report is also under discussions by the Alternative Supervised Pathways Workgroup, Council on Future Practice, ACEND, and CDR as to what focus areas of practice this new credential would address, the relationship of this credential to the RD credential and any impact on state licensure.
**2010-2011 Specialty* Certification Program Evaluation: Support of Specialists by Employers**

From the 2010-2011 Specialty* Certification Program Evaluation conducted by CDR, employer support of CDR specialty* certification is seen in two primary areas: financial remuneration and requirements or preferences for employment. Important to addressing the needs, wants and expectations of customers and other stakeholders (ie employers), the evaluation showed that 81% of employers surveyed felt that CDR specialty* certification resulted in “increased credibility by other professionals,” that 94% felt that the credentials are of “moderate” to “great” value, and that 72% felt CDR specialty* certification “will become more important” in the future.

Of course, a factor of great interest to practitioners is the rate of remuneration associated with the specialty* credentials. By 2011, the average full time CDR specialist earned an average of 12% more than the RD with no specialty* certification at the 50th percentile. While this figure is encouraging, we are by no means in a situation such that any CDR specialist can display their specialty* credential and expect an automatic 12% increase in salary. There are still many organizations that do not recognize specialist credentials in nutrition and dietetics and do not provide additional compensation for them. See Appendix F for list of CDR Specialist Credentials.

**2011 CDR Workforce Demand Studies**

A report from Rhea and Bettles entitled, Future Changes Driving Dietetic Workforce Supply and Demand Future Scan 2011-2021 (3) provides information on workforce demand studies. This scan was shared with the House of Delegates in advance of the Spring 2011 HOD Meeting Identification of Mega Issues dialogue and again for the Fall 2011 HOD Meeting Interdisciplinary Teams. The Executive Summary from the scan provides an overview of the future. The Workforce Demand Task Force identified 10 change drivers affecting dietetic workforce supply and demand, eight mentioned in the scan. The two change drivers that relate to the continuum of professional progression and growth are Workforce Education Meets Job Market Demands and Generalists Gain an Edge on Specialists.

**Workforce Education Meets Job Market Demands**

A more diverse student population seeks flexibility, convenience and affordability in education to prepare for and maintain employability. Workforce challenges include: dietetics education having low visibility for the growing number of nontraditional students, and professional preparation and continuing education need to be more seamless and adaptable. Workforce opportunities include: inter-professional learning could expand the number of dietetic and nutrition specialists, and healthcare career opportunities are growing while being perceived as more secure. While many more students will need postsecondary education to get a job, they will want more assurance that nutrition and dietetic education leads to immediate and sustained employment.

**Generalists versus Specialists**

RDs and DTRs can thrive as adaptable generalists if they cultivate the interdisciplinary perspective and leadership qualities future employers will value. Workforce challenges include: most healthcare professions are developing advanced practice and specialist education and credentialing practice; career mobility requires continuing education and training; personal risk taking and openness to new opportunities; and, business and leadership knowledge and skills. These challenges may not be a priority in academic preparation. Workforce opportunities include: RDs can migrate with healthcare out of the clinical setting, RDs may be a step ahead in adopting the skills to lead interdisciplinary teams, and management opportunities offer better compensation and career growth. Without career adaptability, there could be too many RDs for declining fields and too few for emerging opportunities.

* "Specialty” was used in place of the newly approved term “Specialist”
A second report, Four Futures for Dietetics Workforce Supply and Demand, 2011-2021 Scenarios, summarized a scenario development process directed by the Dietetics Workforce Demand Task Force with the assistance of futurists Marsha Rhea and Craig Bettles. A team of leaders from within and outside of the Academy concluded that two opposing future scenarios are likely to occur: the underprepared future and the overproduced future. To further explain, the underprepared future scenario looked at a future where RDs and DTRs experience high demand for their services, but supply of qualified practitioners does not meet demand. The overproduced future scenario looks at a future where demand for dietetic services is decreasing while the supply of RDs and DTRs looking for work remains high. It was agreed that both scenarios would be considered most challenging to the profession. The dichotomy reflects an inability on the part of RDs to influence two critical aspects of future demand and supply. Unlike other healthcare providers, RDs have a limited ability to protect their scope of practice. Inability to protect the scope of practice opens the profession to increased competition from other healthcare providers. In addition, changes in healthcare payment systems stemming from healthcare reform are introducing challenges and opportunities that open the profession to competitive pressures.

The leaders of the profession are concerned that the dietetics education system is very adverse to change due to various forces within higher education. The current system may be unable to produce enough RDs and DTRs with the skills demanded by future employers, who need a solid evidence base to demonstrate their value and unique contribution in different situations and practice settings. When the value of RDs and DTRs is in question, RDs and DTRs may lose positions to other more well-rounded professionals such as nurses or pharmacists in the future.

Spring 2011 House of Delegates Mega Issue: Market Place Relevance
The content of the Market Place Relevance Mega Issue Backgrounder from the Spring 2011 meeting has relevance to the discussion of the continuum of professional progression and growth. Although it is difficult to predict what the American healthcare system will look like when the next generation of RDs begins practicing, the constancy and intensity of some trends impel extrapolation in preparing for our future practice. Some of these trends are common to virtually all healthcare professions; others are more specific to dietetic and nutrition-related practice:

- There continues to be an ongoing shortage of qualified practitioners among nearly every profession across the healthcare industry.
- A healthcare profession seeks to expand its scope of practice by appropriating one or more elements from the scope of practice of a competitor profession either above it or next to it on the conceptual prestige/remuneration/education hierarchy of professions.
- The practitioner selected to provide particular services is largely a function of (a) who is ultimately paying for them, and (b) any legal and regulatory constraints on the selection.
- Many services within an RD’s and DTR’s scope of practice are increasingly in demand; those increases will cause a corresponding increase in the supply of practitioners—whether Registered Dietitians, Dietetic Technicians Registered or not—who are willing and able to meet the demand?
- Competition will be greater for RDs and DTRs in emerging and growing practice areas such as preventative medicine, where fewer regulations and increased funding combine to attract a variety of competitors willing and able to provide services.

Fall 2011 Joint Meeting (November 2011)
During the joint meeting of CFP, ACEND and CDR, trends of greatest importance to planning the future of advanced practice credentialing (Appendix G) were identified. The categories identified include: Category 1-Need for a plan, Category 2-Competition, Supply and Demand, Category 3-Recognition and Respect, Category 4-Distribution of Practice, and Category 5-Internal Organizational Struggle. As a result of that meeting, the CFP requested a dialogue on the continuum of professional progression and growth by the House of Delegates. The focus of the joint meeting shifted from advanced practice credentialing to the need to examine the whole continuum of education and credentialing (from DTR to advanced practice). The shift relates to the need to create the ability to
recognize advanced practice credentialing while considering all facets of the continuum of education and credentialing.

**Question #2:** What do we know about the current realities and evolving dynamics of our members, marketplace, industry, profession, which is relevant to this decision?

Although the Academy has been addressing concerns for the future of the profession for decades, significant work in the last 3-4 years has provided a foundation for the discussion. In 2008, a survey of members and non-members provided an assessment of the needs of the profession. Also in 2008, the House of Delegates approved the Phase 2 Future Practice and Education Task Force report that illustrated the need for a career continuum including the role of the entry-level RD and DTR, the generalist RD, the Specialist RD and Advanced Practice RD. This resulted in the establishment of the Council on Future Practice in 2009 by the House of Delegates, who was charged to address the continuum of career development. In 2010, the Board of Directors appointed the Alternative Pathways Task Force to address the internship shortage, which resulted in the development of the ISPP guidelines and considerations for a credential for DPD graduates. The Council on Future Practice Visioning Report was released in spring of 2011 in advance of the Future Connections Summit, which addressed both education and credentialing needs along with the career continuum. In addition, a joint meeting among CFP, CDR, and ACEND was conducted in November 2011 to address advanced practice. Below is a brief summary of each activity to better understanding these realities and evolving dynamics.

**2008 Needs Assessment Survey**
The 2008 Needs Assessment Survey indicates that the RD credential is strongly viewed as valuable in the marketplace. Just under half of RDs and even more students agree that CDR's Board Specialist credentials are valued. Thirty-three percent of RD respondents and 42% of students and novices who responded would like to see CDR develop an advanced practice certification examination.

From the 2008 Needs Assessment survey, 34% of 75,418 RDs surveyed had advanced academic degrees in dietetics and 1% of 4,027 DTRs surveyed had advanced academic degrees. As of December 31, 2011, reports from CDR show that there are 84,346 RDs and 4,450 DTRs. At that time, 2,490 of the 84,346 RDs were RD Specialists. Please refer to Appendix F for details of the CDR Specialist Credentials.

**CDR Discontinued Fellow of the American Dietetic Association (FADA)**
CDR conducted a scheduled evaluation of the Fellow Program in 2001. Based on evaluation data, CDR made the decision to discontinue administration of the Fellow certification program due to declining candidate volume, financial and psychometric issues. CDR also made the decision to grant then-current Fellows with lifetime certificates. In 2002 CDR forwarded a motion to the Academy Board of Directors supporting the concept of a Fellow recognition program as a means to honor those who have demonstrated exceptional professional characteristics. In 2003, after reviewing this issue the Academy approved a motion to continue to promote all present awards and honors rather than developing an additional, new formal recognition program. The Council on Future Practice will be examining potential use of the FADA credential as a recognition program during Spring 2012.

**2008 Phase 2 Future Practice and Education Task Force**
The task force believed that to achieve the preferred vision of future dietetics practice, emphasis must be placed on promotion of the DTR as well as the RD, plus development and/or expansion of specialist and advanced practice practitioners including education and credentials when feasible. The task force recognized that, for a variety of reasons, RDs may choose to practice in entry-level positions throughout their careers, while continuing their professional development through appropriate lifelong learning. The task force supported the continued use of the minimum of a baccalaureate degree for entry to the profession, recognizing that entry-level academic and
supervised practice requirements are updated regularly when ACEND Standards of Education are revised. The demands of future practice roles identified in this report will be best achieved by focusing on education specific to specialist and advanced practice. Focusing on an advanced practice credential will elevate dietetic practice at all levels. The task force emphasized the affirmation of the value of the DTR, the value of focusing on advanced and specialist practice and the establishment of a formalized Academy organizational unit responsible for assuring ongoing visioning of the future practice opportunities will position dietetics practitioners at all levels for an exciting and dynamic future. This latter recommendation resulted in the establishment of the Council on Future Practice in 2009 by the House of Delegates (See Appendix H- Functions of the Council). The Council has utilized this final report as the basis for all its efforts to date.

Spring 2011 Future Connections Summit on Dietetics Practice, Credentialing, and Education Report
The Council on Future Practice in collaboration with the CDR, ACEND, and the Education Committee convened the Future Connections Summit on March 24-26, 2011 to develop a vision for future practice, credentialing and education. A select group of 207 participants assembled in seven regional locations and virtually to participate in a collaborative experience of future search and design thinking. Over three days, participants worked together in a future search to understand the profession’s future challenges and opportunities and discover a shared vision. Participants used design thinking to express that vision by developing design principles and proposing innovative initiatives to lead changes to achieve their vision. They did extensive reading to prepare for the summit. On the first day of the summit, the priority changes facing future practice, credentialing and education were identified. These changes set the context and urgency for what the profession must do. On day two, they defined the design principles that should guide the future development and integration of practice, credentialing and education. This is a shared vision the profession can work to achieve. On the final day, they proposed, organized and committed to 76 pilot initiatives. These are the prototypes for innovation and new directions.

The future vision for the profession is one that is expansive and will prepare RDs and DTRs with the knowledge and skills to lead a consumer-centered focus on food and nutrition and their relationship to health and wellness. The profession embraces multiple levels and multiple paths for entering and advancing in dietetics and welcomes new roles as members of interdisciplinary teams. Education and credentialing must evolve to support these diverse, emerging and adaptive careers in food and nutrition.

The Academy’s vision is to have RDs and DTRs recognized as the leaders in food and nutrition. In reality, the profession faces considerable competition and encroachment from other disciplines with an interest and stake in food and nutrition. Some members indicate that the RD and DTR credentials have insufficient marketplace recognition; some members perceive that RDs and DTRs receive inadequate reimbursement and compensation for their work; and, many in the profession want to see more effective marketing and brand recognition.

Institutional barriers do exist across all areas of practice and education. Education institutions and accrediting requirements are seen as inflexible. The Academy itself needs enhanced cohesion among its organizational units. Without internal and external stakeholder buy-in and support, it will be difficult to achieve these significant changes. In order to effectively pursue changes for the profession, it is critical to acknowledge, examine and address the constraints and challenges that do exist throughout the profession. Facing the brutal facts and our own contributions to our challenges is a crucial step in leading change.

In the October 2011 edition, the Journal of the American Dietetic Association nicely summarized the Summit, stating “Constraints and challenges summarized from the group’s input were topped off by fear and resistance to change and followed by the need for internal and external stakeholder support. Varying licensure laws and currently inflexible education standards were also identified as problems, as were a lack of resources, finances, and understanding of the consumer-centered ideology. A lack of diversity within the profession was termed a challenge, as was the encroachment of competitors and the need for effective marketing and brand recognition.
Issues inhibiting reimbursement of services and a lack of leadership, access to training and mentorship were also noted. Institutional barriers and political uncertainty were also included, along with a need for more forward-thinking (5).

Fall 2011 Joint Meeting- Council on Future Practice, Accreditation Council for Education in Nutrition and Dietetics, and Commission on Dietetics Registration

The purpose of the November 2011 joint meeting including CFP, ACEND and CDR was to explore the question, “What are strategies and practical actions we can take, both collectively and individually, to realize the future of advanced practice we have agreed upon? The objectives from the meeting included:

- Create a shared understanding across our three organizations (ACEND, CDR and CFP) of the environment in which we will be operating as we seek to realize the future of advanced practice
- Focus all of our efforts towards those opportunities that will deliver the greatest value of advanced practice to the public and to the profession
- Create a strategic framework that all will support for practical action over the next 3-5 years to realize the future of advanced practice
- Establish the powerful culture of collaboration needed to realize the future of advanced practice

However, the resulting outcomes were different than the stated purpose based on the discussions of the three organizational units. The outcomes were:

1. The Council on Future Practice, ACEND and CDR agreed to move forward to address advanced practice credentialing for the profession, beginning with the clinical dietetics focus area of practice. The timeline they created will be shared in 2012.
2. The three organizational units also agreed that an examination of the continuum of education and credentialing from entry level (for both DTR and RD) to advanced practice credential was critical to moving the profession forward. The three organizational units recognize that in order to compete and remain relevant in today’s healthcare environment, the dietetics profession may have to reconsider increasing the degree requirement for entry into the profession. The three organizational units also believe that developing a new credential for DPD graduates, while considering how the DTR will be able to move toward that credential was important. Details about this effort are included in the timeline with action steps that will be released in summer 2012.
3. The Council, ACEND and CDR have committed to collaboration and communication to address advanced practice and the continuum of education and credentialing.

Outcomes of the HOD Spring dialogue will be utilized by the three organizational units as they pursue a review of the continuum of education and credentialing. The detailed action plan and timeline will be shared with HOD and Academy organizational units in early summer 2012.

2005 Literature on Comparison of RD to Other Healthcare Professionals

A review conducted by Annalyynn Skipper and Nancy Lewis (Academy leaders) in the March 2005 issue of the Journal of the American Dietetic Association can be summarized as: “educational preparation of 16 health-diagnosing and treating professions to better understand the standards for dietetics education within a larger context. Educational standards for each profession were obtained and reviewed for types of degrees; duration of post-secondary, college-level education; division of didactic and clinical education; and presence of accredited post-professional education. Findings reveal that at least 11 of the professions studied offer first professional degrees (practice doctorate, clinical practice doctorate, clinical doctorate, or professional doctorate degree). These degrees differ from the academic doctorate or PhD degree in that they blend didactic or classroom instruction with supervised practice experience. The baccalaureate degree followed by the professional degree is used as a prerequisite to professional practice for those 11 professions. RDs obtain approximately 2 years of
general education while health professions in the cohort other than recreational and respiratory therapists and nurses obtain 4 years of general education.” “Comparison between the dietetics, medical and nursing models reveals differences in the depth of education at the baccalaureate, professional, and supervised practice levels. Both the medical and nursing models include accredited specialized practice education and experience. The existence of advanced practice in dietetics was documented more than a decade ago but a mechanism to accredit advanced practice education in dietetics has yet to be developed (6).”

**Pathways for Education of Other Healthcare Professionals**

Please see Appendix I for the table comparing training of healthcare professionals.

**Demographic Shifts and Future Dietetics Practice**

A supplement to the *Journal of the Academy of Nutrition and Dietetics* about workforce demands will be published following distribution of this backgrounder but will be available before the HOD Spring Meeting and will contain material relevant to the mega issue. One of the five technical papers provides an overview of the most significant population risk factors and trends in health care and public policy that are anticipated to affect the current dietetics workforce and future of dietetic training and practice. It is pointed out that “demographic shifts in the age and racial/ethnic composition of the US population will be a major determinant of future dietetics practice. The location of dietetics professionals geographically and within communities can affect availability, access, and delivery of services (7).” Appendix J-State-Specific Ratios of Dietetics Professionals per 100,000 Population, United States “demonstrates important state-specific differences in available RDs per population and suggest significant differences in the availability of RDs for needed services (7).”

**Question #3:** What do we know about the capacity and strategic position of the Academy in terms of its ability to address this issue?

The 2008 Phase 2 Future Practice and Education Task Force cautions that not all RD/DTRs will be required to attain advanced practice credentials because employment demand will exist for all levels of practice. According to an unpublished report from the 2011 CDR Workforce Demand Study, Dietetics Supply and Demand: 2010-2020, “if current supply factors and limitations persist, there will be a shortfall between demand for services and the capacity of the dietetics workforce. By 2020, a projected shortfall of about 18,000 full time dietetics practitioners (or more) may exist” (8).

**2011 The Future Connections Summit on Dietetic Practice, Credentialing and Education**

The Summit sought to identify innovative pilot initiatives for education so the profession can evolve and develop multiple levels of practice in a changing and challenging environment. To set the context for the summit’s work, participants explored the key changes in the environment facing the profession. A priority change driver explored was that the profession must foster learner-centered and transformative professional education that emphasizes leadership development, critical thinking for decision-making and change, and competency in the continuum of future practice, credentialing and education. During the summit, participants contributed to indentifying the design principles as the priority guidelines for achieving a shared vision. Design principles set the guidelines for designing a system that can achieve the profession’s shared vision. The design principles seen in Appendix K-Design Principles for Future Practice, Credentialing and Education, are not in any rank order as they were all judged to be important and interdependent guidelines.

In addition to the design principles, the participants were invited to propose and organize pilot initiatives (local or regional efforts to lead change) that would be aligned with the design principles and prototype innovations and new approaches for the future. At present, 48 of the 76 pilot initiatives received support from 12 Academy organizational units. Memos to both the pilot initiative champions and the Academy organizational units was sent in October 2011 to inform them of the support being offered. Appendix L defines this support. In addition, 11
pilot initiatives were specific to a state or institutions and they have been encouraged to proceed with development. Eleven other pilot initiatives did not receive any offer of support from an Academy organizational unit and they have the choice to proceed or not in further development. And, 5 pilot initiatives were referred to various Academy organizational units for potential assistance.

The Council on Future Practice is monitoring and coordinating these pilot initiatives to keep the learning and momentum of this summit alive within the Academy. The Council has notified the pilot initiative champions that a report on progress will be requested in February 2012. Also, the Council will be offering pilot initiative champions the opportunity to share information about their initiative at FNCE 2012 in Philadelphia, if desired. More details regarding this activity during FNCE will be shared at a later date.

Visioning Future Practice Roles
The Council on Future Practice was charged with establishing a visioning process for future practice roles. The visioning process for consideration included examining future practice roles, education needed for these roles and credentials that might be required for moving the profession forward. Below is a brief description of the future roles of the entry-level RD, the advanced practice RD and the DTR; Appendix M provides more detail for each practice role and what is envisioned for the future.

The Future Entry-Level RD – Generalist
A general RD practitioner (or generalist) is an individual whose practice includes responsibilities across several focus areas of dietetics practice including, but not limited to, more than one of the following: community, clinical, consultation and business, research, education, and food and nutrition management.

Visioning Future Practice Roles for the Advanced Practice RD in 2020
The practitioner demonstrates a high level of skills, knowledge and behaviors. The individual exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes.

Visioning Future Practice Roles for the DTR
When discussing the future practice visioning of the profession, it would be a disservice not to mention and emphasize the role of the Dietitian Technician, Registered. The small number of dietetic technician programs and DTRs place this segment of our profession at risk for continued existence. Steps must be taken to ensure a sufficient number of DTRs to meet demand and achieve the future vision of the dietetics team who need DTRs as viable team members to succeed.

It became clear that DTRs work in non-traditional or emerging focus areas of dietetics practice with more diverse possibilities for the future. It was also recognized that DTRs, after years of practice, may work with RDs in advanced-level practice areas such as renal dietetics. To that end, a vision of DTR practice was also developed and the details can be found in Appendices M, N and O.

2012 Guidelines for ACEND-Accredited Advanced-Practice Residencies
As a result of recommendations for the Phase 2 Future Practice and Education Task Force, the Commission on Dietetic Registration (CDR) approved funding for the Academy of Nutrition and Dietetics’ Foundation to provide support for the establishment of advanced-practice residency programs across the spectrum of dietetics practice. The goal of developing these residencies is to foster the pursuit of advanced practice and to provide a career ladder for RDs as outlined by the Council on Future Practice Dietetics Career Development Guide. ACEND developed working guidelines that describe an accredited advanced practice, dietetic residency program for use by educators and practitioners. This program structure is applicable to all dietetic practice areas including nutrition support, foodservice management, clinical nutrition management, oncology, pediatrics etc. Because the
accreditation process offers advantages for both didactic and supervised practice programs and students, the advanced practice residency program structure is designed to parallel the 2008 Accreditation Standards established by ACEND.

The goal of an Advance Practice Residency (APR) is to provide a comprehensive, systematic, evidence-based approach to advanced level practice education and training for registered dietitians meeting established prerequisites. APR programs will be expected to have both didactic and experiential components. Institutions/organizations intending to apply for accreditation will need to provide sufficient evidence that they can provide advanced level education, training and mentoring in practice areas. Potential sites for APR programs are ones that are housed within an organization, which have resources available to provide both the didactic and supervised practice experience at an advanced level. APR programs are not limited to academic institutions or to clinical practice areas. Programs may use more than one organization to achieve both didactic and supervised practice.

The criteria for APR program admission includes the number of years to be determined by the program (recommendation is 8 years of experience). If the program chooses, a master’s degree can be substituted for a comprehensive portfolio review or the program can require both a master’s degree and a portfolio review. The criteria for the portfolio should be established by the program to meet its individualized needs. Currently, ACEND is soliciting for programs to volunteer to pilot the APR program. Cleveland Clinic Foundation has volunteered to start an APR pilot project in Nutrition Support in the future (9).

**Question #4:** What ethical/legal implications, if any, surround the issue?

**Code of Ethics**

RDs and DTRs have voluntarily adopted a Code of Ethics to reflect the values and ethical principles guiding the dietetics profession and to outline commitments and obligations of the dietetics practitioner to client, society, self and the profession. The following principles from the Code of Ethics show support for the growth of the profession.

- Principle 2: The dietetics practitioner supports and promotes high standards of professional practice. The dietetics practitioner accepts the obligation to protect clients, the public, and the profession by upholding the Code of Ethics for the Profession of Dietetics and by reporting perceived violations of the Code through the processes established by ADA and its credentialing agency, CDR.
- Principle 14: The dietetics practitioner assumes a life-long responsibility and accountability for personal competence in practice, consistence with accepted professional standards, continually striving to increase professional knowledge and skills and to apply them in practice (10).

**Scope of Practice**

The Scope of practice is the range of roles, functions, responsibilities, and activities that food and nutrition professionals are educated and authorized to perform (11). The Academy of Nutrition and Dietetics has adopted the Scope of Dietetics Practice Framework that guides individual credentialed dietetics practitioners in determining their own individual scope of practice. The practitioner must take into account state practice acts, federal and state regulations, accreditation standards, facility privileges, facility policies and procedures, education, training and competence when determining his or her own individual scope of practice (12). One scope of practice tip from the Academy’s Quality Management Committee is to assess the competency of the dietetics professional. Competency is demonstrated through education, experience and specialized training; all things related to the continuum of professional progression and growth (13).

**In Summary**
From the Future Changes Driving Dietetic Workforce Supply and Demand Future Scan 2011-2021, “the dietetic profession faces many workforce challenges and opportunities to ensure RDs and DTRs are at the forefront of health and nutrition (3).” The goal of this dialogue is to reach a common understanding of the opportunities for growth to enhance our knowledge of the career continuum and the potential recognition of advanced practice. Understanding how the Dietetics Career Development Guide, including advanced practice, assists practitioners to grow into new opportunities should help us to embrace the changes that are required to ensure relevance and a competitive presence in the market place.

“If we’re growing, we’re always going to be out of our comfort zone.” – John Maxwell
APPENDIX A: Spring Meeting Brainstorm of Mega Issues

House of Delegates Discussion on Mega Issue Topics from Spring 2011 Meeting Notes: Topics Relevant to Continuum of Professional Progression and Growth

Topics include:

- Education/training of future practitioners; alternative pathways to practice
  - Expand pathways into the profession
  - How can we make education efficient and flexible to prepare people with the skills to function in future practice
- Branding the Profession
  - How do we market the RD as most qualified nutrition professional
  - How to get the RD to market their services to the general public and break the stigma of being hospital-based only
  - Strengthen the image and perception of the profession
- Inclusion of RD in regulatory language
- Licensure
  - How do we protect our licensure status and scope of practice
  - How can we protect and expand our scope of practice to be most recognized provider of nutrition services
  - Expand scope of practice to include adjusting insulin, anthropometrics; tube feeding placement blood pressures, wellness coaching
- Utilize DTR effectively
- Preparing for the future with tele-health and informatics
- Changes to the workplace for dietetics now and in the future, especially related to hospital based practice. In some areas of clinical advanced training is needed; in other areas jobs are becoming more hybrid (partially clinical and partially community)
- More focus on wellness/prevention which will position us more competitively with others in the marketplace
Dietetics Career Development Guide

Expert
Builds and maintains knowledge, skills and credentials

Advanced Practice
Continues at the highest level of knowledge, skills and behaviors including leadership, vision and/or advanced credential

Proficient
Operational skills obtained and adeptly practiced long-term, may begin to acquire specialist credentials

Competent
Start of practice after registration (generally the first three years of practice)

Beginner
(Learning Phase) Supervised practice

Novice
Didactic education DPD

RD Pathways
Focus Area

DTP
Dietetic Technician Program

DTR Pathway
Knowledge & Skills

EDUCATION FOR ENTRY INTO CAREER
Associate, Baccalaureate or Advanced Degree

Definition of Dietetics: Dietetics is the integration, application and communication of principles derived from food, nutrition, social, business and basic sciences, to achieve and maintain optimal nutrition status of individuals through development, precision and management of effective food and nutrition services in a variety of settings.

Approved 9/23/10; 10/11/10
APPENDIX C: Criteria and Characteristics of Specialist

Criteria for Specialist

1. **Education**
   - Specialized education and training beyond the baccalaureate degree (i.e., residency program, on-job training, advanced degree).
   - Education and training are beyond being proficient as defined by the Dietetics Career Development Guide. Job performance skills are obtained.

2. **Experience**
   - Beyond entry-level (3 years) with defined experiences and skills for a focus area of practice.
   - Documents the continuation of practice and/or management in a focus area.
   - Seeks out professional development experiences in the focus area of practice.
   - Ethics guides the practitioner’s decision-making process.

3. **Credentials** currently available for the specialist.
   Eligibility requirements for specialist certification include maintenance of RD status with CDR, for a minimum of two years from original examination date, and documented practice experience as an RD in the focus area within the past five years.
   CDR Board Certified Specialist credentials currently available (as of March 2011):
   - Pediatric
   - Renal
   - Sports Dietetics
   - Oncology
   - Gerontology.

   Non-CDR Credential for RD Specialist currently available (**this is not an all inclusive list**):
   - Certified Diabetes Educator (CDE)-National Certification Board for Diabetes Educators
   - Certified Nutrition Support Specialist (CNSD—CNSC)-National Board for Nutrition Support Certification
   - Registered Sanitarian (RS)-National Environmental Health Association
   - Registered Environmental Health Specialist (REHS)-National Environmental Health Association
   - Certified Professional-Food Safety (CP-FS)-National Environmental Health Association
   - International Board Certified Lactation Consultant (IBCLC)-International Board for Lactation Consultant Examiners
   - Certified Professional in Healthcare Quality (CPHQ)-Healthcare Quality Certification Board
   - Certified Health Education Specialist (CHES)-National Commission for Health Education Certification.

4. **Characteristics** include the skills, knowledge and/or behaviors are exhibited and demonstrated by the specialist
   - Incorporates evidence-based practice in a focus area of dietetics practice and is involved in research
   - Completes continuing education opportunities each year in the focus area of practice
   - Consistently reads and applies journal articles related to the focus area of practice
   - Participates in advocacy initiatives pertaining to the focus area of practice
   - Serves as a mentor and/or resource to other practitioners
   - Actively participates in specialized practice groups (DPGs etc) related to the focus area of practice
   - Actively participates in self-study and demonstrates heightened interest in learning.
   - Actively participates in a formal work team or research team and leads as needed
- Known as the “go to person” for non-routine questions in focus area of dietetics practice.

5. **Demonstrated examples** of experiences and learning activities of a specialist
   - Authors articles in the focus area for peer-reviewed scientific publications
   - Authors chapters, books, or textbooks in the focus area
   - Presents on topics in the focus area at regional, state, national or international conferences
   - Co-investigator of research projects in the focus area
   - Serves in management position(s) in the focus area
   - Translates complex ideas/concepts inherent to the focus area for students, peers, and other professionals
   - Uses evidence-based information and best practices in communicating a focus area of dietetics practice, e.g., DPG and other professional newsletters, peer journal club activities, and all forms of media
   - Proactively engages in communication and interactions with the media on issues related to the focus area
Criteria and Characteristics of Advanced Practice

Criteria for Advanced Practice

1) Education (minimum)
   - Masters or higher degree from a US regionally accredited institution or an equivalent degree.

2) Experience (minimum)
   - Has more than 8 years as a registered dietitian (based on the Bradley article from 1993).
   - Documents the continuation of advanced practice and/or management in a focus area of practice.
   - CDR Professional Development Portfolio learning plan has focus on advanced practice education.
   - Ethics guides the practitioner’s decision-making process.

3) Credentials
   - Possesses an advanced practice credential, if available. For instances, the following credential is currently available to the RD: Board Certified in Advanced Diabetes Management (BC-ADM)-jointly sponsored by the American Association of Diabetes Educators and the American Nurse Credentialing Center.

4) Characteristics include the skills, knowledge and/or behaviors exhibited and demonstrated by the advanced practice RD within the last five years and evidence of an ongoing development and willingness to explore/experience new opportunities or situations as listed below. Characteristics with the asterisks must be demonstrated. These characteristics might be measured by examination, portfolio, etc.
   - Prioritizes order, rank and mode of required communications (e.g., physician rounds, legislative decision-makers) *
   - Approaches new opportunities/situations with flexibility and adaptability*
   - Demonstrates personal and organizational leadership *
   - Functions with a high degree of autonomy *
   - Recognizes sense of self and knows own limitations *
   - Recognized by others for expertise *
   - Makes decisions using benefit/risk evaluation *
   - Exposes self to new situations and ideas to experience, learn and apply to practice *
   - Strives to improve skill base by continuously moving out of personal comfort zone *
   - Demonstrates effectiveness/efficiency; problem solving; inspires confidence in others *
   - Demonstrates emotional intelligence *
   - Influences decision-makers related to policy, resources and services (e.g., elected and appointed government officials, university president, medical center CEO) *
   - Leads consensus panels and coalitions *
   - Maintains local/state/national/international role contacts and networks *
   - Directs strategic planning efforts *
   - Designs innovative programs, services or curricula
   - Provides expert opinion or expert testimony; Opinion is sought out for their expertise/skills by other leaders/experts
   - Plans and delivers invited presentations for national meetings
   - Conducts benchmarks for research or outcomes studies
   - Reviews proposals, grants, refereed journal articles, publications, and books
   - Creates innovations that impact the profession
   - Seeks and implements grants and external funding
   - Identifies and manages revenue streams and funding
   - Develops IRB proposals
   - Publishes in peer reviewed publications
- Develops guides to practice used by other practitioners
- Interprets and translates the literature effectively into practice application
- Uses data effectively to manipulate or garner the resources to address issues affecting the organization as a whole.
- Applies skills in consultation with other professional fields (e.g., lawyer)
- Formulates and communicates clear visions
- Works effectively internally and externally with all levels (e.g., chairs of departments, president of organization, other organizations, peers in other organizations)
- Mentors peers or professionals in complex issues, procedures and practices
- Contributes to evidence analysis process to affect practice
- Identifies and creates new practice opportunities.
- Maintains and creates networks with wider number of disciplines
- Creates and undertakes expanded and new practice roles and responsibilities
- Uses global resources to reach effective outcomes
- Increase revenues by creating new programs, services to benefit the organization
- Teaches advanced practice professionals (e.g., physicians, nurses)
- Demonstrates high level decision-making with a focus on delivering outcomes
- Maintains connection with key research institutions (e.g., NIH, USDA); viewed as a major contributor within the research community
- Uses time for reflection (regarding progress, issues, goals, plans, achievements)
- Identifies new innovative public policy initiatives in the area of food and nutrition
- Identified as a major collaborator with other organizations in order to position RDs or to facilitate the work of the RD (e.g., NWA, AADE, USBC).

5) **Demonstrated examples** of experiences and learning activities of an advanced practice RD
- Serves as a member of the Board of Editors for a professional peer-reviewed journal due to the level of knowledge, practice and experience.
- Directs the operations of multiple departments including fiscal and human resources.
- Submits applications for grants successfully and manages the grant to completion.
- Serves as a principal investigator for a research project involving other disciplines.
- Authors articles in peer-reviewed scientific publications.
- Authors chapters, book, or textbooks.
- Presents on topics regarding food, nutrition and health issues at regional, state, national, or international conferences.
- Mentors and educates for all levels of practice within dietetics including those professional peers outside the field of dietetics.
- Proactively engages in communication and interactions with the media on issues related to food, nutrition and health.
APPENDIX D: Future Practice Scenarios: Making the Dietetics Career Development Guide Come Alive

Career in Clinical Dietetics

Scenario #3: Beginning as a registered dietitian from an internship into a clinical outpatient hospital setting (entry-level), moving into a focus area of practice and securing the Certified Diabetes Educator (CDE) credential, entering into advanced practice with a dual master’s degree and accomplishing many research, practice and grant oriented endeavors.

Beginner/Competent Level and Focus Area of Practice

Jennifer completed her dietetic internship and successfully obtained the RD credential. She began working in a hospital outpatient diabetes center as the clinical dietitian. Jennifer began to develop her knowledge and skills related to diabetes care through her interactions with the diabetes management team.

Proficient Level

After five years, Jennifer decided to pursue the CDE credential and successfully passed the exam. She continued to provide diabetes self management education to all her patients and worked with the physicians, nurses and Endocrinologists to help patients manage their diabetes. She provided diabetes counseling, monitored and evaluated patients and developed nutrition care plans. She participated in diabetes management team meetings and served on clinical service committee meetings for quality assurance.

Jennifer decided to pursue a dual master’s degree in community nutrition and public health administration. She started to write both research and non-research grants. She was awarded several grants from federal, state and private agencies to do research in diabetes management as well as to expand the diabetes center to provide services that include screening for pre-diabetes and education on diabetes prevention.

Expert/Advanced-Practice Level

Jennifer was promoted to director of the diabetes center. She supervises a team of 10 registered dietitians, four registered nurses who are certified diabetes educators and 20 community workers. Most of the community workers assist in organizing and facilitating educational events for the potential clients in the actual communities they serve.

After 18 years of practice, Jennifer decided to sit for the board certification examination for advanced diabetes management (BC-ADM) which she passed. Jennifer has published several diabetes research articles in peer-reviewed journals and has expanded the diabetes center to include a weight management program for overweight patients and a healthy lifestyle and nutrition program for gestational diabetes patients. The center has also employed a nurse midwife who is a CDE and an exercise specialist to work with Jennifer in this program.
Career in Public Health

Scenario #10: Starting career as nutrition associate in WIC and later completing an employer paid internship. Working initially in WIC clinics and advancing to coordinator and education director.

Beginner/Competent Level and Focus Area of Practice

Keisha obtained a bachelor’s degree in nutrition and dietetics but due to having difficulty with chemistry did not have the grade point average to be accepted into an internship. During one of her clinical experiences she worked in the WIC program and really enjoyed that. Her faculty mentor identified a state WIC program that had an internship program as part of employment. She applied and was employed as a Nutrition Associate in a WIC clinic. One she had a year work experience; she was accepted into the internship. She was allowed to remain a full time employee (with benefits) but during internship blocks only worked part time. She completed all the internship requirements in 15 months and passed the RD exam. One of the requirements of the program was that once the internship was completed, that she was required to work for 3 years for the agency or she would have to pay back the cost for the internship. Since Keisha enjoyed the job, this was not a problem. After obtaining her RD, she was promoted to clinic WIC coordinator.

Proficient Level

Because of her interest in preventing childhood obesity, she worked with the state office to develop an obesity prevention initiative grant. The grant was funded and she became the nutrition coordinator for this grant. She was able to develop statewide initiatives that targeted obesity prevention and interventions. She continued to enjoy public health, but knew to advance in the field she would need to obtain a master’s degree. She found an on-line MPH and enrolled. Her employer agreed to pay for one course a semester.

Expert/Advanced-Practice Level

After completing her MPH, she successfully applied for WIC nutrition education coordinator at the state. She was selected as the State’s representative to Association of State and Territorial Public Health Nutrition Directors (ASTPHND) and served on the MCH council. She served on the MCH Council which was part of ASTPHND. She knew she needed to develop leadership skills if she wanted to advance in her career. She applied and was accepted into the Maternal and Child Health Bureau (MCHB) funded Nutrition Training Grant leadership program for year-long Emerging Public Health Leadership. Although much of the work for this program was done on her own time, she developed leadership skills that allowed her to advance in her public health career.
APPENDIX E: Visioning Future Practice Roles for the Advanced Practice RD in 2020

**Definition:** The practitioner demonstrates a high level of skills, knowledge and behaviors. The individual exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes.

**Foundation Practice Elements and Characteristics**
The following are practice elements consistent with all of the described practice roles:

- Prioritizes order, rank and mode of required communications (e.g., physician rounds, legislative decision-makers)
- Approaches new opportunities/situations with skills, flexibility and adaptability
- Demonstrates personal and organizational leadership
- Functions with a high degree of autonomy
- Recognizes sense of self and knows own limitations
- Recognized by others for expertise
- Embraces new situations and ideas to experience, explore, and potentially apply to practice
- Strives to improve skill base by continuously moving out of personal comfort zone
- Demonstrates effectiveness/efficiency; problem solving; inspires confidence in others
- Demonstrates emotional intelligence
- Influences decision-makers related to policy, resources and services (e.g. elected and appointed government officials, university president, medical center CEO)
- Leads consensus panels and coalitions
- Establishes local/state/national/international role contacts and networks
- Directs strategic planning efforts
- Teaches, mentors, and coaches students, DTRs, RDs, and other practice professionals
- Performs ethically and with personal integrity
- Communicates effectively using a variety of media
- Adopts technology advancements and uses informatics.

**Advanced Practice RD in Health Promotion/Disease Prevention**
The advanced practice RD in health promotion/disease prevention is a food and nutrition expert and contributing member of the public health team and/or private corporation/business entity. The advanced practice RD does some or all of the following:

- Establishes appropriate program evaluation systems which empirically measure program performance outcomes;
- Assesses needs, developing, directing and evaluating nutrition and wellness programs/facilities/corporations with multiple disciplines;
- Designs, directs and evaluates community programs;
- Advances nationally recognized health initiatives and programs within the community;
- Designs/conducts/publishes research to advance nutrition status of people;
- Conducts and evaluates interventions and outcomes;
- Directs multiple departments/sites/systems;
- Directs national/international public health agencies;
- Secures funds to develop/support health promotion/disease prevention programs;
- Influences public policy related to health promotion and disease prevention.

The practitioner demonstrates the ability to effectively communicate using a variety of media; directs/leads/organizes other professionals in order that nutrition services are provided to individuals and groups resulting in enhanced nutrition status; is expert in a particular focused area of dietetics practice such as, but not
limited to, maternal and child nutrition, nutrition and sports, nutrigenomics, complementary and alternative medicine, nutraceuticals, nutrition supplements. Critically assesses the research literature pertaining to health promotion and disease prevention, health and fitness, etc. Engages in a practice that is evidence based; and is competent to develop/direct accredited education programs for dietetic practitioners studying in a focus area of dietetics practice. This individual reflects a creative/innovative approach in problem-solving.

**Advanced Practice RD in Public Policy**
The advanced practice RD in public policy is a food and nutrition expert and contributing member of the public policy team, capable of some or all of the following:

- Recognized as an expert in a focus area of dietetics practice of food and nutrition which results in the evaluation and promotion of public policy; the practitioner works with consumers, professionals, agencies, individuals and all members of the public policy team
- Serves on healthcare policy boards which results in the implementation and evaluation of public policy; the practitioner works with public officials, hospitals, healthcare agencies and consumers
- Facilitates the development of policies related to global food and nutrition issues
- Identifies and builds health-related programs for positive health outcomes providing food and nutrition policies in health related programs
- Interacts with governmental agencies at all levels, non-profit and for profit organizations and consumers in establishing public policy
- Advocates for policy changes at the state, national, and international levels in food and nutrition areas
- Influences and/or holds elected/appointed political office or positions at various levels of local/state/national/international
- Leads and develops system to assure food safety and promotes sustainability
- Provides expert opinion or expert testimony; opinion is sought out for expertise/skills by other leaders/experts
- Directs national/international public health agencies
- Establishes and maintains influential networks
- Translates evidence-based research findings into practice.

The practitioner demonstrates the ability to identify, develop, implement, evaluate and administer food and nutrition programs that contribute to public health outcomes; applies concepts of political awareness; expresses a local/state/national/international/or global perspective of public policy related to food, nutrition and health; participates in professional and trade associations; and interacts with international groups.

**Advanced Practice RD in Research**
The advanced practice RD is a food and nutrition expert and contributing member of the research team who has the knowledge and skills to perform the following activities:

- Designs and conducts research in practice-based settings which results in improved practice and outcomes; works with/in clinical education, health promotion/disease prevention, research centers, business and industry;
- Directs the design, implementation, evaluation and interpretation of research which results in successful research outcomes; works with other RDs, other professionals (e.g. physicians, food chemists, food designers, nurses, public health), and essential research staff;
- Publishes in peer-reviewed journals which results in the dissemination of food and nutrition knowledge to peers and other professionals, transfers technology, and adds to the evidence based literature for food and nutrition practitioners; works with other scientists, statisticians, epidemiologists;
- Serves as principal investigator and/or co-investigator which results in the funding of research; acquires grants for food and nutrition research projects; works with peers, other researchers, staff, statisticians, grant writing experts and consumers;
- Secures external funding through grants, agreements, contracts, which results in additional research to further the profession, improve nutrition and public health, or improve educational methods for students; works with granting agencies, e.g., foundations, government agencies and private individuals;
- Establishes outcome management systems which results in state of the art practice research; works with management professionals and staff, peers, industry and equipment manufacturers;
- Presents findings at professional national and international meetings which results in visibility of the RD as a researcher, enhanced networks, and opportunities for mentoring RDs and students; works with varied audiences, students, and other scientists;
- Designs data collection instruments and manuals of operations/ procedures resulting in science of high quality and meaningful data to be used by other scientists/practitioners;
- Serves as leader in developing informatics and databases involving food composition, electronic records, and other issues related to nutrition which results in more accurate information systems and improved credibility for the databases; works with information technology specialists, food scientists, and statisticians.

The practitioner evaluates and implements research methodologies related to food, nutrition, management, and/or education; analyzes and interprets research; applies the research process including ethics, design, implementation, analysis, interpretation, and dissemination of data and results; publishes in peer reviewed journals; conducts research in one or more of the following areas: clinical/human studies, food science/production/service systems, basic laboratory, applied, qualitative or quantitative studies, etc. Participates in professional associations and interacts with international groups, foundations, granting agencies and other governmental agencies.

**Advanced Practice RD in Clinical Healthcare**
The advanced practice RD is a food and nutrition expert who leads and/or collaborates with the health care team in various settings. The advanced practice RD may be credentialed in a focus area of dietetics practice. The practitioner has the knowledge and skills to perform the following activities:
- Provides expert skills in complex nutrition care in focus area of dietetics practice;
- Directs and leads a team of RDs in the provision of NCP in health promotion and MNT;
- Has full autonomy for nutrition prescriptions within regulatory or institutional policies;
- Advocates advancement of food and nutrition services within the healthcare environments;
- Leads interdisciplinary teams, committees and task forces;
- Serves as partner with other healthcare providers in patient/client care;
- Publishes or presents to scientific and professional arenas;
- Conducts clinical outcomes research independently or in collaboration with others.

The practitioner demonstrates the ability to direct or provide nutrition care to patients with complex nutrition and health issues, organizes and manages the processes related to the provision of MNT through critical review of the literature and professional judgment, conducts research, and designs and directs educational programs.

**Advanced Practice RD in Systems and Services Management/Administration**
The advanced practice RD in systems and service management/administration is an expert and contributing member of the management/administrative team. The practitioner has the knowledge and skills to perform the following activities:
- Directs complex or multi-unit service operations
- Directs the delivery of nutrition, hospitality, and culinary products and services in a variety of healthcare or other environments and industries;
- Collaborates, leads, or directs food and nutrition, dietetics, hospitality, or culinary education programs;
- Directs the management of financial resources to insure cost effectiveness and efficiency;
• Provides leadership to multiple departments or team members with a variety of expertise within a department/corporation/or other organization;
• Applies human resource expertise in leading and developing staff at all levels;
• Communicates effectively with a variety of administrators and management team members; insures effective customer service;
• Establishes outcome measurement/evaluation systems; integrates departmental goals with organizational mission/vision/values;
• Directs product development or brand management activities;
• Provides leadership in food safety, security, and sustainability; disaster preparedness, and regulatory issues.

The practitioner demonstrates the ability to direct/lead/organize other professional staff in systems and service delivery based on empirical concepts. Is an expert in food safety and security; is politically savvy and influences public policy; is a member of corporate executive; designs and directs accredited education programs for dietetics practitioners.

**Advanced Practice RD in Higher Education**

The advanced practice RD in higher education is an expert in nutrition, food, hospitality/culinary, or food production and service systems and is a contributing member of the education administration team. The advanced practice RD has the knowledge and skills to perform the following activities:

• Designs and applies effective teaching methodologies;
• Serves as a senior faculty member at colleges and universities;
• Designs/directs and teaches research using a variety of methodologies and appropriate statistical analyses;
• Publishes research findings and papers in peer reviewed journals;
• Writes textbooks or chapters in focus area of dietetics practice;
• Secures competitive research and development grants;
• Consults with food/nutrition/hospitality/culinary industries and develops related networks which benefit students;
• Functions in an administrative capacity in academic organizations;
• Designs/directs accredited education programs for dietetic practitioners and other health professionals;
• Directs graduate students in teaching and research;
• Consults with and for other educational programs;
• Creates future-oriented education programs for academic/CPE credit;
• Adopts technology advancements and uses informatics;
• Identifies collaborative teaching opportunities with other disciplines.

The practitioner demonstrates the ability to teach in a focus area of dietetics practice and has practitioner experience which is current; is an experienced researcher with a publication/presentation/public service track record; and is capable of effectively translating research into concepts for targeted audiences. Develops creative and innovative strategies to accomplish goals.
Advanced Practice RD in Executive Positions

An RD achieving this level of practice is regarded as an accountability leader for the culture of the organization. The advanced practice RD in executive positions promulgates the mission and vision of the organization, and is responsible for effectuating the purposes of the organization by ensuring proper and compliant implementation of agency and/or board policies and directives. The advanced practice RD has the knowledge and skills to perform the following activities:

- Understands pressures and concerns in “C-suite” (chief executive level);
- Facilitates organization wide transformation by establishing mission and vision, strategic goals, objectives and implementation tasks;
- Demonstrates high level decision-making with a focus on delivering mission-based outcomes;
- Prudently manages the organization’s financial and human resources within established laws, regulations, and policies;
- Remains current on industry-related laws, regulation, and policies;
- Recruits, hires, develops and incorporates mentoring for aspiring leaders and other key individuals;
- Oversees the design, marketing, promotion, delivery and research of quality programs, products, and services;
- Develops business plans including marketing and sales initiatives both internal and externally;
- Connects with business units related to business outcomes, particularly relating to key quality indicators within business segment;
- Identifies, engages, and develops strategies for forging internal and external community collaborations;
- Incorporates sustainability feedback loop into planning;
- Engages in capacity-building projects that create, enhance, and/or expand value;
- Organizes, designs, writes and/or implements effective proposals;
- Develops strategic fund development plan by assessing and expanding revenue stream;
- Oversees and maintains relevance of risk management and quality assurance initiatives;
- Delivers service excellence to customers and employees.

The practitioner demonstrates business acumen, strategic agility and disciplined execution; is recognized for building people capability, organizational collaboration, impact and influence. Adaptable to change and recognized for being a successful change agent.
APPENDIX F: Trends of Greatest Importance to Planning the Future of Advanced Practice

After creating the mind map on the prior page, the group identified the top trends of greatest importance to the full group. The dots are an indicator of how many individuals ranked each item as one of a limited number of priorities to be addressed.

Category 1 – **Need for a plan** (21 dots)
- Increased use of return on investment in making education decisions. (2 dots)
- Increased perception...we are already behind.
- Lack of a career pathway. (8 dots)
- Need for increase recognition of high risk clinical.
- Increased pressure for accurate and measurable outcomes.
- Increased link between outcomes and recognition/compensation. (11 dots)

Category 2 – **Competition, Supply and Demand** (14 dots)
- Demand for services outpacing capacity. (7 dots)
  - School food service/public health, etc.
  - Increased competition by other organizations for training and education
  - Tendency to sub specialize
  - Continuing lack of DTRs
  - Increased need for RDs in long term care
  - Encroachment of other allied health practitioners (5 dots)
    - Increased entry level requirements for other healthcare professionals (2 dots)

Category 3 – **Recognition and Respect** (11 dots)
- Lack of increase in salary compensation (2 dots)
  - Increased demand for advanced generalists focused on solutions
  - Decrease in management role and budget responsibility; decrease in pay
- Disconnect between paid jobs available and desired jobs (7 dots)
  - Increased perception of employers of RDs as “Jack of all trades” (2 dots)
- Increase in salary linked to risk revenue and resource management
  - Lack of recognition and influence needed

Category 4 – **Distribution of Practice** (9 dots) This was two categories that were collapsed under 1 heading “Distribution of Practice”
- Dependency on legislative and regulatory trends related to clinical practice (9 dots)
  - 45% of members are in non-regulated jobs (2 dots)
- Continuing bias towards clinical practice disenfranchises others (9 dots)

Category 5 – **Internal Organizational Struggle** (8 dots)
- Increased pressure to collaborate
  - No silos, not isolated
  - Culture supports getting 100% consensus (3 dots)
  - Continued lack of agreement about who we are and what we do (5 dots)
APPENDIX G: CDR Specialist Credentials

From a report ran by CDR on Dec 31, 2011, there are 2490 RD Specialists. More specifically, below is further breakdown of the number of RD specialists by area of practice:

- 648 Pediatrics
- 469 Renal
- 501 Sports
- 389 Gerontology
- 483 Oncology

Gerontological Nutrition Specialist
The Gerontological Nutrition Specialist RD has additional experience, knowledge and skills specific to gerontological nutrition. The specialist RD designs, implements and manages safe and effective nutrition strategies to promote quality of life and health for older adults. They work directly with older adults to provide optimal nutrition and food sources and information in a variety of settings (such as, hospitals, long term care, assisted living, home health care, community-based nutrition programs, food service industry, correctional facilities, governmental programs, related industries), or indirectly as documented by management, education or research practice linked specifically to gerontological nutrition.

Oncology Nutrition Specialist
The Oncology Nutrition Specialist RD has additional experience, knowledge and skills specific to oncology nutrition. The specialist RD works directly with individuals at risk for, or diagnosed with, any type of malignancy or pre-malignant condition, in a variety of settings (e.g. hospitals, clinics, cancer centers, hospices, public health) or indirectly through roles in management, education, industry, research practice linked specifically to oncology nutrition.

Sports Dietetics Specialist
The Sports Dietetics Specialist RD has additional experience, knowledge and skills specific to sports nutrition. The specialist RD works to apply evidence-based nutrition knowledge in exercise and sports. They assess, educate, and counsel athletes and active individuals. They design, implement, and manage safe and effective nutrition strategies that enhance lifelong health, fitness, and optimal performance.

Renal Nutrition Specialist
The Renal Nutrition Specialist RD has additional experience, knowledge and skills specific to renal nutrition. The specialist RD works directly with adults and/or children with acute or chronic renal dysfunction or failure, under treatment by kidney transplantation, dialysis, or other modalities in a variety of settings (home, hospitals, other treatment centers, etc.) or indirectly as documented by management, education, or research practice linked specifically to renal nutrition.

Pediatric Nutrition Specialist
The Pediatric Nutrition Specialist RD has additional experience, knowledge and skills specific to pediatric nutrition. The specialist RD works directly with healthy and/or ill children (newborn to 18 years of age) as well as children with special health care needs in a variety of settings (schools, hospitals, community-based and/or family-centered programs, education programs, home, etc.) or indirectly as documented by management, education, or research practice linked specifically to pediatric nutrition.

The following Specialist RD roles were identified but not further developed. The roles are currently evolving and will provide unique opportunities for RDs now and in the future.
- Neonatal Nutrition Specialist (specialist working in NICU and follow-up clinics)
- Genomics Specialist
- Nutrition Informatics Specialist
- Chronic Disease Management Nutrition Specialist (addresses treatment/management of diseases such as cardiovascular disease, obesity, diabetes and includes palliative care)
- Community/Public Health Nutrition Specialist
- Public Policy Nutrition Specialist (e.g., sustainable agriculture, environmental issues, hunger and health issues)
- Integrative and Functional Nutrition Specialist
- Media and Marketing Nutrition Specialist
- Dietetics Educator Specialist
- Food and Culinary Specialist
- Intensive Nutrition Specialist
- Behavior Change Nutrition Specialist
- Weight Management Nutrition Specialist
- Food and Nutrition Services Management Specialist.
SUBJECT: Council on Future Practice

POLICY: Purpose, Structure, Composition and Functions

PURPOSE
This Council works in collaboration with the Commission on Dietetic Registration and Commission on Accreditation for Dietetics Education to project the future practice needs for the profession of dietetics. Each of these organizational units (future practice, credentialing and accreditation) represent the three critical segments necessary for producing new practitioners, as well as assisting experienced practitioners to move up the career ladder.

STRUCTURE
The Council is a House of Delegates (HOD) committee. Quarterly reports to the HOD Leadership Team (HLT) and semi-annual reports to the House of Delegates will focus on the Council’s program of work and projected status. The Council will also report on a semi-annual basis to the Board of Directors to assure awareness of developments that may impact the Association.

COMPOSITION
The new organizational unit is comprised of nine (9) ADA members who represent the practice, credentialing and education communities. One member from the HOD Leadership Team will be appointed by the Speaker to serve as the communication link to the House of Delegates and Board of Directors. One member from Commission on Dietetic Registration and one member from the Commission on Accreditation for Dietetics Education will also be included. And, a fourth member will be appointed by the Speaker to represent young members in practice for 5-10 years (i.e. affiliate RYDYs or At-large Delegate: Under 30 Years of Age or a member of the New Member Advisory Sub-committee). These four appointments will be for a one (1)-year term, but members may be appointed for multiple years, not to exceed three (3)-years.

The remaining five (5) members will be appointed initially to the Council. The individuals appointed will have following characteristics: 1) demonstrated leadership experience; 2) in-depth knowledge of the profession including broad experiences in dietetics practice, research and education; 3) knowledge of specialty and advanced-practice within and outside of the profession; 4) knowledge of the current job market; 5) strong communication and collaboration skills; 6) futuristic thinking skills; 7) awareness of members’ perspectives; 8) past or present member of the House of Delegates; and, 9) memberships in DPGs.

The member selection criteria follow:

- Leadership experience
- Practitioner type (clinical, community, consultation & business, management, education and research)
- Research background
- Education background
- Knowledge related to credentialing and accreditation
- Specialty practice
- Employer of RDs/DTRs
- Communication/collaboration skills
- Futuristic thinking skills
- Awareness of members’ perspectives
- Current or past member of the House of Delegates
- DPG membership(s)
- Ethnic diversity

**PROCEDURE**
The Council may hold two (2) face-to-face meetings per year and will conduct the remainder of the business via teleconference. Any specific educational programs, seminar, symposium or similar programs must be approved by the Speaker and/or HOD Leadership Team, and may be implemented by other organizational units as appropriate.

**FUNCTIONS**
The functions of the Council are:
1. Ensure the viability and relevance of the profession of dietetics via engaging in a visioning process to initiate recommendations for general practice roles, specialist practice roles and advanced practice roles.
2. Identify future specialist and advanced practice roles to meet emerging practitioner and marketplace needs.
3. Seek input and feedback from relevant ADA organizational units on issues related to future practice roles.
4. Coordinate with CADE, CDR, Education Committee and other ADA organizational units to communicate and collaborate to determine current and future practice, credentialing, and education recommendations.
5. Monitor the intended and unintended consequences of implementing current and future practice, credentialing and education recommendations.

**STAFFING**
The CEO will designate staff support for this committee annually. The HOD Governance Team supports the efforts of the Council.
APPENDIX I: Comparison of Typical Entry-Level Didactic and Experiential Training for Practitioners

The typical entry-level didactic and experiential training for a registered dietitian is provided for you in the narrative below. On the following page in a table, you will see the typical entry-level didactic and experiential training for other practitioners.

To become a registered dietitian you would need to:

- Enroll in a Coordinated Program. This may be a bachelor or master’s degree program that combines classroom and supervised practical experience and is accredited by ACEND. Graduates are then eligible to take the Registration Examination for Dietitians to become credentialed as RDs, registered dietitians. Or:
  - Enroll in a Didactic Program in Dietetics academic program. This is a program, granting at least a bachelor’s degree that is accredited or approved by ACEND. After you receive your degree, you will then need to apply for and complete supervised practical experience in an ACEND-accredited Dietetic Internship Program. You will then be eligible to take the Registration Examination for Dietitians to become credentialed as a RD, registered dietitian.
- Supervised practice experiences occur as part of the degree program for Coordinated Programs in Dietetics (CPs) and Master’s degree granting dietetic internships require degree completion. Internships that don’t offer a Master’s degree and ISPPs are not part of a degree program.
- Supervised practice experiences occur in conjunction with didactic courses for CPs but not for DIs and ISPPs.
- Supervised practice experiences occur after didactic courses are finished for DIs and ISPPs. CPs either integrate the supervised practice with the coursework or have students complete all supervised practice after they have completed the courses but before they receive the degree.
- Supervised practice experiences occur after students have graduated with the degree for DIs and ISPPs.
- Duration of practice experience in weeks is currently 30 weeks. Supervised practice hours requirements were increased from 900 to 1200 hours with the most recent standards.
- Prior work experience, in part, may be used to grant eligibility to take certification or licensure exams through assessment of prior learning. However, prior work experience alone may not be used to grant eligibility to take certification or licensure exams.
- Students must attend an accredited educational program to be eligible to take certification or licensure exams.
<table>
<thead>
<tr>
<th>Entry- Level Credential</th>
<th>Podiatric Physician</th>
<th>Physician Assistant</th>
<th>Chiropractor</th>
<th>Pharmacist</th>
<th>Audiologists and Speech-language pathologists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DPM, Doctor of Podiatric Medicine</td>
<td>PA, Physician Assistant</td>
<td>DC, Doctor of Chiropractic</td>
<td>PharmD, Doctor of Pharmacy</td>
<td>AudD, Doctor of Audiology</td>
</tr>
<tr>
<td>Minimum entry-level degree required</td>
<td>Doc</td>
<td>BA-Doc</td>
<td>Doc</td>
<td>Doc</td>
<td>MS-Doc</td>
</tr>
<tr>
<td>Years of post-secondary, college-level education required for acceptance into professional education</td>
<td>4</td>
<td>2-3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Supervised practice experiences occur as part of the degree program</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Supervised practice experiences occur in conjunction with didactic courses</td>
<td>TRUE</td>
<td>FALSE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Supervised practice experiences occur after didactic courses are finished</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Supervised practice experiences occur after students have graduated with the degree</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE (RESIDENCIES)</td>
</tr>
<tr>
<td>Duration of didactic education in academic years</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Students must attend an accredited educational program to be eligible to take certification or licensure exams</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Prior work experience alone, may be used to grant eligibility to take certification or licensure exams</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Prior work experience, in part, may be used to grant eligibility to take certification or licensure exams</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Total years of post-secondary education to entry level</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

This table is adapted from:
• an unpublished survey conducted in 2009 by the Accreditation Council for Education in Nutrition and Dietetics
### APPENDIX J: State-Specific Ratios of Dietetics Professionals per 100,000 Population, United States

<table>
<thead>
<tr>
<th>STATE</th>
<th>RD: Population Ratio</th>
<th>DTR: Population Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>RD per 100,000*</td>
</tr>
<tr>
<td>North Dakota</td>
<td>356</td>
<td>55.0</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>480</td>
<td>36.2</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1,894</td>
<td>36.0</td>
</tr>
<tr>
<td>Nebraska</td>
<td>641</td>
<td>35.7</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>2,287</td>
<td>34.7</td>
</tr>
<tr>
<td>Vermont</td>
<td>209</td>
<td>33.6</td>
</tr>
<tr>
<td>Connecticut</td>
<td>1,179</td>
<td>33.5</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1,875</td>
<td>33.2</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>341</td>
<td>32.4</td>
</tr>
<tr>
<td>Ohio</td>
<td>3,728</td>
<td>32.3</td>
</tr>
<tr>
<td>South Dakota</td>
<td>261</td>
<td>32.1</td>
</tr>
<tr>
<td>Colorado</td>
<td>1,574</td>
<td>31.3</td>
</tr>
<tr>
<td>Kansas</td>
<td>871</td>
<td>30.9</td>
</tr>
<tr>
<td>Iowa</td>
<td>925</td>
<td>30.8</td>
</tr>
<tr>
<td>State</td>
<td>Value</td>
<td>Growth</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>3,749</td>
<td>29.7</td>
</tr>
<tr>
<td>Maryland</td>
<td>1,692</td>
<td>29.7</td>
</tr>
<tr>
<td>Washington</td>
<td>1,970</td>
<td>29.6</td>
</tr>
<tr>
<td>Montana</td>
<td>283</td>
<td>29.0</td>
</tr>
<tr>
<td>New York</td>
<td>5,578</td>
<td>28.5</td>
</tr>
<tr>
<td>Idaho</td>
<td>441</td>
<td>28.5</td>
</tr>
<tr>
<td>New Jersey</td>
<td>2,437</td>
<td>28.0</td>
</tr>
<tr>
<td>Delaware</td>
<td>246</td>
<td>27.8</td>
</tr>
<tr>
<td>Michigan</td>
<td>2,738</td>
<td>27.5</td>
</tr>
<tr>
<td>Utah</td>
<td>747</td>
<td>26.8</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1,150</td>
<td>26.7</td>
</tr>
<tr>
<td>Illinois</td>
<td>3,435</td>
<td>26.6</td>
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<tr>
<td>Maine</td>
<td>349</td>
<td>26.5</td>
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<tr>
<td>Missouri</td>
<td>1,579</td>
<td>26.4</td>
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<tr>
<td>Louisiana</td>
<td>1,184</td>
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</tr>
<tr>
<td>North Carolina</td>
<td>2,460</td>
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</tr>
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<td>Hawaii</td>
<td>336</td>
<td>25.9</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>153</td>
<td>25.5</td>
</tr>
<tr>
<td>State</td>
<td>Occupations (1,000)</td>
<td>Growth (Percent)</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Tennessee</td>
<td>1,584</td>
<td>25.2</td>
</tr>
<tr>
<td>Alaska</td>
<td>175</td>
<td>25.1</td>
</tr>
<tr>
<td>Indiana</td>
<td>1,600</td>
<td>24.9</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>911</td>
<td>24.7</td>
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<tr>
<td>Virginia</td>
<td>1,923</td>
<td>24.4</td>
</tr>
<tr>
<td>Alabama</td>
<td>1,140</td>
<td>24.2</td>
</tr>
<tr>
<td>Oregon</td>
<td>911</td>
<td>23.8</td>
</tr>
<tr>
<td>Mississippi</td>
<td>698</td>
<td>23.6</td>
</tr>
<tr>
<td>Arkansas</td>
<td>679</td>
<td>23.5</td>
</tr>
<tr>
<td>California</td>
<td>8,416</td>
<td>22.8</td>
</tr>
<tr>
<td>Wyoming</td>
<td>120</td>
<td>22.0</td>
</tr>
<tr>
<td>Texas</td>
<td>5,136</td>
<td>20.7</td>
</tr>
<tr>
<td>Arizona</td>
<td>1,304</td>
<td>19.8</td>
</tr>
<tr>
<td>New Mexico</td>
<td>397</td>
<td>19.8</td>
</tr>
<tr>
<td>Florida</td>
<td>3,644</td>
<td>19.7</td>
</tr>
<tr>
<td>Georgia</td>
<td>1,879</td>
<td>19.1</td>
</tr>
<tr>
<td>South Carolina</td>
<td>870</td>
<td>19.1</td>
</tr>
<tr>
<td>West Virginia</td>
<td>310</td>
<td>17.0</td>
</tr>
</tbody>
</table>

HOD Backgrounder: Continuum of Professional Progression and Growth
<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>422</td>
<td>16.0</td>
<td>51</td>
<td>Hawaii</td>
<td>1</td>
<td>0.1</td>
<td>51</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>202</td>
<td>5.1</td>
<td>52</td>
<td>Puerto Rico</td>
<td>1</td>
<td>0.0</td>
<td>52</td>
</tr>
</tbody>
</table>

*Based on personal communication (Chris Reidy) and 2008 Needs Assessment.*
APPENDIX K: Design Principles for the Continuum of Future Practice, Credentialing and Education

1. Multiple levels of practice and innovative ways to reach these levels and credentials enable the profession to grow and develop in a vibrant and challenging environment while protecting the public.
2. The dietetics profession has a defined and workable process for advancement through the career path options.
3. RDs and DTRs are integral leaders/members of interdisciplinary teams in education, research and practice.
4. RDs and DTRs are nationally recognized, sought after and well compensated for innovation and effectiveness in meeting the food and nutrition needs of consumers.
5. RDs possess a core education in food, food science, nutrition, health and wellness with the ability to select an emphasis area to position RDs as the leaders in foods and nutrition.
6. RDs and DTRs lead change to promote optimal health for all populations through food and nutrition.

**Practice Design Principles**

1. RDs and DTRs lead, collaborate, and actively engage with inter-professional/interdisciplinary teams in diverse settings.
2. The RD and DTR are recognized as the leading food and nutrition practitioners.
3. Specialist and advanced practice are accessible to diverse populations and areas of practice.
4. RDs and DTRs translate evidence-based food, nutrition and health information to guide practice interventions and outcomes.
5. The value of the profession is demonstrated through the use of standardized outcomes measures for research and practice.
6. Lifelong mentoring occurs throughout careers and across all disciplines.
7. The profession monitors and assesses the viability of future practice roles to meet consumer and marketplace demand and influence policy decisions.
8. RDs and DTRs anticipate, adapt and respond to the changing needs of society.
9. RDs and DTRs demonstrate competency in technology and informatics.
10. RDs and DTRs are sought after to advocate for equal access to good food, healthcare, and nutrition education.

**Credentialing Design Principles**

1. Pathways to credentials are broadened to increase flexibility, diversity and numbers of practitioners.
2. Expanded credentialing opportunities promote career growth and autonomy, cut across levels of practice and ensure the profession has sufficient numbers to meet future consumer needs.
3. The RD, DTR, specialist and advanced practice credentials identify dietetics practitioners as leaders in food and nutrition and are recognized and valued by consumers, policymakers and external stakeholders.
4. The dietetics credentials promote and protect the health and wellness of the public.
5. The dietetics credentials are globally recognized.

**Education Design Principles**

1. Core curricula for education and experiential programs are redesigned to be interdisciplinary, flexible, adaptable and cost efficient.
2. Learner-centered education fosters leadership, assertiveness, innovation, critical thinking and problem-solving, strategic planning, effective communications and emotional intelligence.
3. Education and experiential programs develop knowledge and skills in food, nutrition, social, business and basic sciences (based on the definition of dietetics).
4. Diverse and flexible education and experiential pathways, which positively impact students, educators, and preceptors, exist for attaining all RD and DTR credentials.
5. Dietetics education uses evidence-based and best practices to prepare students with future focused knowledge and skills for emerging roles.
6. Innovative and formalized ways exist to educate across the continuum of practice (from entry to advanced) to enable the profession to grow and change in response to a vibrant and challenging environment.
7. Education, experiential and CPE programs foster the use of client-centered approaches in practice.
8. The accreditation process for education programs is less cumbersome and more streamlined.
### APPENDIX L: Support for Pilot Initiatives

<table>
<thead>
<tr>
<th>Organizational Unit Role Related to the Pilot Initiatives</th>
<th>Definition of Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>The organizational unit has a similar project in place. The pilot initiative champion will need to contact the organizational unit to obtain information on the project and to determine how to collaborate or pursue the development of the initiative independently.</td>
</tr>
<tr>
<td>2011-2012</td>
<td>The organizational unit has incorporated the pilot initiative into its program of work for the 2011-2012 program year (June 1, 2011-May 31, 2012). The pilot initiative champion should contact the organizational unit to discuss collaboration.</td>
</tr>
<tr>
<td>2012-2013</td>
<td>The organizational unit has plans to incorporate the pilot initiative into its program of work for the 2012-2013 program year (June 1, 2012-May 31, 2013). The pilot initiative champion should contact the organizational unit to discuss collaboration.</td>
</tr>
<tr>
<td>Advise</td>
<td>The organizational unit is willing to provide advice on the pilot initiative. The pilot initiative champion will contact the organizational unit to obtain the advice.</td>
</tr>
<tr>
<td>Data</td>
<td>The organizational unit has data or key documents that will assist the pilot initiative champion to further develop the initiative. The pilot initiative champion will make contact with the organizational unit to solicit the necessary data/documentation.</td>
</tr>
<tr>
<td>Not Now</td>
<td>The organizational unit does not have the capacity to pursue this type of initiative at this time. The pilot initiative champion can pursue development and report back to the Council on Future Practice.</td>
</tr>
<tr>
<td>No Fit</td>
<td>The pilot initiative does not fit with the mission or program of work for the organizational unit. The pilot initiative champion can pursue development and report back to the Council on Future Practice.</td>
</tr>
</tbody>
</table>
APPENDIX M: Visioning Future Practice Roles

Visioning Future Practice Roles for the Entry Level RD in 2020

Foundation Practice Elements
The following are practice elements that are consistent with all the described practice roles included.

- Provides patient/client-centered care.
- Practices using evidence-based recommendations and professional judgment to challenge the status quo.
- Contributes to the body of knowledge by participating in operational analyses, business process improvement and other applied research activities and by monitoring and evaluating the effectiveness of the nutrition care provided and reporting results.
- Analyses, interprets and applies research.
- Adopts technology advancements.
- Utilizes informatics.
- Demonstrates leadership in multidisciplinary teams.
- Contributes to the advancement of food and nutrition policy through advocacy.

The Future Entry-Level RD – Generalist
A general RD practitioner (or generalist) is an individual whose practice includes responsibilities across several areas of practice including, but not limited to, more than one of the following community, clinical, consultation and business, research, education, and food and nutrition management.

The entry-level RD-generalist is a food and nutrition expert and contributing member of the healthcare, public health, community, or administrative team, capable of implementing effective and efficient food systems and providing comprehensive nutrition care.

- Provides nutrition care or services in a variety of settings, including the acute, sub-acute, extended care, and community-based (e.g. schools) settings.
- Functions as part of an interdisciplinary team.
- Provides comprehensive care within the Nutrition Care Process.
- Utilizes prescriptive authority within the regulations of the institution and legislative bodies, to order nutrients, food, supplements, enteral and parenteral nutrition and nutrition-related diagnostic tests to achieve health.
- Utilizes knowledge of foods and food preparation to deliver culturally, ethnically, and developmentally appropriate educational programs and materials.
- Develops and leads support personnel to accomplish organizational goals, such as patient/client satisfaction, financial performance, and customer service.
- Manages resources (time, talent, money, equipment) to further the organization’s mission.
- Adapts processes to incorporate technology advances.
- Functions with a degree of professional autonomy and independent practice commensurate with the complexity of the situation, referring to appropriate specialists when needed.

Focus Area of Dietetics Practice
Definition: Defined area of dietetics practice that requires focused knowledge, skills, and experience.

Specialist
Definition: A practitioner who demonstrates a minimum of the proficient level of knowledge, skills and experience in a focus area of dietetics practice by the attainment of a credential.
Foundation Practice Elements for Specialist RD—
These include the skills, knowledge and/or practice behaviors that are exhibited and demonstrated by the specialist at either proficient level or higher
- Completes continuing education opportunities each year and demonstrates heightened interest in learning in the focus area of practice by reflecting on learning needs and participating in self-study
- Translates and applies research and evidence-based information into practice in a focus area
- Uses evidence-based information and best practices in communicating about focus area of dietetics practice to students, peers, other professionals and the public and via DPG activities, professional newsletters, peer journal clubs, and all forms of media
- Translates complex ideas/concepts inherent to the focus area for students, peers, and other professionals and promotes knowledge to others as a mentor and/or resource to other practitioners
- Actively participates in formal work teams, task forces, consensus panels, coalitions and specialized practice groups locally, nationally and internationally and leads as needed
- Participates in advocacy initiatives pertaining to the focus area of dietetics practice
- Actively participates in professional activities (DPGs etc) related to the focus area of dietetics practice
- Establishes educational session programming or presents on topics in the focus area at regional, state, national or international conferences
- Prioritizes order, rank and mode of required communications (i.e., physician rounds, legislative decision-makers)
- Collaborates in research teams or acts as principal or co-investigator of research projects in the focus area and contributes or authors publications for peer-reviewed scientific publications
- Supports or serves in management position(s) in the focus area and establishes organizational protocols and practice
- Proactively engages in communication and interactions with others outside of the profession on issues related to the focus area; establishes networks that support expertise in the focus area
- Offers professional judgment in routine and novel problem solving and decision making relative to focus area of practice
- Recognized for developing or having an actual higher authority and privilege in a focus area of dietetics practice
- Recognized by others as a proficient leader, inspires and serves as a mentor and/or resource to others; demonstrates efficiency, emotional intelligence and effectiveness
- Encourages and or participates in strategic planning efforts to support and increase focus area effectiveness
- Performs ethically and with personal integrity.

Visioning Future Practice Roles for the Advanced Practice RD in 2020
Definition: The practitioner demonstrates a high level of skills, knowledge and behaviors. The individual exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes.

Foundation Practice Elements and Characteristics
The following are practice elements consistent with all of the described practice roles:
- Prioritizes order, rank and mode of required communications (e.g., physician rounds, legislative decision-makers)
- Approaches new opportunities/situations with skills, flexibility and adaptability
- Demonstrates personal and organizational leadership
- Functions with a high degree of autonomy
- Recognizes sense of self and knows own limitations
- Recognized by others for expertise
• Embraces new situations and ideas to experience, explore, and potentially apply to practice
• Strives to improve skill base by continuously moving out of personal comfort zone
• Demonstrates effectiveness/efficiency; problem solving; inspires confidence in others
• Demonstrates emotional intelligence
• Influences decision-makers related to policy, resources and services (e.g. elected and appointed government officials, university president, medical center CEO)
• Leads consensus panels and coalitions
• Establishes local/state/national/international role contacts and networks
• Directs strategic planning efforts
• Teaches, mentors, and coaches students, DTRs, RDs, and other practice professionals
• Performs ethically and with personal integrity
• Communicates effectively using a variety of media
• Adopts technology advancements and uses informatics.

Vision of Future Practice: Dietetic Technician, Registered

Core Values:
• Customer focus
• Integrity
• Innovation
• Social responsibility

Vision Statement: The Dietetic Technician, Registered (DTR) is a vital member of the dietetics team. The DTR works under the direction of the RD in the provision of clinical nutrition services. The DTR practices in foodservice management, community programs, and in evolving settings and organizational structures. Depending on the complexity of the organization, may or may not work under the supervision of the RD.

Value Statements:
Dietetic Technicians, Registered will:
• Contribute to the body of knowledge in the nutrition care
• Process under the supervision of the RD and provide valuable services in foodservice management and community nutrition
• Practice from an evidence-base collaborate with the dietetics team including RDs and Certified Dietary Managers
• Function in a variety of specialty areas
• Utilize the Scope of Dietetic Practice Framework to assist in identifying practice opportunities.
• Based on this vision and values, employers hiring Dietetic Technicians will only hire DTRs or DTR-eligible individuals and institutions will have, at minimum, a DTR overseeing food and nutrition services.
References