

Executive Summary

The Special Task Force on External Issues related to the occupational therapist (OT) and occupational therapy assistant (OTA) entry levels was created by the AOTA Board of Directors in October 2018, with two representatives¹ from the Board of Directors, the Representative Assembly, and ACOTE®, along with the AOTA Executive Director. The charge of the Special Task Force was to determine the external issues surrounding the entry point for OTs and OTAs to the profession that warrant further investigation, to gather and analyze relevant data and information, and to forward a report to the Representative Assembly for use in its deliberations on this matter. The Special Task Force was not charged with recommending any decision on the entry-level mandates.

The Special Task Force began its work by identifying stakeholders and internal and external issues surrounding the entry level mandates. These were formulated into key questions addressed by the Special Task Force and a report for each is provided following the executive summary:

1. [What is the impact of the entry-level point for the OT and the OTA on practice settings \(e.g., school-based practice, skilled nursing facility \(SNF\), home health, mental health, rural, and urban\)? How will changes in the entry level affect this in the future?](#)
2. [What is the impact of the entry-level point on diversity within the workforce, specifically recruitment and retention?](#)
3. [What is the impact of the entry-level point for the OT and the OTA on obtaining a job? What is the impact of the entry-level point for the OT and the OTA related to salary in the current and future health care climate?](#)
4. [What are the outcomes and value of OTM vs. OTD, and associate's vs. baccalaureate for the OTA?](#)
5. [What is the impact of the entry-level point for the OT and the OTA on consumer perceptions?](#)
6. [Will entry-level point impact a person's decision to pursue a research-based degree, such as a PhD?](#)
7. [What are the perceptions/concerns of current and future students \(and parents\) about entry-level degree, cost of education, and debt load?](#)
8. [What is the impact of the entry-level point for the OT and the OTA on licensure laws?](#)
9. [What is the impact of the entry-level point for the internationally trained occupational therapists/occupational therapy assistants working in the United States?](#)
10. [How will projected changes in reimbursement, including quality initiatives \(VBP, QRP\) affect the profession, and how does this tie to entry levels?](#)
11. [What is the impact of the entry-level point for the OT and the OTA on academic programs? How will changes in the entry level affect them in the future?](#)
12. [What is the impact of the entry-level point for the OT and the OTA on Fieldwork? How will changes in the entry level affect this in the future?](#)

¹ Task Force members: Task Force Chairperson: Karen Jacobs, EdD, OT, OTR, CPE, FAOTA; RA Representatives: Sara Androyna, COTAL, Arameh Anvarizadeh, OTD, OTR/L; ACOTE representatives: Lynn Kilburg, DHSc, MBA, OTR/L, Mark Kovic, OTD, OTR/L, FAOTA; Board of Directors Representatives: Alyson D. Stover, MOT, JD, OTR/L, BCP, Debra Young, MEd, OTR/L, SCEM, ATP, CAPS, FAOTA; Staff Liaison: Sherry Keramidas, PhD, FASAE, CAE

During its three months of work, the Special Task Force thoroughly identified, collected, and analyzed data and information related to these questions, and reviewed the information and findings. Data and information was collected from numerous sources including AOTA and other professional organizations, federal and state agencies, the College Board, and general searches.

The Special Task Force created an online form for OTs and OTAs to offer their perspectives on this issue and the specific questions studied by the Special Task Force. The Special Task Force also conducted a survey of current OT and OTA students to better understand student perceptions and concerns. The report of the Special Task Force presents findings from its investigation of each question, including the relevance of the question to the mandate deliberation, a summary of key findings, and discussion of the strength and/or limitations of information related to the question. Data related to each question is included in appendices to the report.

MAJOR FINDINGS

The majority of findings of the Special Task Force are based on analyses of historical trends from the occupational therapy profession, other related professions, employment and compensation data, reimbursement issues, and higher education. Through its work, the Special Task Force noted the strong interrelationships among many of the areas of inquiry, with the issue of reimbursement of occupational therapy services being a central driver.

Even with the diligent work of AOTA in reimbursement, the precise nature of future changes and the ramifications of these changes are unclear. Changes in reimbursement may modify workforce demands for OTs and OTAs and their salaries, with the amount of impact varying by practice setting. The profession's position in the national conversation related to policy issues is critical and essential. The current climate emphasizing Value Based Purchasing, reimbursement based on effectiveness, and varying reimbursement by degree level (for OT versus OTA) may be significant issues that will impact academic programs and student enrollment in the future.

Salary information was carefully examined using AOTA data as well as data from the Bureau of Labor Statistics within the U.S. Department of Labor, and data for other professions. These data indicate that compensation of OTs and OTAs varies by practice setting and is positively influenced by professional experience. Median compensation of OTs in 2017, as reported by the Bureau of Labor Statistics, was \$83,200; for PTs the median compensation with a doctoral entry level was \$86,850. In comparison to other professions, speech language pathologists at the master's entry level was \$76,610 and Physician Assistants at the master's entry level was \$104,860. Changes in reimbursement are not expected to significantly change salary profiles in the near future.

Salary issues are closely entwined with student debt load issues, with the latter representing a major issue across all fields. Media reporting indicates that for many professionals, debt load associated with graduate-level preparation other than for medical school may exceed \$125,000. Precise levels of debt load among OT and OTA students are not available. For OT students, debt associated with undergraduate and graduate education, living expenses, and other costs and fees is a key concern.

Debt load and salary expectations may affect job opportunities and decisions in some key practice settings, including school-based programs and rural locations. How these will be shaped by a change in entry-level degree requirements cannot be predicted from available data, although concerns must be raised.

In an attempt to explore the impact of entry-level point for the OT and the OTA on practice settings (e.g. school based practice, skilled nursing facilities (SNF), home health, mental health, rural and urban settings), very limited evidence-based research was identified. There is not information available to indicate higher degree level for the OT and OTA translates to better quality of care provided to clients, nor related to dual entry-level points for the OT and OTA generating confusion within a practice setting. However, the concern over employers using OTAs more often and using OTs more consultatively remains a concern, but is dependent upon changes occurring within external forces such as academia, OT/OTA workforce, reimbursement and state law.

In general, the credit load in entry-level OT and OTA programs exceeds a typical credit load for the degrees offered in order to address all required content. Additionally, at the OT level credit load, length of program and cost of program do not automatically increase due to degree offered. Within degree levels, variation in the length and cost of programs will continue to exist due to institution type and other factors, which in turn provide students with choices in selecting programs and entering the profession.

Diversity in the profession if it were to move to single entry-level degrees is an issue of concern. However, there are limited data from the occupational therapy profession showing outcomes and evidence to deem whether there would be an impact. Several of the concerns shaping this perception are about increased debt and cost of education. There also is limited collection and dissemination of demographic data beyond race and ethnicity within the profession. Lastly, there is limited data reflecting occupational therapy's recruitment and retention efforts to increase diversity within the profession.

There are limited information sources or outcomes data about the impact of entry-level-point OT and OTA degrees on fieldwork, but availability of placements is acknowledged as a concern if entry advanced to the OTD for OT and BS for OTA programs. Advancing entry degree levels impacting practitioners' decision to pursue research-based degrees has also been a concern. However, this impact cannot be known, and inference based on past and present data and trends is also not possible.

Consumer perceptions of professions are complex to assess and made more difficult when trying to examine how perceptions will change based on a different degree. Evidence indicates that consumer perceptions are driven more by rapport with the professional and coverage for services than by the professional's degree level. Most consumers do not inquire about practitioner training, as long as the practitioner is licensed. It was also noted that in some settings the consumer has no choice of the occupational therapy professional.

Details of the findings on all the questions appear in the Special Task Force report.

OVERVIEW OF INPUT FROM STUDENTS AND FROM PRACTITIONERS

The Special Task Force's call for input from the OT and OTA community resulted in 244 comments, with more than 86% indicating support for dual entry levels for the OT and 81% supporting either dual entry levels or an associate degree level only for the OTA. While the Special Task Force did not undertake a qualitative analysis of submitted comments (see p. 60 of the appendices), the most frequently cited basis for dual entry levels was student debt load and salaries, and a lack of evidence on the effect of a higher entry-level degree on outcomes.

The Special Task Force undertook a survey of current OT and OTA students for their views on entry-level degrees. Nearly 3,500 completed responses were received from OT students, and nearly 840 were received from OTA students. Among the OT students, 68% support both master's and OTD entry levels, with 17% supporting a single entry level of OTD only. Among students currently enrolled in an OTD program, 47% support dual entry levels and 39% support an OTD level only. The most frequently cited reason for dual entry levels was concerns about student debt load.

Among OTA students, 38% support dual entry levels at the associate or baccalaureate level; 43% support an associate degree entry level only, and 9% support baccalaureate degree entry level only.

KEY QUESTIONS AND RELATED FINDINGS

Question 1: Practice Settings

What is the impact of the entry-level point for the OT and the OTA on practice settings (e.g., school-based practice, skilled nursing facility (SNF), home health, mental health, rural, and urban)? How will changes in the entry level affect practice settings in the future?

Relevance of the Issue

There has been discussion that the entry-level point for OTs and OTAs will impact practice settings. Concerns discussed include:

- Dual entry levels for occupational therapists could generate confusion within a practice setting.
- OTs with an OTD will generate confusion within a practice setting if “everyone with whom a client and family interact within the health care context is referred to as Dr” (Brown et al., 2015).
- Confusion could occur within a practice setting if a bachelor’s-trained OT is working with a bachelor’s-trained OTA.
- Change in entry-level degree for OT to the OTD may result in employers using OTAs more often and using OTs more consultatively.
- It may not be clear how higher degree levels for the OT/OTA translate to the type and quality of care being provided to the clients within the practice settings.

Please note: This specific question will not address the concerns of the impact of the entry-level point for the OT and the OTA on job outlook, salary, or consumer outcomes and perceptions. These concerns, although practice related, are addressed separately under questions 3 and 5.

Key Perspectives/Findings

- *Concern over employers using OTAs more often and using OTs more consultatively:* According to Brown et al. (2015), “this concern may be validated if one or more of the following scenarios happens as a result of the move: the total number of occupational therapy programs decreases; the total number of students who enroll and graduate decreases; the number of assistants and support personnel disproportionately increases; and changes are made to the service delivery and reimbursement models, including changes in state law that mandate ratios of professional and technical staff” (p.4).
- *Level of knowledge and skills of the practicing OT with an OTD:*
 - Quality of Care: According to Brown et al. (2015), the assertion that “clients and families will receive better care from an OT with this degree because such therapists have an advanced skill set” is “still a largely unproven conjecture. No studies in occupational therapy specifically compare level of care provided by therapists educated at the different levels” (p.4).

- *Level of knowledge and skills of the practicing OTA*
 - Evidence-Based Practice/Research: According to McCombie (2016) regarding whether OTAs would be more current in evidence-based practice/research if holding a bachelor's degree vs. an associate's degree, there is "no clear overall agreement by the participants that those holding an entry-level bachelor's degree would be...more current in evidence-based practice/research (disagree/strongly disagree = 39.7%, neutral = 20.7, agree/strongly agree =39.7%) than those holding an associate degree" (p. 6).
 - Advanced Practice: According to McCombie's (2016) study, "A slim majority (50.2%) did tend to agree/strongly agree that OTAs holding an OTA bachelor's degree would be more qualified for advanced practice positions in OT settings" (p. 7).
- *Level of knowledge and skills for specific practice settings*
 - Rural Practice
 - In a qualitative study completed by Roots et al. (2014) in Canada, "participants described how the complexity of working in rural communities results in the tendency to specialize in general practice. The rural practice context required participants to have a broad range of skills to deliver services in multiple settings to a varied caseload covering all areas of practice" (p. 6).

Although the Roots et al.'s (2014) qualitative study discussed the "impact of rural context on their professional practice," it did not discuss degree levels, nor did it provide the degree levels of the study participants. Rather, the characteristics accounted for included whether or not the therapist was trained in Canada, and time spent in professional and rural practice.

- School-Based Practice
 - An older, but interesting, descriptive study completed by Brandenburger-Shasby (2005) investigated the perceptions of occupational therapists working in school-based settings regarding their level of preparation for practice. 71% of the respondents had an entry-level bachelor's degree, and 27% had a master's entry-level degree. Results of this study indicated the majority of occupational therapists perceived they were poorly prepared for school-based practice based on level of education alone. Mentoring and continuing education were cited as most important for preparing the occupational therapists for school-based practice. We attempted to locate an updated version of this study and/or a separate more recent study that relates to master's-level versus doctoral-level prepared OTs and perceived level of preparation for school-based practice, but were unable to locate such studies.
 - It is of interest to note that upon exploration of the impact of degree level on school-based practice, older literature (prior to 2005) was located related to OT degree level meeting the needs of practice at that time. One specific example is a 1998 letter to the editor published in *AJOT* titled, "Entry-Level Education Inadequate for Practice in Pediatrics by Lillian Kaplan and Gita Porway, which discusses the impact of "not requiring an affiliation in pediatrics" on a student's knowledge and skills to work in pediatric practice settings.

Limitations of Available Information/Other Considerations

In an attempt to explore the impact of entry-level point for the OT and the OTA on practice settings (e.g., school-based practice, skilled nursing facilities (SNFs), home health, mental health, rural and urban

settings), very limited rigorous evidence-based research was identified. This exploration demonstrated that there is a gap in knowledge and evidence, but rather an expansive quantity of anecdotal findings.

References

Brandenburger-Shasby, B. (2005) School-based practice: Acquiring the knowledge and skills. *American Journal of Occupational Therapy*, 59(1), 88–96. <https://doi.org/10.5014/ajot.59.1.88>

Brown, T., Crabtree, J. L., Mu, K., & Wells, J. (2015). The next paradigm shift in occupational therapy education: The move to the entry-level clinical doctorate. *American Journal of Occupational Therapy*, 69(Suppl. 2), 6912360020p1–6912360020p6. <https://doi.org/10.5014/ajot.2015.016527>

Kaplan, L., & Porway, G. (1988). Entry-level education inadequate for practice in pediatrics. *American Journal of Occupational Therapy*, 42(5), 329–330.

McCombie, R. P. (2016). Attitudes of occupational therapists and occupational therapy assistants toward the entry-level bachelor's degree for OTAs. *The Open Journal of Occupational Therapy*, 4(1), 5. <https://doi.org/10.15453/2168-6408.1182>

Roots, R., Brown, H., Bainbridge, L., & Li, L. (2014). Rural rehabilitation practice: perspectives of occupational therapists and physical therapists in British Columbia, Canada. *Rural and Remote Health*, 14(1), 2506.

Resource

Cahill, S. M., Egan, B. E., Wallingford, M., Huber-Lee, C., & Dess-McGuire, M. (2015) Results of a school-based evidence-based practice initiative. *American Journal of Occupational Therapy*, 69(2), 6902220010p1–6902220010p5. <https://doi.org/10.5014/ajot.2015.014597>

Question 2: Diversity

What is the impact of the entry-level point on diversity within the workforce, specifically recruitment and retention?

Relevance of the Issue

Diversity within the workforce, specifically recruitment and retention, has been a focus within the OT profession. As our country continues to become more of a plurality nation, diversity in our profession is important to address. There are concerns that single entry-level degrees for OTs and OTAs will further decline the diversity within the profession. There are thoughts that the increased cost and debt will negatively impact diverse populations entering the profession.

Key Perspectives/Findings

1. Disparities continue to exist between the occupational therapy workforce and demographics of the United States. According to the 2016 U.S. Census Bureau, the country's demographics are:
 - 61.9% White alone (not Hispanic or Latino)
 - 38.1% racial/ethnic minority
2. According to the Census Bureau (2016), as of July 2016, African Americans (13%) and Latinos (18%) make up the largest ethnic minority in our country.
3. By 2044, the United States is expected to be a plurality nation (U.S. Census Bureau, 2015). While the non-Hispanic White alone population will still be the largest, no race or ethnic group is projected to have greater than a 50% share of the nation's total.
4. These reports indicate that there are and will continue to be significant disparities and gaps in health care delivery systems and services if efforts are not made to maximize diversity in the profession.
5. In the ACOTE® 2027 Mandate, there is indication that AOTA and ACOTE leadership did consider the impact that single entry level would have on the diversity of the profession. There was discussion that it may decrease the diversity of the student body and ultimately the future of the profession.
6. A pros and cons table of the OTD mandate related to professional diversity was included in the Coalition of Occupational Therapy Advocates for Diversity's (COTAD's) 2018 Statement. Please see **Appendix A** on p. 2 of the appendices for details.
7. Data from the Academic Programs Annual Data Report (Academic Year 2017–2018) for current OT student demographics (Figure 1) show modest growth in ethnic and gender diversity in our profession. See below for demographics, and please see **Appendix B** on p. 3 of the appendices for further details on demographics.

Figure . Student Demographics Reported in Academic Programs Annual Data Report (Academic Year 2017-2018)

Ethnicity–Percent of enrolled students who self-identify as Hispanic:



Race: Enrolled students' self-identified race:

Student Race:						
	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Other Pacific Islander	White	Other
Doctoral	<1%	7%	3%	<1%	85%	5%
Master's	<1%	7%	5%	<1%	80%	8%
OTA	<1%	5%	11%	1%	74%	8%

Gender: Enrolled students' self-identified gender:

Student gender:			
	Doctoral	Master's	OTA
Male	10%	11%	14%
Female	90%	89%	86%

8. Findings of diversity in other doctorate-level health professions:

- American Association of Medical Colleges (AAMC) and the American Physical Therapy Association (APTA) show increases in both enrollment and applicant numbers for racial and ethnic groups. Strategies and initiatives have been developed focusing on ways to increase diversity within these professions. Data is limited, but percentage breakdown indicates the increase. Please see **Appendices C and D** on pages 5 and 6 of the appendices for further details.

Limitations of Available Information/Other Considerations

To date, there is a lot of opinion about the negative impact of diversity on the profession if it were to move to single entry-level degrees. However, there is also limited data from the occupational therapy profession showing outcomes and evidence to support whether this is true. Several of the concerns that shape this perception stem from worries about increased debt and cost of education. There also is limited collection and dissemination of demographic data beyond race and ethnicity within the profession. Lastly, there is limited data reflecting occupational therapy's recruitment and retention efforts to increase diversity within the profession.

References

COTAD Executive Board. (2018). *Statement by the Coalition of Occupational Therapy Advocates for Diversity (COTAD): An analysis of the potential impact of the OTD mandate on OT workforce diversity*. Retrieved from <https://docs.google.com/document/d/1h0JuVmpm7jvs2RbjwhMzn3qyCri6qImbDscoxPgCrHQ/edit>.

U.S. Census Bureau. (2015, March). *Projections of the size and composition of the U.S. Population: 2014 to 2016*. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>

U.S. Census Bureau. (2016). *Quick facts—United States*. Retrieved from <https://www.census.gov/quickfacts/fact/table/US/RHI125216>

Resources

American Occupational Therapy Association Academic Programs Data Annual Report, 2017–2018.

Association of American Medical Colleges (2009). *Addressing racial disparities in health care: A targeted action plan for academic medical centers*. Retrieved from <https://members.aamc.org/eweb/upload/addressing%20racial%20disparities.pdf>

Central Intelligence Agency. (n.d.). *World fact book—Life expectancy at birth (2016 Est.)*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html>

Question 3: Job Outlook

What is the impact of the entry-level point for the OT and the OTA on obtaining a job? What is the impact of the entry-level point for the OT and the OTA related to salary in the current and future health care climate?

Relevance of the Issue

According to the U.S. Bureau of Labor Statistics (BLS), employment of occupational therapists is projected to grow by 24% from 2016-2026 (2018b), and employment of occupational therapy assistants is projected to grow by 28% (2018c). Additionally, the BLS reported that as of May 2017, the median annual wage was \$59,310 (\$39,020–\$80,320) for occupational therapy assistants (2018c) and \$83,200 (\$54,560–\$120,440) for occupational therapists (2018b). The *Occupational Outlook Handbook* produced by the BLS identifies the education requirements as such: “Occupational therapy assistants need an associate’s degree from an accredited occupational therapy assistant program” (2018c), and “Occupational therapists typically have a master’s degree in occupational therapy” (2018b). With the shift to value-based care, there is a potential change in the health care climate and potential impact on the occupational therapy profession. There has been a push for change away from payment based on the amount of therapy minutes for many years. Congress, the Medicare Payment Advisory Commission (MedPAC), and the Health and Human Services Office of the Inspector General have highlighted the opportunities for fraud and abuse in the current Resource Utilization Groups, Version IV (RUG-IV) system because payment is based on the amount of therapy provided to a patient instead of individual patient characteristics and care needs. The Centers for Medicare & Medicaid Services (CMS) proposed the Patient-Driven Payment Model (PDPM) in spring 2018 and published the final PDPM on August 8 with some changes. PDPM includes some safeguards such as reporting total therapy minutes by discipline at discharge in MDS Section O, and a 25% combined limit on group and concurrent therapy. In addition to potentially changing reimbursement rates, higher student debt load without reciprocation in job availability and/or salary/reimbursement could result in further financial hardship to the new graduate.

Key Perspectives/Findings

A. Job obtainment:

Absent information delivered in the *Occupational Outlook Handbook* (BLS, 2018b, 2018c), there is no evidence that would allow for absolute statements regarding the impact of the entry level of occupational therapy practitioners on job obtainment. Exploration of general job search platforms (indeed.com, monster.com, otjoblink.org) did not reveal specified degree levels as a requirement for most jobs, with the exception of those in academia.

B. Salary/Reimbursement Structure:

- Data from the AOTA (2015) salary and workforce studies indicate:
 - There was no difference in median salary based on entry-level degree.
 - Professional experience appears to have the strongest correlation with median salary among OTs and OTAs.
 - The majority of OTs and OTAs are employees (and not private practitioners). Nearly 70% are employed in a hospital, long-term care/skilled nursing facility, and/or schools (American Occupational Therapy Association [AOTA], 2015). There is no indication these work settings will increase salary with a higher entry-level degree (versus experience).

- Data from physical therapists (PTs) from the Bureau of Labor Statistics (BLS) and from a salary report from American Physical Therapy Association (APTA) does not indicate that the doctorate in physical therapy (DPT) resulted in any increases in median salary. Higher median salaries are reported in 2016 among physical therapists (PTs) with a master or baccalaureate degree, which likely reflects more experienced professionals at the master and baccalaureate levels. When viewed over the time period from 2005 to 2016, the DPT did not result in median salaries being higher than salaries at other degree levels, and the rate of increase did not exceed typical cost-of-living increases.
- The BLS salary information for OT, OTA, and several other professionals indicates the following:
 - The median salary for OTs is \$83,200, with the highest salaries reported for therapists working in SNFs and home health care services. BLS (2018b) reports entry level for OTs at the master degree level.
 - The median salary for OTAs is \$59,310, with the highest salaries reported for OTAs working in SNFs.
 - Median salaries for similar professionals such as nurse practitioners/nurse midwives/nurse anesthetists at a master degree is \$110,930 (2018a); PTs at a DPT is \$86,850 (2018d); recreational therapists at a bachelor degree is \$47,680 (2018f); speech-language pathologist at a master degree is \$76,610 (2018g); and physician assistants at a master degree is \$104,860 (2018e).
- Among those who submitted comments to the Special Task Force, approximately 53% cited concerns about student debt load as an issue against moving to a single OTD or baccalaureate entry level, and 43% noted concerns about whether raising the entry-level degree will result in commensurate compensation.
- Some commercial websites offer insight related to the data collected by the represented organizations; however, there is little known about the accuracy and applicability of the data represented. Below are just a few examples of what has been posted (Salary.com, n.d.).

Occupational therapist with the following degree	Will likely fall in this salary range
Bachelor's Degree	\$83,122–\$87,183
Master's Degree or MBA	\$83,662–\$87,758
JD, MD, PhD, or Equivalent	\$83,877–\$87,988

In 2012, the average occupational therapist brought home \$76,400 a year, according to the U.S. Bureau of Labor Statistics, but this figure accounts for all practitioners, regardless of degree. A survey by Advance Healthcare Network provides a better idea of what advanced degrees can do for earnings. In 2011, occupational therapists with a bachelor's degree in the field averaged \$73,271 a year, while those with entry-level master's degrees earned nearly 10% less, at an average of \$66,690. With doctoral degrees, salaries averaged at \$84,872 annually (Severson, 2017).

Limits of Available Information/Other Considerations:

When evaluating salary and reimbursement, education is only one factor that determines an outcome. One must also consider the contributions of experience, regional factors, practice setting, demand of services, demonstration of specialties and/or expertise, etc.

Many changes are evolving in the areas of occupational therapy practice. Elimination of the Medicare therapy cap, the impact of the Endrew Supreme Court decision in school-based practice, and a movement to value-based care are only a few examples of the high fluidity of the health care climate. Many of the changes in the health care climate are novel, with little experience to guide future predictions of impact. Like job obtainment and salary/reimbursement structure, there is little evidence to support a conclusive statement regarding the impact of entry-level degree.

There is not enough evidence to support conclusive statements about the future job obtainment, future salary/reimbursement, and potential changes in the health care climate. Although some projections of future health care reimbursement and policy changes exist, these predictions can only serve as “potential impact factors” versus evidence. Most statements are speculations of the future.

References

American Occupational Therapy Association. (2015). *2015 Salary & workforce survey*. Bethesda, MD: Author.

Salary.com. (n.d.). Salaries for occupational therapist with a master’s degree or MBA. Retrieved from <https://www1.salary.com/Salaries-for-Occupational-Therapist-with-a-Masters-Degree-or-MBA>

Severson, D. (2017, November 21). The average salary with a doctorate for an occupational therapist. Retrieved from <https://work.chron.com/average-salary-doctorate-occupational-therapist-25966.html>

U.S. Department of Labor, Bureau of Labor Statistics. (2018a). *Occupational outlook handbook: nurse anesthetists, nurse midwives, and nurse practitioners*. Retrieved from <https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm>

U.S. Department of Labor, Bureau of Labor Statistics. (2018b). *Occupational outlook handbook: Occupational therapists*. Retrieved from <https://www.bls.gov/ooh/healthcare/occupational-therapists.htm>

U.S. Department of Labor, Bureau of Labor Statistics. (2018c). *Occupational outlook handbook: Occupational therapy assistants and aides*. Retrieved from <https://www.bls.gov/ooh/healthcare/occupational-therapy-assistants-and-aides.htm>

U.S. Department of Labor, Bureau of Labor Statistics. (2018d). *Occupational outlook handbook: Physical therapists*. Retrieved from <https://www.bls.gov/ooh/healthcare/physical-therapists.htm>

U.S. Department of Labor, Bureau of Labor Statistics. (2018e). *Occupational outlook handbook: Physician assistants*. Retrieved from <https://www.bls.gov/ooh/healthcare/physician-assistants.htm>

U.S. Department of Labor, Bureau of Labor Statistics. (2018f). *Occupational outlook handbook: Recreational therapists*. Retrieved from <https://www.bls.gov/ooh/healthcare/recreational-therapists.htm>

U.S. Department of Labor, Bureau of Labor Statistics. (2018g). *Occupational outlook handbook: Speech-language pathologists*. Retrieved from <https://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm>

Question 4: Outcomes

What are the outcomes and value of OTM vs. OTD, and associate's vs. baccalaureate for the OTA?

Relevance of the issue

When comparing the outcomes and value of OTM vs. OTD, and associate's vs. baccalaureate for the OTA, many external factors must be taken into consideration. These include reimbursement, salary, loan debt, quality of services, fieldwork availability, diversity, employer, and client and consumer perceptions, among other factors.

Key Perspectives/Findings

There is a void in documented evidence that higher entry-level degrees will improve quality outcomes; increase reimbursement or salary; increase diversity of professionals; and impact employer, client, and consumer perceptions, among others factors. Information is not currently available at a level that allows adequate assessment of this question.

As stated in the review of the other questions, the point can be made that the complex health and social issues associated with the changing demographics of the U.S. place new and expanded demands on all health-related professionals. However, there is no indication that current practitioners (trained at the associate's or master's degree level) are not able to address the changing requirements and complexities of their scope of practice.

- It was noted in comments through the online survey to the Special Task Force that fully understanding and addressing client and system complexities may be skills acquired with experience and post-graduation. Some respondents raised concerns over whether such skills can be fully conveyed in the academic setting.
- Points were raised that based on the direction of quality measures for reimbursement and the impact on practice, education and training of OTs and OTAs may need to change in the future to reflect these "realities." Questions were posed as to whether this change requires additional coursework, higher degree level, and/or curriculum modification to reflect current practice.
- The changes in the approach to reimbursement are not expected to directly translate into increases in compensation for the OT or OTA, so it will be important to examine compensation, cost of education, and student debt load.
- There are few studies that indicate consumer perceptions of health care providers are based on considering their entry-level degree; consumers typically are concerned that a health care provider is licensed and that their services will be covered by their insurer. (See question 5)
- Consumers often judge the quality of services based on the ability to develop rapport with the provider. (See question 5)
- There is limited data reflecting occupational therapy's recruitment and retention efforts to increase diversity within the profession at any entry level in the profession. (See question 2)
- There are limited findings about the impact of higher degree level on fieldwork. Based on anecdotal information from the comments received by the Special Task Force, there is major concern that this shift will severely impact fieldwork. (See question 12)
- The question of how the entry level will impact practitioners' decision to pursue research-based degrees cannot be known. Inference based on past and present data and trends is also not possible. (See question 6)

- Many of the changes in the health care climate are novel, so there is little experience to guide predictions of their impact. Like job obtainment and salary/reimbursement structure, there is little evidence to support a conclusive statement regarding the impact of higher degree levels.

Limitations of Available Information/Other Considerations

There is no information available indicating that a change in entry-level degrees will increase diversity of the profession; increase reimbursement or salary; decrease loan debt; improve quality of services; impact fieldwork availability; and affect employer, client, and consumer perceptions, among others factors.

Question 5: Consumers

What is the impact of the entry-level point for the OT and the OTA on consumer perceptions?

Relevance of the issue

One question in debating the value of a higher degree entry level for OTs or OTAs is whether a specific degree affects how clients perceive the practitioner and/or the value of OT services. Will a higher entry-level degree increase the number of consumers seeking OT services, their access to services, and/or the perceived value of services? If a higher degree improves consumer perceptions, how will this affect practitioners holding a lower degree?

Key Perspectives/Findings

- Consumer perceptions of health care services and care providers are complex, reflecting individual demographics (age, education, location, work and insurance status, experience with health care services, and others). Trends in consumer perceptions indicate that perceptions change as insurance coverage, costs, and access issues evolve.
- The Task Force explored the possibility of undertaking research to address this question. Discussions with researchers in this area from PricewaterhouseCoopers, Deloitte, and the health services and social services fields indicated this research could not be completed quickly and was not likely to provide any clear-cut answers.
- Ongoing research indicates that while patients and consumers seek services from a “qualified” practitioner, “qualified” typically refers to being licensed to provide services and being covered by their health insurer. A 2018 study by Deloitte (Betts & Korenda, 2018) health care research team indicated that only 16% of consumers look at the training of physicians from whom they seek care. Many speculate this percentage falls even lower when the consumer seeks care from other health care professionals.
- Consumers will continue to look at quality; however, pricing, insurance coverage, and convenience play an increasing role when seeking services. Studies indicate that consumers may actually adjust their behavior in pursuing health care services based on insurance coverage (Keckley, 2016).
- Consumer perceptions are shaped by age, with millennials interested in a provider’s integration of technology tools, and baby boomers most concerned with costs (Oliver Wyman Health, 2017). Again, there are no indications that degree level or training are key factors in shaping consumer perceptions.
- Information on higher entry degrees positively impacting consumer perceptions of the practitioner or services among other health professions failed to yield evidence to address this question.
- The point can be made that the complex health and social issues associated with the changing demographics of the United States place new and expanded demands on all health-related professionals. However, there is no indication that current practitioners (trained at the baccalaureate or master degree level) are not able to address the changing requirements and complexities of their scope of practice.

Other perspectives related to this issue include:

- It was noted in comments through the online survey to the Special Task Force that fully understanding and addressing client and system complexities may be skills acquired with experience

post-graduation. Some respondents raised concerns about whether such skills can be fully conveyed in the academic setting.

- Points were raised that based on the direction of quality measures and their impact on practice, education and training of OTs and OTAs may need to change in the future to reflect these realities. Questions were posed about whether this reimbursement change requires additional coursework/degree and/or a modification of curriculum to reflect current and future practice.

Limitations of Available Information/Other Considerations

There is no information available indicating that a change in entry-level degrees will improve consumer perceptions of or trust in the OT profession.

References

Betts, D., & Korenda, L. (2018). Inside the patient journey: Three touch points for consumer engagement strategies. Retrieved from <https://www2.deloitte.com/insights/us/en/industry/health-care/patient-engagement-health-care-consumer-survey.html>

Keckley, P. (2016) Patient attitudes about health care are changing, slowly but steadily. *Hospital and Health Networks Magazine*. Retrieved from <https://www.hhnmag.com/articles/7222-patient-attitudes-about-health-care-are-changing-slowly-but-steadily>

Oliver Wyman Health. (2017). New research: 2017 consumer survey of U.S. healthcare. Retrieved from https://health.oliverwyman.com/2017/06/new_research_2017c.html

Question 6: Research Career

Will entry-level point impact a person's decision to pursue a research-based degree, such as a PhD?

Relevance of the Issue

The OT profession needs evidence-based research to show the effectiveness of OT services in a reimbursement climate focused on value-based payment systems and outcomes. Occupational therapists with advanced research-based degrees often engage in this work. Additionally, ACOTE® Standards addressing faculty qualifications require that at least 50% of faculty in doctoral programs have a post-professional degree (Accreditation Council for Occupational Therapy Education [ACOTE], 2018).

Key Perspectives/Findings

1. A doctoral degree is generally considered to be the highest degree that can be earned for graduate study. The categories of doctoral degree, as defined by the National Center for Education Statistics (NCES) are Research/Scholarship, Professional Practice, and Other [NCES, n.d.]. (See **Appendix E** on p. 7 of the appendices for select definitions from NCES.)
 - a. In occupational therapy, an entry-level doctoral degree in occupational therapy, formerly classified by NCES as a first-professional degree, is likely categorized as a Doctoral—Professional Practice degree.
 - b. A Doctoral—Research/Scholarship degree is defined by NCES as a degree that “requires advanced work beyond the master’s level, including the preparation and defense of a dissertation based on original research, or the planning and execution of an original project demonstrating substantial artistic or scholarly achievement.” Degrees such as PhD, EdD, and ScD have been generally accepted as fitting this category.
 - c. In occupational therapy, post–entry level and advanced degrees in occupational therapy are offered. In keeping with the NCES categories, the content of those degrees may need to be analyzed in order to determine which of the categories they fit—perhaps they fall into the Doctoral—Other category. This may be an important factor to determine, given the ACOTE standards on faculty qualifications.
 - d. In occupational therapy, a terminal degree for occupational therapists in academia is defined as including “doctoral degrees in occupational therapy or occupational science and related areas of science or social science, including but not limited to education, neuroscience, public health, psychology, policy, law, and sociology” (AOTA, 2017, p. 7112410030p1).
2. The 2015 AOTA Salary and Workforce Survey, comparing survey respondents from 2010 to 2014, indicates that the majority of practicing occupational therapists hold master’s degrees, and the number with professional doctorate degrees has grown from 2.7% to 4.8% (Table 1.5). The percentage of those holding a PhD, ScD, or Other as a total category is small and has not changed substantially (Table 1.5). However, in small increments, there is growth in the number of practitioners receiving professional doctoral degrees (Table 1.6).

While this may indicate no or little impact of entry-level degree on those pursuing research-based degrees, this data is not reflective of the most recent 4 years, which has seen a significant growth in entry-level doctoral degree programs (up 480% from 2010 to 2019), and significant growth in students enrolled in entry-level doctoral degree programs (up 588.44% from 2010 to 2017–2018) (AOTA, 2008 2009, 2012, 2013, 2016–2017, 2017–2018).

This workforce profile data should continue to be analyzed to determine the impact of the entry level OTD.

Table 1.5. Degrees Held in the Occupational Therapy Field

	2014		2010	
	OT	OTA	OT	OTA
Certificate	0.5%	3.4%	0.9%	4.8%
Associate's Degree	0.1%	93.0%	0.2%	91.2%
Baccalaureate Degree	32.0%	1.9%	47.4%	2.5%
Master's Degree	60.0%	0.6%	46.6%	0.9%
Professional Doctorate Degree	4.8%	0.1%	2.7%	0.0%
PhD	1.1%	0.0%	1.3%	0.0%
ScD	0.1%	0.0%	0.1%	0.0%
Other*	0.9%	0.4%	0.5%	0.0%
No Response	0.6%	0.7%	0.2%	0.5%

Note: *Other* refers to degree outside the occupational therapy profession or various certifications other than degrees. Percentages do not add to 100 due to rounding.

Table 1.6. Changes in OT and OTA Educational Background

	OTs				
	2014	2010	2006	2000	1997
Certificate	0.5%	0.9%	1.1%	1.2%	1.7%
Associate's Degree	0.1%	0.2%	0.3%	0.2%	0.1%
Baccalaureate Degree	32%	47.5%	63.8%	62.6%	67.6%
Master's Degree	60%	46.6%	31.9%	33.9%	29.5%
Professional Doctorate Degree	6%	4.1%	2.4%	2.1%	1.1%

	OTAs				
	2014	2010	2006	2000	1997
Certificate	3.4%	4.8%	12.7%	5.4%	2.8%
Associate's Degree	93%	91.2%	83.2%	73.1%	80.2%
Baccalaureate Degree	1.9%	2.5%	2.5%	19.0%	16.0%
Master's Degree	0.6%	0.9%	0.0%	2.5%	1.0%
Professional Doctorate Degree	0.1%	0.0%	0.0%	0.0%	0.0%

Note: Data for 1997 and 2000 indicate the highest degree held in any field. Data from 2006 onward indicate the highest degree held in the occupational therapy field. Percentages do not add to 100 due to rounding.

- The past 10 years have seen an increase in all levels of entry into the profession (OTA, OTM, OTD). The number of accredited entry-level doctoral programs has grown substantially, by 480%. Academic Programs Annual Data Reports were reviewed for 10-year trends in doctoral-level post-professional degree program offerings among institutions that also host entry-level OT programs to determine whether the growth of entry programs has impacted the number of existing post-professional doctoral programs among these institutions that host both. As the number of entry programs has grown, the number of those same institutions offering post-professional programs has not grown proportionally and has, in fact, decreased by 5.9%.

There is, however, an overall growth in individual program offerings. Options for post-professional OTD study have increased the most, by 192.3%. Programs offering degrees traditionally classified as Doctoral—Research/Scholarship appear to be unchanged. The Doctorate—Other category has grown at a modest pace of 20.83%.

	Type	2008–2009	2012–2013	2017–2018	10 Year % Change
Programs Offering Post-Professional Degrees	No	75	88	105	40%
	Yes	67	61	63	-5.97%
Degree Types Offered	Post-Professional OTD	13	16	38	192.3%
	PhD / DSc-OT Occupational Science	9	6	9	0%
	Doctorate—Other	24	28	29	20.83%
	Master’s/MOT/ Certificates	75	44	25	-66.66%

Limitations of Available Information/Other Considerations

The question of how the entry level will impact practitioners’ decisions to pursue research-based degrees cannot be known. Inference based on past and present data and trends is also not possible. Of note:

- The Workforce Survey data is four years old. As a result, it does not indicate trends in degrees held among practitioners given the dramatic increase in entry-level OTD programs and student enrollment in the most recent years. A new workforce survey is underway, and results should be considered along with the older data to identify trends.
- This data shows workforce trends in program offerings among institutions hosting entry-level programs. Enrollment in these programs is not tracked with annual program data.
- OT practitioners often obtain research-based and professional degrees in and outside of the discipline of OT, which are not captured in these numbers. The 2015 Salary and Workforce Survey indicates that a number of practitioners hold degrees outside of OT (See Table 1.7 in **Appendix F** on p. 9 of the appendices). Those programs and enrollment trends are not tracked.

References

Accreditation Council for Occupational Therapy Education. (2018). Standards and interpretive guide. Retrieved from <http://www.aota.org/~media/Corporate/Files/EducationCareers/Accredit/StandardsReview/2018-ACOTE-Standards-Interpretive-Guide.pdf>

American Occupational Therapy Association. (2008–2009, 2012–2013, 2016–2017, 2017–2018). *Academic programs annual data report*. Bethesda, MD: Author.

American Occupational Therapy Association. (2015). *2015 AOTA salary and workforce survey*. Bethesda, MD: Author. Summary available: <http://www.aota.org/Education-Careers/Advance-Career/Salary-Workforce-Survey.aspx>

American Occupational Therapy Association. (2017). Academic terminal degree. *American Journal of Occupational Therapy*, 71(Suppl. 2), 7112410030. <https://doi.org/10.5014/ajot.716S07>

National Center for Education Statistics. (n.d.). *Glossary*. Retrieved from <https://nces.ed.gov/programs/coe/glossary.asp#doctors> (Select definitions provided in **Appendix E** on p. 7 of the appendices.)

Question 7: Student/Parent Perception, and Debt Load

What are the perceptions/concerns of current and future students (and parents) about entry-level degree, cost of education, and debt load?

Relevance of the Issue

Student debt load continues to be a concern across the profession. The concern is that single entry-level degrees for OTs and OTAs, and the increasing cost of tuition, will negatively impact the profession. The personal finance website Make Lemonade says that the student loan debt is now the second-highest consumer debt category—second only to mortgages, and higher than credit card debt (Friedman, 2018). According to Make Lemonade, there are more than 44 million borrowers who collectively owe \$1.5 trillion in student loan debt. The average student in the Class of 2016 has \$37,172 in student loan debt. The average student in the Class of 2017 has almost \$40,000 in student loan debt (Friedman, 2018). A new review of available research on the consequences of student loan debt suggests that student loan debt, particularly in the U.S., tends to have a negative impact on people’s lives after university (Callender et al., 2018). The review, undertaken by academics from the Centre for Global Higher Education (CGHE), is unclear whether the decision to undertake a postgraduate course is influenced by student loan debt. The decision to study at postgraduate level depends rather on students’ socioeconomic backgrounds, the type of degree on offer, and the university they attended as an undergraduate (Callender et al., 2018).

The Special Task Force sought information on education, employment, and other issues related to the entry-level points for OTs and OTAs through a survey of students. The student survey launched on Monday, November 26, and ran through December 12, 2019. An error in degree preference question response alternative for OTA students, which listed dual entry level as associate and master’s degrees (rather than associate and bachelor’s degrees) was identified after the survey launched. The error was corrected, and we are able to identify responses received before and after the correction. The corrections do not appear to significantly change the response pattern. The majority of early responses resulted from direct emails to students in the AOTA database (52%), followed by announcements to social media (23%), Program Directors (21%), and ASD (4%).

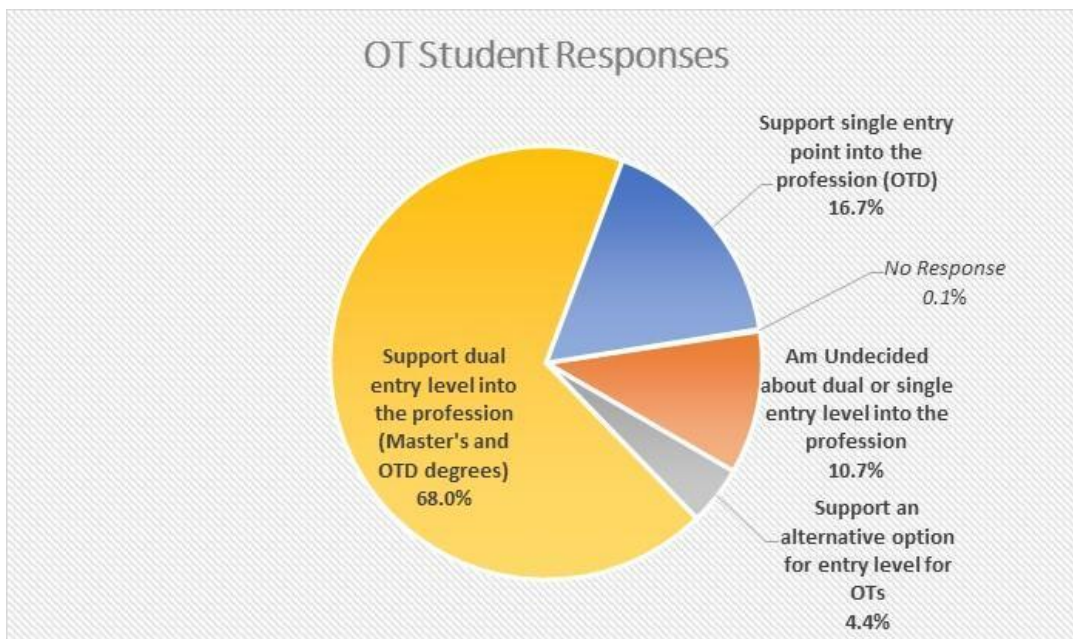
Key Perspectives/Findings

A. Student survey

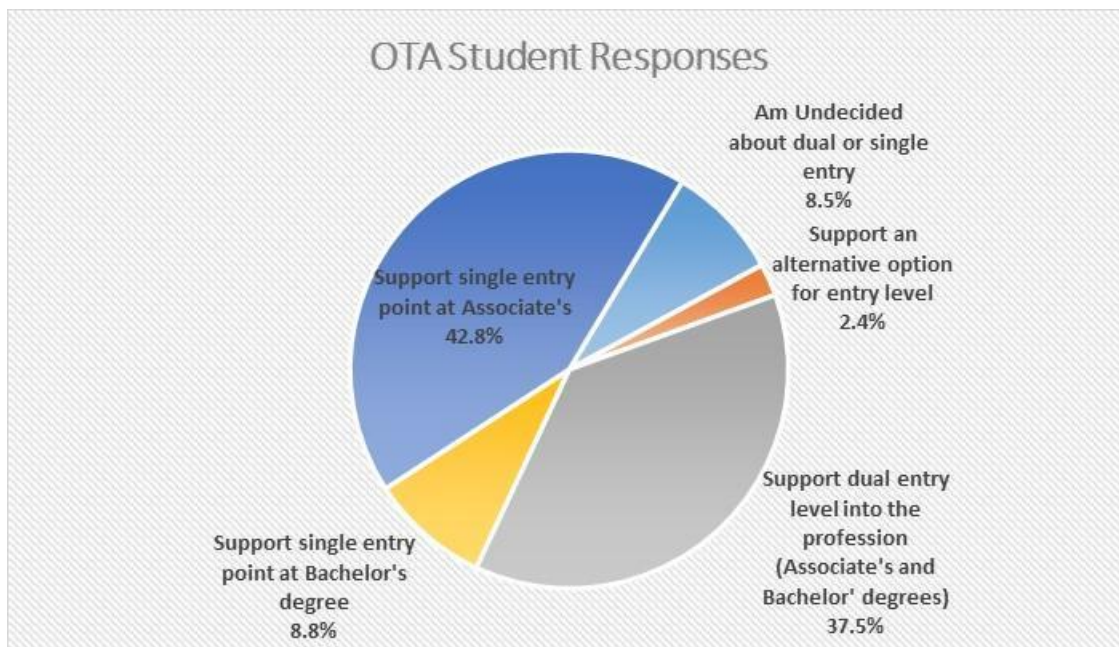
- Summary: 68% of respondents support dual entry level for OTs; 80.3% support dual entry level or associate level for OTAs; 16.7% of OT student respondents support the move to only OTD for OT, and 8.8% of OTA students support the move to only bachelor’s degree for OTAs. Among the factors most frequently cited: outcome/value of different degrees (often saying OTD won’t offer more value) 58%; student debt load 50%; job/salary/levels won’t change 37%; diversity 23%; economic considerations 24%.
- Additional information on students from OTD and master’s programs: Among students in master’s programs, 76.3% support dual entry level. Among students in OTD programs, 39% support OTD only, 47% support dual entry level.

Survey Summary

COMPLETED RESPONSES ONLY		
OT Students	Votes	
Am Undecided about dual or single entry level into the profession	370	10.7%
Support an alternative option for entry level for OTs	153	4.4%
Support dual entry level into the profession (Masters and OTD degrees)	2,357	68.1%
Support single entry point into the profession (OTD)	580	16.8%
Grand Total	3,460	100%



ALL OTA VOTES		
OTA Students	Votes	
Am Undecided about dual or single entry level into the profession	71	8.5%
Support an alternative option for entry level	20	2.4%
Support dual entry level into the profession (Associate and Bachelor degrees)	314	37.5%
Support single entry point at Bachelor degree	74	8.8%
Support single entry point at the Associate degree	358	42.8%
Grand Total	837	100%



Additional considerations

Among comments submitted to the Special Task Force, approximately 53% cited concerns about student debt load as an issue against moving to a single OTD or baccalaureate entry level, and 43% noted concerns about whether raising the entry-level degree will result in commensurate compensation.

Limitations of Available Information

Several of the concerns that shape perception of single entry-level degrees for OTs and OTAs stem from increased debt and cost of education and its negative impact on the profession. However, it is difficult to calculate the cost of entry-level points because the statistical data does not combine total student debt of undergraduate and postgraduate degrees. The cost of tuition also varies from private and public institutions, which factors into student debt.

References

Callender, C., de Gayardon, A., DesJardins, S., & Deane, K. C. (2018, June). Graduate indebtedness: Its perceived effects on behaviour and life choices—a literature review. (Working paper 38). London: Centre for Global Higher Education. Retrieved from

<https://www.researchcghe.org/publications/working-paper/graduate-indebtedness-its-perceived-effects-on-behaviour-and-life-choices-a-literature-review/>

Friedman, Z. (2018, November 28). Betsy DeVos: Student loan debt is now a 'crisis'. *Forbes*. Retrieved from

<https://www.forbes.com/sites/zackfriedman/2018/11/28/student-loan-debt-crisis/#2ca4957821e3>

Question 8: Licensure Laws

What is the impact of the entry-level point for the OT and the OTA on licensure laws? How do existing licensure requirements reference accreditation requirements for OT and OTA education programs? Is there a need to change licensure laws to address the entry-level point for OT and OTAs?

Relevance of the Issue

Occupational therapy is regulated in all 50 states, the District of Columbia and Puerto Rico. The primary goals of state licensure include: to safeguard the public from harm caused by unqualified persons; to assure the highest degree of professional care and conduct on the part of occupational therapists and occupational therapy assistants; and to assure the availability of occupational therapy services of the highest quality to persons in need of such services. The accompanying state practice acts, codes, rules, and regulations also serve to protect licensed occupational therapy clinicians from other non-licensed professionals encroaching on occupational therapy's scope of practice.

The accompanying acts and/or codes define how licensure and the practice of occupational therapy are operationalized. These acts and/or codes often contain licensure rules, minimum standards of practice, a code of ethics, disciplinary proceedings, and additional state-specific requirements (e.g., mandated reporter training, etc.).

The core licensure requirements for OTs and OTAs are consistent across the states. Applicants must graduate from an accredited education program, complete a period of supervised fieldwork experience and pass the entry-level certification exam. While these core requirements are the same, there is wide variation in the language used across state statutes and regulations to spell out the requirements particularly related to education requirements for OTs and OTAs.* For example, in some states the statute might include language requiring that applicants graduate from an ACOTE accredited program for occupational therapists while in other states the statute might require graduation from an occupational therapy education program accredited by an agency approved by the board.

References to Accreditation of OT/OTA Programs

States vary on the inclusion of language that requires the occupational therapy program for OTs and OTAs to be accredited for state licensure. However, in practice, all states and DC effectively require graduation from an OT or OTA program accredited by ACOTE or a predecessor organization. Some states have language that reference WFOT for internationally trained OTs but WFOT does not accredit education programs. In practice, state licensure boards require internationally trained applicants to pass the NBCOT exam. In order to pass the NBCOT exam, candidates must go through NBCOT's OTED program to verify that their education is comparable to education program in the United States.

Licensure Requirements – References to Accreditation for OT Education Programs

	Accreditation Reference			
	ACOTE	Accreditation Body Approve or Recognized by Board/State Agency	Reference to predecessor organization or outdated reference	Meet NBCOT educational requirement for certification
Number of States	30	10	8	4
States	AL, CA, CO, DE, DC, FL, ID, IN, IA, KY, ME, MD, MN, MS, NV, NH, NM, ND, OH, RI, SC, TN, TX, UT, VA, VT, WA, WV, WI, WY	AZ, GA, IL, KS, MA, MI, MT, NY, OR, PA	AK, AR, CT, NE, NJ, PR**, OK, SD	HI, LA, MO, NC

Licensure Requirements – References to Accreditation for OTA Education Programs

	Accreditation Reference			
	ACOTE	Accreditation Body Approved or Recognized by Board/State Agency	Reference to predecessor organization or outdated reference	Meet NBCOT educational requirement for certification
Number of States	30	10	8	4
States	AL, CA, CO, DE, DC, FL, ID, IN, IA, KY, ME, MD, MN, MS, NV, NH, NM, ND, OH, RI, SC, TN, TX, UT, VA, VT, WA, WV, WI, WY	AZ, GA, IL, KS, MA, MI, MT, NY, OR, PA	AK, AR, CT, NE, NJ, PR**, OK, SD	HI, LA, MO, NC

Is There a Need to Revise State Laws?

The need to change state practice acts and regulations can be viewed from two perspectives.

From the perspective of an additional point of entry (for example, the creation of the entry-level OTD degree years ago as well as the additional of the bachelors level OTA): Some state laws specify the degree level. The addition of a higher level OT or OTA program may not require a change in the statute or regulations; rather state boards may simply accept graduates from those programs. This has happened with the OTD degree. For example, in Indiana, the statute states that a graduate must have a

master's degree after certain date, yet the OT Committee will in fact issue a license to someone with an OTD degree.

Mandating the point of entry for OTs or OTAs: Again some state laws specify the degree level. If the OTD degree is mandated for OTs or if the bachelor degree is mandated for OTAs, state statutes and regulations should be updated to reflect the new requirement or they will be in direct conflict with standards in the profession.

The opening of the acts and/or codes may create a potential hardship related to resources imposed by this process. It is also possible that efforts to increase licensure requirements (through mandating a higher degree level) could get the attention of state policy makers just as occupational licensing requirements are under more scrutiny.

Key Perspectives/Findings

- A. While many states and the District of Columbia do not include language within their practice acts or regulations that would be impacted by the entry-level point for occupational therapists, **Arkansas, Indiana, and Pennsylvania** may need to be revised.
- B. If there are two points of entry for OTs and OTAs, state laws might not need to change immediately; state boards may simply accept the new degree as meeting the licensure requirements.
- C. Mandating a single point of entry (OTD for OTs or bachelor degree for OTAs) might require legislative or regulatory action to implement.

*See **Appendix G** (state licensure requirements) for reference on p. 10 of the appendices.

** Puerto Rico requires OTs and OTA to graduate from programs that are recognized nationally in the United States or locally by the Council on Higher Education of Puerto Rico. Graduation of locally recognized schools allows them to take the exam developed by the licensing entity in Puerto Rico but not the NBCOT examination.

Question 9: Internationally Trained Practitioners

What is the impact of entry-level point for internationally trained occupational therapists/occupational therapy assistants working in the United States?

Relevance of the Issue

There is a dynamic discussion about how the ACOTE® mandates may impact internationally trained occupational therapy personnel who want to work in the United States (US). This is a complex issue. Minimal occupational therapy educational standards vary across countries throughout the world. Health care delivery and reimbursement may impact the role of occupational therapy in individual countries.

Key Perspectives/Findings

Internationally trained occupational therapists must go through a vetting process to assess their qualifications.

The World Federation of Occupational Therapists (WFOT) recognizes that occupational therapy education should be grounded in the local context. This is reflected in the most recently updated version of the WFOT Minimal Standards for the Education of Occupational Therapists (2016).

In order to practice occupational therapy in the US, an internationally trained occupational therapist must demonstrate sufficient evidence of education equivalency.

The National Board for Certification in Occupational Therapy (NBCOT®) requires all applicants to have earned at least a master's degree. Applicants must demonstrate proficiency in English.

Occupational Therapist (OT)

There is no data at this time to make a recommendation as to the impact of the mandates for the supply and demand of a diverse workforce to meet society's occupational needs and how this impacts an internationally trained OT.

There is a lack of parity when occupational therapy in the U.S. is compared with OT in other countries throughout the world. Although some countries require at least a master's degree, most have the entry-level baccalaureate degree.

A master's degree may be a means for internationally trained OTs to access NBCOT credentials to be able to practice in the U.S., yet given these requirements, others may have returned to start or enrich clinical practice in their countries of origin. Additionally, some have developed collaborations and networks to continue collaborative teaching and research, and consequently strengthening ties from the U.S. to other parts of the world.

Occupational Therapy Assistant (OTA)

The U.S. is the only country that requires a certification exam for OTAs. Future OTAs trained under a baccalaureate level will essentially have the same number of years of education as occupational therapists from most other countries. This might create an imbalance in the supervisory process for OTAs who would like to practice in other countries. There are no educational standards from WFOT related to the OTA. There could be confusion regarding baccalaureate degree training of the OTA alongside OTs from other parts of the world who are also trained at the baccalaureate degree level.

There is no visa category in the U.S. for internationally trained OTAs. The current requirement for an H1B visa is a bachelor's degree in a specialty occupation.

Limitations of Available Information/Other Considerations

There remain additional questions for possible consideration given this topic's potential relevance to the entry-level discussion.

- What is the number of foreign trained practitioners (FTP) who apply to take the certification exam given by NBCOT?
- Of the FTP who apply to take the exam, how many are deemed eligible to do so?
- What is the FTP pass rate for the exam?
- How many FTP apply for NBCOT's Visa Credential Verification Certificate (VCVC), and how many are successful?
- For those FTP who are not successful with VCVC, is there data indicating why (e.g., English proficiency)?
- How many FTP apply for VCVC renewal, and how many are successful?

Reference

World Federation of Occupational Therapists. (2016). Minimal standards for the education of occupational therapists, revised 2016. Retrieved from <https://www.mailmens.nl/files/21072349/copyrighted+world+federation+of+occupational+therapists+minimum+standards+for+the+education+of+occupational+therapists+2016a.pdf>

Question 10: Reimbursement

How will projected changes in reimbursement, including quality initiatives (VBP, QRP) affect the profession, and how does this tie to entry levels?

Relevance of the Issue

Congress, the Medicare Payment Advisory Commission (MedPAC), and the Health and Human Services Office of the Inspector General have highlighted the opportunities for fraud and abuse in the current Resource Utilization Groups, Version IV (RUG-IV) system because payment is based on the amount of therapy provided to a patient instead of individual patient characteristics and care needs. Thus, Medicare, other payers, and health systems are moving to emphasize the value of services provided rather than rewarding the volume of services. The Centers for Medicare & Medicaid Services (CMS) and other payers will be reimbursing for services based on outcomes, rather than on the amount of time a patient spends in therapy. These changes initially will affect therapy services in the following areas:

- Quality Payment Program for Medicare Part B: Began January 1, 2019
- Skilled Nursing Facilities: Begins October 1, 2019
- Inpatient Rehabilitation Facilities: Begins October 1, 2019
- Home Health: Begins January 1, 2020

Information on these issues is provided in more detail on the AOTA website at:

<http://www.aota.org/Practice/Manage/value.aspx>

Value, quality, and outcomes-based reporting are likely to become drivers for OT and other health professions for the future. However, the issue for consideration in discussion on the entry-level mandate is whether these changes in reimbursement are related to the entry-level mandate. Related questions include, will higher entry-level degrees for OTs and OTAs place professionals in a better position to address reimbursement changes, and are reimbursement changes likely to affect entry level preparation?

Key Perspectives/Findings

- Changes in reimbursement, including quality measures, will impact the profession by placing increased emphasis on demonstrating positive outcomes with less therapy. These changes will affect practicing professionals in many settings over the next 2 years.
- The ability of the profession to implement and thrive with the changes will occur independent of a change in entry-level degree to the profession in the next decade.
- AOTA is actively developing tools, learning opportunities, and other initiatives to prepare the profession and practitioners for the upcoming changes and the emphasis on quality.
- The OT profession has responded to changing health care and reimbursement models, with professionals acquiring knowledge and skills through professional development and continuing education.
- Current practitioners are learning about the changes through AOTA and their work environment and are implementing these changes.
- Entry-level curricula will need to reflect changes in reimbursement, as they have in the past. It is not clear that a higher entry-level degree is required to include this in curricula.
- There is no information available to indicate that raising entry-level degree requirements will improve the ability to address reimbursement issues.

- The changes in the approach to reimbursement are not expected to directly translate into increases in compensation for the OT or OTA so it will be important to examine compensation, cost of education, and student debt load.

Question 11: Academic Programs

What is the impact of entry-level point for the OT and the OTA on academic programs? How will changes in the entry level affect them in the future?

Relevance of the Issue

Entry-level occupational therapy education programs (OTA and OT) must comply with the Accreditation Council for Occupational Therapy Education (ACOTE®) standards to receive and maintain accreditation, thereby ensuring the student can take the certification exam and enter practice.

The entry-level program an institution offers, whether mandated or chosen, will require a variety of external and internal approvals, assurances of resources (human, physical, technological, and financial), hiring and retaining faculty, and designing and implementing curriculum including fieldwork components that are in keeping with the institution type and mission. The planning and implementation of a program is a resource- and time-intensive endeavor. Additionally, changes in ACOTE standards, in general and in entry-level, require a length of time for academic programs to implement and ensure compliance.

Key Perspectives/Findings

1. OT and OTA program numbers overall are growing. Doctoral programs are growing at the fastest rate. Master's-level programs are transitioning to doctoral level, and the total number of master's-level programs is declining. Associate-level program numbers are also growing. In general, it appears programs increase and innovate as ACOTE standards, practice concerns, and student interest demands. (See **Appendix H** on p. 55 of the appendices for information on program and student data from 2008–2009, 2012–2013, 2017–2018, and 2019.)
 - a. Program trends over the past 10 years indicate a 65.69% overall increase in programs at all entry levels and accreditation stages. The number of accredited doctoral programs has increased by 480%. The number of accredited master's programs has declined by 32.39%. The number of accredited associate-level programs has grown by 68.99%.
 - b. The trend of existing master's-level programs transitioning to doctoral level was first noted in 2016–2017 with 14 OTM programs, then 45 OTM programs in 2017–2018, and currently 76 OTM programs as of winter 2019.
 - c. Institutions and programs devote significant time and financial resources to providing quality educational programs. Existing ACOTE standards, regular review of and changes in ACOTE Standards, and any mandates related to entry level will impact an institution, program, and current and prospective students in numerous ways. These conditions are not unique to this time period, and programs respond and innovate. Historically, accreditation standards, changes in standards, and changes in professional perspectives on entry degree standards have all existed over time. As an example, with the release of the most recent ACOTE standards providing for baccalaureate-level OTA programs for the first time, there were already applicant programs.
2. OT practitioners note concerns related to cost and length of entry-level occupational therapy and occupational therapy assistant education. A prevalent assumption appears to

be that requiring a higher degree level to enter the profession will correspond with longer and more expensive programs, making it more difficult to enter the profession.

a. Relative to OT Entry Level

- i. To address all entry-level standards for practice as an OT, both an entry master’s and entry doctoral degree in OT exceed the typical length of time and credits required to achieve that degree level as defined by the National Center for Education Standards (NCES, n.d.). As an example, the average length and credits required to complete an entry master’s degree in OT is comparable to the typical length of study and credit load of achieving a doctoral degree as defined by NCES.
- ii. On average, the difference between the length of study and credit load for an entry-level master’s degree in OT and an entry-level doctoral degree in OT appears as expected given the difference in rigor and content demanded by the ACOTE standards (in compliance with USDE standards for differences in rigor, based on degree level obtained). On a program-by-program basis, the differences are not always consistent with the premise that a doctoral degree requires more credits or more time. Significant variability in cost also occurs due to institutional differences (public, private, etc.).
- iii. To consider the impact of OT entry-level point on length and cost of academic program, the length of time, total credits, and stated tuition expense of the 20 entry OTD programs providing annual reports in 2018 were compared with a matched sample of 20 entry OTM programs providing annual reports in 2018. (See data set and source material in **Appendix I** on p. 56 of the appendices.)

OTD and OTM Entry-Level Program Summary Data

	Entry OTD Programs	Entry OTM Programs
Average Length of Study	32.85 Months	28.40 Months
Average Credits to Complete	111.30 credits	86.15 credits
Range of Credits to Complete	88–131 credits	47–125 credits
Average Credit Load per Year	37 credits	35 credits
Average Tuition Cost	\$91.2K	\$72K
Range of Tuition Cost	\$29.5K–\$146K	\$28K–\$149K
	Doctoral Degrees	Masters Degrees
Length of Study (Source: NCES)	At least 6 full-time academic years of pre-professional and professional coursework.	12–24 months following completion of a baccalaureate degree
Full-Time Graduate Study Credit Load (Source: NCES)	18–24 credits/year (9 credits/semester or trimester)	18-24 credits/year (9 credits/semester or trimester)

b. Relative to OTA Entry Level

- i. To address all entry-level standards for practice as an OTA, most programs are within a typical length of time (2 years: 24 months) for completion. However, credit load tends to exceed the average full-time credit load (60 credits) as defined by NCES.
- ii. As a general review of cost of education and length of academic program of entry OTA programs, a sample of 22 entry OTA programs was collected to reflect varied

geographic regions and institution type. Comparison to baccalaureate-level OTA programs is not possible as the 2018 ACOTE Education Standards are the first to address this degree level. (See data set and source material in **Appendix J** on p. 58 of the appendices.)

OTA Entry-level Program Summary Data

	Entry OTA Programs
Average Length of Study	23.6 Months
Average Credits to Complete	70.65 credits
Range of Credits to Complete	58–81 credits
Average Credit Load per Year	35 credits
Average Tuition Cost	\$29K
Range of Tuition Cost	\$4K–\$47K
	Associate’s/Baccalaureate Degrees
Typical Length of Full-Time Study (Source: NCES)	Associate’s Degree: 2 Years Baccalaureate Degree: 4 Years
Typical Full-Time Undergraduate Study Credit Load (Source: NCES)	30 credits/year (12–15 credits/semester or trimester)

c. Relative to Students Enrolled in All Program Levels

Ten-year enrollment trends note a 62.75% increase across all program levels, which is proportional overall with program growth. While cost is certainly a significant issue in higher education, students are still seeking OT as a profession and entering programs in order to prepare themselves as practitioners.

Student Enrollment Numbers by Degree Level

Student Enrollment by Program Level	2008–2009	2012–2013	2017–2018	10-Year % Change
Doctoral	303	425	2086	588.44%
Master	13187	16799	19262	46.06%
Associate	5513	8833	9580	73.77%
Total	19003	26057	30928	62.75%

Limitations of Available Information/Other Considerations:

The question of how the entry level will impact programs in the future is not able to be known but can be inferred based on past and present data and trends. Of note:

- While this report offers a view of the past 10 years (2008–present), the 10 years prior to that (1998–2008) had seen a sharp decline and then beginning of a recovery in workforce demand, corresponding student interest, and even program closure following the Balanced Budget Act of 1997. This history provides an example of how reimbursement issues and corresponding workforce demands appear to have a greater impact on academic programs than does entry-level point alone. The profession’s position in the national conversation related to policy issues

is critical and essential. The current climate emphasizing value based purchasing, reimbursement based on effectiveness, and varying reimbursement by degree level (for OT versus OTA) may be significant issues to impact academic programs and student enrollment.

- It is anticipated that programs will innovate in response to entry degree level, professional trends, student demand and needs, and other factors. Within degree levels, variation in length and cost of programs will continue to exist due to institution type and other factors which in turn provide students with choices in selecting programs and entering the profession.
- Student debt load and cost of higher education will continue to be a concern in the future. Accreditation standards, and changes in standards or degree levels, do promote close analysis of curriculum and resources that result in an institution examining the length and cost of a program.

References

Accreditation Council for Occupational Therapy Education. (Winter, 2019). *Program director's newsletter*. Retrieved from

<https://www.aota.org/~media/Corporate/Files/EducationCareers/Accredit/Announcements/PDenews/PDNewsletterWinter2019.pdf>

American Occupational Therapy Association. (2008–2009, 2012–2013, 2016–2017, 2017–18). *Academic Programs Annual Data Report*. Bethesda, MD: Author.

National Council on Education Statistics. (n.d.). *Glossary*. Retrieved from

<https://nces.ed.gov/programs/coe/glossary.asp#m>

(Select definitions provided in **Appendix/ E** on p. 7 of the appendices.)

Question 12: Fieldwork

What is the impact of the entry-level point for the OT and the OTA on fieldwork? How will changes in the entry level affect this in the future?

Relevance of the Issue

There is concern that the entry-level degrees for OTs and OTAs will impact fieldwork sites/placement. Concerns are that many sites will be unprepared to supervise entry-level students, and that there will be an influx of students with limited available sites. This will add to the fieldwork crisis that is already present.

Key Perspectives/Findings

1. Accreditation Council for Occupational Therapy Education (ACOTE®) Section C Standards (2011): Findings show no indications that C standards will not be met or will need to be modified due to a shift in entry-level degrees for OTs and OTAs. To date, there is no standard stating that the fieldwork supervisor needs to have the same degree as the student to be able to supervise. (See **Appendix K** on p. 59 of the appendices.)
2. Fieldwork I and II Resources
 - Level I Fieldwork Definition and Purpose on the AOTA website (Commission on Education [COE] & Fieldwork Issues Committee (1999) describes the goal of Level I fieldwork and provides an understanding of what the objectives should reflect.
 - The COE (2013) Guidelines for an Occupational Therapy Fieldwork Experience Level II was developed to be a reference document that “articulates the desired attributes of a fieldwork setting to maximize students’ learning in context.”
3. Articles and podcasts (Glass Half Full, 2018; Thomas et al., 2007) shed light on the current state of fieldwork—the crisis of securing slots for students as more programs are being developed and cohort sizes are increasing. Valid concerns with increased enrollments in education programs; and changes in employment patterns, productivity standards, and reimbursement pose challenges to providing fieldwork placements and supervision. Several innovative fieldwork models have been developed to address these issues.

Limitations of Available Information/Other Considerations

There are limited findings and outcomes about the impact of fieldwork on entry-level point of the OT and OTA degrees. However, based on the anecdotal information from the comments received by the Task Force, there is major concern that this shift will severely impact fieldwork.

References

- Accreditation Council for Occupational Therapy Education. (2011). *Standards and Interpretive Guide*. Retrieved from [https://www.aota.org/~media/Corporate/Files/EducationCareers/Accredit/Standards/2011-Standards-and-Interpretive-Guide.pdf](https://www.aota.org/~/media/Corporate/Files/EducationCareers/Accredit/Standards/2011-Standards-and-Interpretive-Guide.pdf)
- Commission on Education. (2013). *Guidelines for an occupational therapy fieldwork experience—Level II*. Retrieved from <https://www.aota.org/~media/Corporate/Files/EducationCareers/Educators/Fieldwork/LevelII/COE%2>

[0Guidelines%20for%20an%20Occupational%20Therapy%20Fieldwork%20Experience%20--%20Level%20II--Final.pdf](#)

Commission on Education & Fieldwork Issues Committee. (1999). *Level I fieldwork*. Retrieved from <https://www.aota.org/Education-Careers/Fieldwork/LevelI.aspx>

Glass Half Full. (2018, February 18). OT podcast: *Managing the Fieldwork Crisis*. Retrieved from <https://glasshalffullot.com/podcast/managing-fieldwork-crisis/>

Thomas, Y., Dickson, D., Broadbridge, J., Hopper, L., Hawkins, R., Edwards, A., & McBryde, C. (2007). Benefits and challenges of supervising occupational therapy fieldwork students: Supervisor's perspective. *Australian Occupational Therapy Journal*, 54(1), S2–S12. <https://doi.org/10.1111/j.1440-1630.2007.00694.x>