Programs For Respiratory Therapy Entry Into Practice:Curriculum And Competency Assessment

Abdulrahman Theeb Mohammed Alqahtani, Khaled Mohammed Nahil Alotaibi, Amer Obelk Attya Alanazi³

¹⁻³Respiratory Therapy Technician.

Abstract:

Beyond the conventional scope of therapy, respiratory therapists need to possess certain essential skills. It is expected of respiratory therapists to practice in interprofessional teams, provide bedside education, and communicate clearly. The accreditation standards for respiratory therapy entry-to-practice programs demand that students' proficiency in interprofessional practice and communication be assessed. The purpose of this study was to ascertain whether or not curriculum and competency evaluation for oral communication, patienteducation, telehealth, and interprofessional activities are included in entry into practice programs.

METHODS: Determining the curriculum and competency evaluation methodology was the main goal. Comparing degree programs was thesecondary goal. An anonymous survey about degree program type, oral communication, patient education, learning strategies, telehealth, and interprofessional activities was sent to directors of accredited respiratory therapy programs. The degree programs were divided into three categories: bachelor's of science, associate's of science two year, and associate's of science less than two year.

CONCLUSIONS: Program types vary in how they assess curriculum and competency. Seldom was telehealth discussed or assessed to anyextent. Programs should assess the need for telehealth training and improved patient education.

Keywords: Respiratory therapy, curriculum, student, accreditation, communication, entry to practice.

Introduction

The traditional scope of therapy is no longer the only set of essential skills for respiratory therapists (RT). There is growing pressure on department heads to hire well-trained employees, make the most of orientation time, and improve patient outcomes. Effective communication, bedside education, and practice in interprofessional teams are all expected of the RT. In order to prepare for professional practice, it is necessary to develop essential non-clinical professionalskills. There is often a disconnect between what is taught in school and what is needed for bedside practice. It is assumed that students studying respiratory therapy will exhibit the necessary proficiency priorto graduating. Programs' pedagogy and tactics for closing the knowledge-practice gap are crucial (Varekojis, 2018).

An entirely concept-based approach to health professions education has given way to a more inclusive, all-encompassing approach of competency-based instruction and assessment. The 2022 Commission on Accreditation Entry into Practice Standards, which outline the fundamental skills graduates should possess upon entering the workforce, are incorporated into the strategy. This change also affects clinical simulation-based telehealth competency. As they develop their clinical skills and get ready to practice as registered RTs, students should follow a progressive evolution of non-clinical, professional attributes (Barnes, 2010).

Formal patient education training is required as part of entry-topractice programs due to the growing role of RTs in patient educationand disease management. To help respiratory therapy programsprepare their graduates to provide patient education, training programs and curriculum models are available. The models comprise evaluative rubrics, teaching and learning domains, telehealth, cultural competency, health literacy, and curriculum outlines and assessment techniques for core competencies (Myers, 2013). Research on curriculum in health professions programs is lagging behind but is starting to emerge, with the majority of the literature on telehealth appearing to be practice-focused. No publications that specifically differentiated respiratory therapy curriculum or evaluation practices by comparing different program types or lengths were found in a recent literature search. Identifying related student experiences, figuring out how competence is assessed, and learning how various degree programs integrate communication, patient education, telehealth, and interprofessional practice into the curriculum were our goals (Zamjahn, 2018).

Methods:

Finding out whether respiratory therapy entry-to-practice

programs include specialized curricula for oral communication, patient education, telehealth, and interprofessional activities outside of clinical rotation was the main goal of the study. Comparing degree programs and identifying competency evaluation techniques were the secondary goals. To address the objectives, a questionnaire was created. Degree program type, oral communication, patient education, patient education learning strategies, telehealth, interprofessional activities, use of laboratory or simulation experiences, and competency evaluation method were the survey domains.

Through an email link, directors of respiratory therapy entry-to-practice programs were asked to anonymously fill out the survey. Commission on Accreditation for Respiratory Care-accredited programs met the inclusion requirements. The survey was carried out in 2021 between February and March. The Research Electronic Database Capture application was used to electronically gather the responses. 33 Results were summarized using descriptive statistics, such as frequency and percentage. Program types were compared using chi-square or Fisher exact tests (when cells had expected counts of < 5) to see if response frequency varied between programs. A significance level of P <.05 was deemed statistical. SAS version 9.4 was used for the analyses.

Respiratory therapy program:

Identifying and implementing consistent teaching strategies is a significant challenge due to the wide range of respiratory therapy program types (master's, bachelor's, associate of science, and associate of applied science degrees), academic settings, degree requirements, and enrollment duration (2 years vs. less than 2 years). Every element of a program's structure and procedures, such as prerequisite requirements, instructional materials, curriculum design, the amount of time allotted for content instruction, and clinical exposure, may be impacted by program length.(Davis, 2022)Programs with limited faculty resources and a shortened academic timeline for degree completion face additional challenges in ensuring the development and evaluation of competence in interprofessional communication and patient education skills. There is little and inconsistent research on how respiratory therapy programs at differentdegree levels instruct or assess these abilities, either separately or incombination (Hodges et al., 2019).

Oral communication was covered in the majority of programs as a component of a communication and patient assessment unit or patient encounter module. Building interprofessional communication skillswas mentioned by survey participants from all program types, and the programs place a strong emphasis on patient rapport. Compared to

69% of bachelor's of science degree programs, oral communication was a prerequisite for about half of all associate's degree programs. Oral communication was evaluated through competency evaluation in most degree programs. Oral presentations and laboratory proficiency tests were frequently used to evaluate competence, regardless of the program type. Although there was no proof that the two assessments were connected or carried out at the same time, these methods were generally consistent with the rate of competency evaluation for patienteducation across all programs.

Clinical evaluation:

Clinical evaluation by clinical faculty and preceptors was the most common evaluation method. In contrast to 80% of associate's degree programs that are less than two years old and 47% of associate's degree programs that are two years old, 65% of respondents with bachelor's degrees in science stated that written tests and assessments were used to assess their competency in patient education. Written tests to evaluate knowledge might be helpful, but they don't consider the progression of competence or the demonstration of ability in a patient care setting. Clinical simulation, 360-degree evaluation, and objective structured clinical examination have a well-established pedagogy and value for evaluating clinical competency. It was previously discovered that although simulation- based learning was widely used in respiratory entry-to-practice programs, faculty training was lacking (Barnes, 2011).

Use Technology:

Rapid growth in the use of technology for patient interaction means that educational preparation is falling behind clinical experience and employer demands. It can be challenging to create an appropriate learning environment when telehealth experiences are not readily available. One suitable and quickly expanding method for teaching telehealth competencies in an interprofessional context is clinicalsimulation. The importance of telehealth was highlighted by the COVID-19 pandemic, which also emphasizes the necessity of carefully planning program implementation and exposing students during clinical rotations. implemented a tele-ICU rotation during the pandemic, when students were not permitted on-site at many clinical sites. Students' confidence in patient assessment and their understanding of COVID-19 increased as a result of the rotation (Fitzgerald et al., 2016).

Recommendations:

A number of restrictions are noted. The researchers created the survey themselves. Strict validity and reliability cannot be guaranteed, despitepilot testing with faculty from three distinct program types. Although the results are based on a small convenience sample of program directors who opted to participate, the response rate was satisfactory. Surveys may have been completed for several locations because some program directors manage multiple programs, which could marginally boost the response rate. The survey's convenience participation may disproportionately reflect well-resourced, high-quality programs with highly motivated program directors. How a program's culture, program type, clinical opportunities, faculty size, or faculty background may affect the survey's components or survey respondents' answers was not covered in the survey. It was not investigated how many contact hours were assigned to specific competencies. It is impossible toguarantee how respondents will interpret terms that were defined in the survey.

Conclusion:

Program types for interprofessional activities and patient education courses in respiratory entry-to-practice programs vary. Seldom was telehealth discussed or assessed to any extent. In order to increase exposure to telemedicine, programs should assess the need for improved patient education and telehealth training. They should also think about collaborating with clinics and affiliates. To determine best practices, more research is required on the creation and assessment of critical professional competencies and telehealth in respiratory care programs. It is necessary to conduct additional research on each of the study's components.

References:

- Varekojis S, Brownfield T, Gates R, Schulte M, Davis M. Respiratory therapy department directors' preferences regarding the educational background of newgraduate staff respiratory therapists. Respir Care Educ Annu 2018;27:16–21.
- 2. Barnes TA, Gale DD, Kacmarek RM, Kageler WV. Competencies needed by graduate respiratory therapists in 2015 and beyond. Respir Care 2010;55(5):601–616.
- 3. Myers TR. Thinking outside the box: moving the respiratory care profession beyond the hospital walls. Respir Care 2013;58(8):1377–1385.
- 4. Zamjahn JB, Beyer EO, Alig KL, Mercante DE, Carter KL, Gunaldo TP. Increasing awareness of the roles, knowledge, and skills of respiratory therapists through an interprofessional education experience. Respir Care 2018;63(5):510–518.

- 5. Hodges AL, Konicki AJ, Talley MH, Bordelon CJ, Holland AC, Galin FS.Competency-based education in transitioning nurse practitioner students from education into practice. J Am Assoc Nurse Pract 2019;31(11):675–682.
- 6. Barnes TA, Kacmarek RM, Kageler WV, Morris MJ, Durbin CG, Jr. Transitioningthe respiratory therapy workforce for 2015 and beyond. Respir Care 2011;56(5):681–690.
- 7. Fitzgerald JT, Burkhardt JC, Kasten SJ, Mullan PB, Santen SA, Sheets KJ, et al. Assessment challenges in competency-based education: a case study in health professions education. Med Teach 2016;38(5):482–490.
- 8. Davis SP, Stover CF, Willhaus JK. Simulation use in entry-intopractice respiratory care programs. Respir Care 2022;67(6):676–681.