Abstract

Objectives: The Clinical Learning Environment Review (CLER) Pathways to Excellence focus on the responsibility of the sponsoring institution for Health Care Quality and Patient Safety. Very little information is known regarding the status of Quality Improvement (QI) education in otolaryngology training programs. The purpose of this survey is to evaluate the extent of resident and faculty participation in QI in order to derive opportunities for both resident curriculum and faculty development.

Study Design: Cross-sectional survey

Methods: A 15-item survey was distributed to 106 Otolaryngology program directors. The survey was developed after an extensive review of literature regarding education in practice-based learning, systems-based practice, quality improvement, and patient safety. Questions were directed at the format and content of the QI curriculum, as well as barriers to implementation.

Results: There was a 38.7% response rate. 90.2% of program directors considered education in quality improvement important or very important to a resident’s future success. Only 23.1% of programs contained an educational curriculum in QI and only 33.3% monitored resident’s individual outcome measures, both CLER requirements. Barriers to implementation of a QI program included inadequate number of faculty with expertise in QI (75%), low level of faculty enthusiasm toward curriculum (65%), and competing resident educational demands (90%).

Conclusions: Program directors recognize the importance of quality improvement in otolaryngology practice. Unfortunately, this survey identifies a distinct lack of resources in support of these educational goals. The results provide necessary information in order to generate comprehensive QI curriculum for both faculty development and resident instruction.

Introduction

• The physician workforce is one of the key levers to improving health care, however many newly trained physicians appear deficient in areas of communication, use of systems-based analysis, and inter-professional teamwork highlighting the need to address quality improvement.
• As a result, the Association of American Medical Colleges, the Accreditation Council for Graduate Medical Education (ACGME), and other professional organizations have identified that health professional education needs to be re-designed to equip students and residents with the knowledge, skills, and attitudes necessary to achieve the highest quality patient care.1-3
• The American College of Surgeons National Surgical Quality Improvement Program Quality In-Training Initiative (ACS-NSQIP QII) recently published a comprehensive systematic review of QI educational materials.4 Only 24% of the articles were specific to surgery and none within otolaryngology-head and neck surgery (OHNHS) residencies.
• Clearly, there is very little information known regarding the status of QI education in the OHNHS community. Herein, we present the results of a program director survey to characterize the current opinions, extent, and barriers of resident and faculty participation in quality improvement education within OHNHS residencies.

Methods and Materials

• An extensive literature review on quality improvement and patient safety across multiple disciplines was performed.
• A 15-question survey, which focused on 5 areas: (1) program director (PD) characteristics, (2) program characteristics, (3) attitudes toward quality improvement education, (4) current status of QI engagement in the program, and (5) barriers to implementing a quality improvement program were developed.
• The survey was then distributed via secure SurveyMonkey account to 106 program directors.
• Descriptive statistics with relative frequencies were used to access the distribution of the survey responses.

Results

• The survey reached a broad audience representing a wide range of participants in respect to age, sex, residency completion year, and subspecialty, as well as program size.
• A 38.7% response rate was achieved.
• When asked to complete the statement, “I consider education in quality improvement __________ to a resident’s future success in the field of otolaryngology,” 51.2% noted very important and another 39.0% noted important.

Discussion

• In this study, we have obtained the first national assessment of the quality improvement experiences of our otolaryngology residents as reported by program directors.
• Recent initiatives by the ACGME have made resident education in QI a requirement to maintain accreditation,3,4 but also provide an opportunity for programs to influence a lifetime of practice habits after the completion of residency training.
• Unfortunately, there are several barriers to implementing a QI curriculum. Most current surgeons have not been formally trained in QI and as a result do not feel confident in their ability to educate their residents in these topics, let alone mentor them through projects. Many programs have difficulty obtaining institutional resources to access data on the individual and department level. And, the biggest hurdle lies in meeting these increasing educational demands under the constraints of duty hour restrictions.

• The ACGME recognizes the great interest by sponsoring institutions to support faculty development in these areas on which the CLER program will focus. One of the three major activities identified by the CLER program will be to develop a program to support faculty development.2 In the meantime, there are already opportunities to increase education in general quality improvement principles both online (e.g. Institute for Healthcare Improvement)7 and in-person (e.g. Quality and Safety Educators Academy).8 In addition to the CLER program, there are likely to be even more focused opportunities for faculty development directed at members of the surgical disciplines through the ACS-NSQIP QII.9

• The CLER considers access to data essential to prioritizing improvement activities. Under the Health Quality Pathway 3, residents should be receiving data on quality metrics.2 One option to improve access to this data would be to better align graduate medical education (GME) interests with those of the sponsoring organization, thus obtaining institutional resource support. Another option could focus on a collaborative effort as an extension of the ACS-NSQIP focusing on OHNHS-specific metrics, alleviating the burden placed on individual programs.

• As the biggest obstacle, 90% of program directors have identified concern surrounding the competing educational demands on residents in the setting of duty hour restrictions. As a result, developing curricular content that fits into the processes of patient care and transmits QI principles, as a routine part of every clinical and educational activity is paramount. While we work toward this goal, programs should consider adapting their standard Morbidity & Mortality conferences into a critical evaluation of patient care episodes using the framework of the six ACGME Core Competencies to identify areas for improvement.9,10

Conclusions

• Program directors clearly recognize the importance of quality improvement in otolaryngology practice.
• Unfortunately, this survey identifies a distinct lack of resources in support of these educational goals.
• The first step to achieving success will be to provide faculty with the requisite knowledge and skills in quality improvement so that they may develop and lead resident QI education.
• The next step will be to develop a comprehensive integrated resident curriculum that fits into the processes of patient care and transmits QI principles as a routine part of clinical and educational activities. This will best be achieved with improved collaboration and dissemination of information across institutions with the overarching goal of improving future patient care within the otolaryngology community.
• With this solid foundation, we can then begin to engage our academic medical centers and align our goals with a strategic vision toward quality. This will improve access to institutional resources (e.g. data systems, IT support), facilitating experiential learning opportunities.
• As we work to shift training paradigms, pre-existing educational opportunities, such as Morbidity & Mortality conferences, serves as a feasible venue for introducing QI concepts into resident training.

References


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Military Disclosure Statement

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