The Transitional Year internship: Five classes of former interns reflect on their first clinical year

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Recommended Citation

ISSN: 2769-2779
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The Transitional Year internship: Five classes of former interns reflect on their first clinical year

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Abstract
Objective:

The clinical internship (postgraduate year-1), which precedes many advanced residency training programs, are traditionally fulfilled by a transitional year (TY) or preliminary year of training in medicine or surgery. TY programs can take place in a variety of settings, ranging from community hospitals to large academic medical centers. In the present study, we sought to evaluate if resident physicians who completed a community hospital-based TY internship felt prepared for their subsequent specialty residency training.

Methods:

A cross-sectional survey was adapted and distributed to resident physicians who completed their TY internship at a university-affiliated community hospital in Baltimore, Maryland, between 2015 and 2019. The survey was composed of seven questions, utilizing a 5-point Likert-type scale, and assessed the perceived value of internship in preparing for advanced residency training, their professional development, and their willingness to choose the TY training experience again.

Results:

Thirty-seven responses were received out of a total of 53 resident physicians who trained in the program over a five-year period (70% response rate). After completing the TY internship, most residents subsequently trained in Diagnostic Radiology 16/37 (43%) and Ophthalmology 11/37 (30%). Of all respondents, 33/37 (89%) agreed that the internship training experience was necessary for their development as a physician. Regarding preparedness, 22/37 (59%) reported that the TY internship had advanced their procedural skills. Most respondents, 32/37 (86%), would choose the TY experience again to fulfill the internship requirement. No significant difference was seen when responses were stratified by year of internship completion.

Conclusion:

This single-center study of resident physicians who completed a community hospital-based Transitional Year internship revealed that the majority of participants found their training to adequately prepare them for their respective residencies across specialties and that they would select this route again to fulfill the internship requirement.

Keywords
Graduate medical education, Transitional Year, Internship, Interprofessional

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Introduction

Many advanced residency training programs require a postgraduate year 1 (PGY-1) prior to dedicated specialty training. These specialties include anesthesiology, dermatology, neurology, nuclear medicine, physical medicine and rehabilitation, ophthalmology, radiology, and radiation oncology. Medical students have a choice of program type in which to address this requirement - a preliminary year of internal medicine or surgery, or the transitional year (TY).

The type of internship that best prepares individuals for careers in their chosen advanced residency programs, is controversial.\(^1\) For example, in radiology, most medical students apply to the internship of their choice,\(^2\) and studies have found that residents and fellows who participated in medical and surgical internships reported feeling more satisfied with their internship when compared to those who participated in the TY internship.\(^3,4\) In contrast, first-year ophthalmology residents who completed a TY internship experienced less stress when entering residency compared to those who had completed medical or surgical internships.\(^5\) However, another study of first-year ophthalmology residents found no difference in overall preparedness when comparing who had completed internal medicine or TY internships.\(^6\)

Examining the requirements set forth by the advanced residency programs that require a clinical internship reveals that there is variation among specialties. As such, it is likely that the flexible nature of the TY allows it to accommodate interns heading towards multiple specialties, as the curriculum can be adapted to suit their individual needs. For example, a resident advancing to radiology is restricted to a maximum of two elective months spent in diagnostic radiology, whereas a resident proceeding to either ophthalmology or dermatology is not limited in the amount of elective time that can be spent within their chosen specialty during the PGY-1 year.\(^7\) Residents proceeding to anesthesiology, nuclear medicine and radiation oncology are required to spend at least nine months providing direct patient care.

Historically, internships devoted entirely to internal medicine or surgery have been considered to provide a more rigorous preparation for advanced residency positions compared to the TY internship.\(^4\) Part of this view likely stems from the perceived differences in competitiveness to earn a position in a TY program, compared to a preliminary medicine or preliminary surgery program. Data from the National Residency Matching Program (NRMP) matches have showed an overall increase in the number of positions available for the TY, preliminary medicine and preliminary surgery internships, from 4148 (2017) to 4466 (2021).\(^8\) Of these positions, there has been a 65% increase in the number of positions available within TY programs (Figure 1), so an examination of preparedness for residents in these programs is timely. Information about the specific characteristics of match applicants to TY programs is limited, as it is not considered a distinct specialty.\(^8\)
The TY internship is distinct because it offers trainees a broad-based clinical experience. It has garnered criticism, however, because of its schedule flexibility and variability in program structure.1,3,4 Of the three main types of internships, only the TY has ACGME requirements for the structure of the year (24 weeks of fundamental clinical skills, 8 weeks of inpatient service, 140 hours of ambulatory care, and a minimum of 8 weeks of elective time). The ACGME guidelines for surgery internship require that the preliminary year surgical interns have a schedule that resembles that of the categorical interns. The ACGME guidelines for internal medicine do not have specific requirements for preliminary year internal medicine interns. For example, the TY curriculum at our institution, outlined in Table 1, is similar to the curricula at other TY programs in the United States.
Table 1. Transitional Year (TY) curriculum at the University of Maryland Medical Center Midtown Campus, Baltimore, Maryland.

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Duration (month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
<td>2.5</td>
</tr>
<tr>
<td>Multidisciplinary Ambulatory</td>
<td>0.5</td>
</tr>
<tr>
<td>Internal Medicine (Inpatient)</td>
<td>3.5</td>
</tr>
<tr>
<td>Intensive Care Unit/Critical Care Unit</td>
<td>2.5</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>1.0</td>
</tr>
<tr>
<td>General Surgery</td>
<td>1.0</td>
</tr>
<tr>
<td>Night Float</td>
<td>0.5</td>
</tr>
<tr>
<td>Vacation</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Like most internal medicine and surgery programs, TY internships can take place in a range of settings, from community hospitals to large academic centers. The TY curricular requirements place interns in both inpatient and outpatient settings, the degree to which varies among individual programs.

Between 2014 and 2019, there has been a 55% increase in the number of TY internship programs as well as a 41% increase in the number of residents participating in these programs. In the 2018-2019 academic year, of the 3,579 residents who completed preliminary training, 1,402 residents graduated from 157 accredited TY programs. As the number of TY internship programs increases and the discussion of internship requirements for each specialty unfolds, we sought to examine how recent graduates from one TY internship program perceived their training experiences contributed toward their professional development.

Methods

This cross-sectional study was designed to investigate the perceived value of internship by residents who completed their TY Internship at the University of Maryland Medical Center Midtown Campus (Baltimore, MD), a university-affiliated community medical center. The study was IRB approved as non-human research and informed consent was obtained from participants. The survey tool was adapted from Baker et al. (2008), which had been designed for radiology residents, to be applicable to residents in pursuit of all specialties who had successfully completed the TY internship at our institution (Table 2). In an effort to limit respondents answering questions with answers that aligned with their overall sentiment about their training experiences, a pitfall delineated by the Kirkpatrick model, respondents answered questions related to specific skills that they encountered during the internship. The survey tool in the present study was distributed electronically using Qualtrics (Provo, UT) in July 2019 to resident physicians who had completed the TY Internship program between June 2014 and June 2019. Single-use survey links were used...
to limit the possibility of multiple survey submissions. Information regarding TY internship completion year and current residency program was also collected.

The seven Likert-type questions of the survey elicited responses on a 5-point scale (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree and Strongly agree). Responses were characterized into binary responses, ‘Agree’ (Strongly agree and Somewhat agree) or ‘Disagree’ (Strongly disagree and Somewhat disagree).

Table 2. Survey adapted from Baker et al. (2008) to assess how residents perceive the value of their Transitional Year (TY) internship, one to five years following completion.

<table>
<thead>
<tr>
<th>Survey to Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internship year was necessary for my development as a physician.</td>
</tr>
<tr>
<td>2. Internship year was necessary for my development as a physician in MY CHOSEN SPECIALTY.</td>
</tr>
<tr>
<td>3. Internship year further affirmed my decision to pursue MY CHOSEN SPECIALTY.</td>
</tr>
<tr>
<td>4. Internship year advanced my capabilities and skills in specific procedures that contributed to development as a physician in MY CHOSEN SPECIALTY.</td>
</tr>
<tr>
<td>5. Working within different medical and surgical departments during the TY enriched my current practice in MY CHOSEN SPECIALTY.</td>
</tr>
<tr>
<td>6. Given the opportunity to choose again, I would select the TY to fulfill the internship requirement for my CHOSEN SPECIALTY.</td>
</tr>
<tr>
<td>7. Given the opportunity to advise future applicants to CHOSEN SPECIALTY, I would recommend them to consider the TY.</td>
</tr>
</tbody>
</table>

Results

Thirty-seven responses were received out of a total of 53 resident physicians who trained in University of Maryland, Midtown Campus TY internship between 2015 and 2019 and for whom active email addresses were available (70% response rate). After completion of the TY internship, residents subsequently trained in diagnostic radiology, ophthalmology, anesthesia, neurology, physical medicine and rehabilitation, psychiatry, internal medicine and radiation oncology (Figure 2). Responses were grouped by specialty to facilitate analysis. Diagnostic radiology (16/37) and ophthalmology (10/37) residents represented the largest proportion of respondents. Those residents in all other specialties were pooled (11/37): Anesthesia, neurology, physical medicine and rehabilitation, psychiatry, internal medicine and radiation oncology.
Most respondents, 33/37 (89%), agreed that internship was necessary for their development as a physician. However, only 29/37 (78%), reported that the internship was necessary for their development as a physician within their chosen specialty. When examined by specialty, 14/16 (88%) of diagnostic radiology residents reported that the TY was necessary for their development as a physician and 12/16 (75%) reported that the TY was necessary for their development as a radiologist. In comparison, 9/10 (90%) of ophthalmology residents reported that the TY was necessary for their development as a physician whereas 6/10 (60%) reported that the TY was necessary for their development as an ophthalmologist. Of the remaining residents, 9/11 (82%) reported that the TY was necessary for their development as a physician and 10/11 (91%) reported that the TY was necessary for their development as a physician within their specialty. Of all residents, 32/37 (86%) who completed the TY internship reported that the experience affirmed their decision to pursue their chosen specialty.

Regarding preparedness for advanced residency training, 22/37 (59%) of all residents felt the internship had advanced their procedural skills. Meanwhile, 30/37 (81%) felt that their interdisciplinary interactions with members of other specialties during internship enriched their current practice.

Upon asking residents if they would choose the TY internship again to fulfill the clinical internship requirement, 35/37 (95%) agreed and of which, 31/37 (89%) ‘Strongly’ agreed. Furthermore, 36/37 (97%), would advise future applicants in their specialty to consider a Transitional Year Internship Program.
Discussion

We found that respondents predominantly viewed the TY training experience as one that enhanced their professional development and preparedness for their advanced residency training. Though the present study had a smaller sample size, our results contrast from those found in a significantly larger study by Baker et al (2008), who reported a “collective expression of dissatisfaction” of radiology residents and fellows with regard to their TY internship. The present study differed from the aforementioned study in that the respondents in the present study reflected multiple specialties. In addition, since we had adapted the survey from the Baker et al original paper, we cannot make a direct comparison of the individual responses.

Most residents in our survey reported that participating in the TY internship program affirmed their decision to pursue their advanced specialty. This finding is reassuring because a previous report had identified a relationship between symptoms of burnout and career choice regret. Though the relationship has not been formally validated, it is possible that career choice affirmation could help reduce incidence of burnout. Satisfaction with specialty selection did not vary with year of graduation, suggesting that affirmation in career decision-making may have a lasting influence that persists through the course of residency training. This observation is consistent with findings reported one decade earlier.

The next subject of interest was preparedness for residency. Transitions in medical training are known to be challenging, this has been described in interns transitioning to residencies in radiology and ophthalmology. Adapting to a new specialty requires shifting roles, which can be complicated. The response within the specialty of ophthalmology has been to incorporate the internship into a categorical internship, with increased ophthalmology exposure to facilitate skill development in a more controlled curricular setting. In radiology, the increasing distinction between diagnostic and interventional radiology residency training tracks has complicated the discussion regarding internship training, as diagnostic radiology typically involves fewer procedures compared to interventional radiology. Though both tracks currently require completion of any internship, a recent survey of interventional radiology residents and fellows found that those who completed surgical internships reported having felt a greater level of preparedness compared to those who had done either TY or internal medicine internships. Perhaps these findings will shape the recommendations for internships for future residency applicants, as the TY and medicine programs may better suit those anticipating a career in diagnostic radiology compared to interventional radiology.

Over half of the residents who took the present survey (59%) reported that they were able to advance their procedural skills. Residents might have been able to perform procedures as part of duties on medical ward and intensive care unit rotations, as well as on electives. Ophthalmology residents who completed TY internship programs were found to be more likely to do an ophthalmology elective that might have contributed to this procedural preparedness. In the present study, 5/10 (50%) of ophthalmology residents reported advancements in their procedural skills. Among other groups, 10/16 (63%) of diagnostic radiology and 7/11 (64%) of all other residents reported advancements in their procedural skills. Information on the specific type of elective completed was not collected on this survey and may be of interest for future investigation.

With regard to interacting with members of other disciplines, 15/16 (94%) of diagnostic radiology residents, 6/10 (60%) of ophthalmology residents and 9/11 (82%) of other residents reported that their interactions with members of other specialties during internship enriched their current practice.
When asked about the likelihood of again choosing the TY experience to fulfill the internship requirement, the predominant sentiment reported was agree (95%). These findings suggest that residents found their TY internship satisfactorily prepared them for their advanced residency. This is consistent with the findings reported that first-year ophthalmology residents who had completed TY internships had a greater ease of transition to ophthalmology residency, including scheduled electives that allowed for specific preparation for ophthalmology. In addition, we asked if resident physicians would advise other students pursuing their specialty to consider the TY and again, 97% agreed. Again, we recognize that the community-oriented setting and faculty members who chose to work in this environment may play a role in the perceived value attributed by residents to their internship experience. The factors that contributed to this sentiment were not explored in the present study.

The present study is limited to a small sample of self-selected individuals who trained at a single university-affiliated community-based hospital, which may not reflect the experiences of residents from programs at other institutions in different settings. Perhaps, the University of Maryland Medical Center, Midtown Campus Transitional Year Internship Program could be further evaluated in order to identify the features of the academic program that influenced the experiences reported by residents who completed the program. Though our findings may not reflect the sentiment of all TY internship programs, this is the first multidisciplinary evaluation of resident physicians who completed the TY internship known to the authors. Further research may endeavor to compare a broader range of resident experiences, by expanding the survey to include residents who completed TY internships at multiple community sites.

Conclusion

The findings of this survey suggest that the community-based Transitional Year (TY) internship program offers resident physicians a valuable opportunity to develop interpersonal and procedural skills and growth as a physician. It was reassuring to learn that the majority of residents who completed the TY internship reported that the experience helped to affirm their decision to pursue their chosen specialty. Though the preliminary clinical internship has been questioned and the role of the Transitional Year internship critiqued, the findings from the present study suggest that the Transitional Year internship adequately prepares residents for advanced residencies in their respective fields.
References