Evaluating the potential merger of two internal medicine residency programs: process and recommendations

Richard Alweis* a,b, Christina Goodermote a,b,c and Robert Mayo a,c

*Department of Graduate Medical Education, Rochester Regional Health, Rochester, NY, USA; a Department of Medicine, Unity Hospital, Greece, NY, USA; b Department of Medicine, Rochester General Hospital, Rochester, NY, USA

ABSTRACT

Background: Economic forces have led to significant consolidation within the healthcare sector, but the effects of hospital mergers on graduate medical education programs are not well studied. Academic leaders may be expected to operationalize an institutional merger through educational program consolidation. Through a case study of our potential GME program consolidation, the authors present a helpful model for assessing the practicality of a program consolidation and share lessons learned.

Methods: A novel exploratory process assessed the viability of four levels of integration for two internal medicine programs within a merged health system. Focused interviews with outside organizations, literature review, SWOT analysis by stakeholders, and a semi-quantitative scoring system resulted in the final recommendation to health system administration.

Results: The two internal medicine programs will pursue educational and administrative synergies but will not merge.

Discussion: Common challenges facing GME leadership in assessing the viability of a merger include: different organizational culture, mistrust of intentions, lack of a shared vision, lack of communication, and managing the pace of change to prevent erosion of the learning environment. Overcoming these challenges is best accomplished by establishing shared values, recognizing synergies and estimating organizational compatibility. Maximizing faculty and resident interactions while performing combined QI projects, research, or didactics can build trust over time and change the cultural norm. Early successes are vital to the process. Finally, even if residency programs do not merge, they should have common salaries and benefits so that disparities do not engender further distrust.

1. Background

The last 30 years have seen significant consolidation within the healthcare sector, primarily driven by economic priorities. This process accelerated with the passage of a number of healthcare reform initiatives in the early 1990s and was followed by explosive expansion with the passage of the Patient Protection and Affordable Care Act (ACA) in 2010. The merger rate doubled within two years of the passage of the ACA compared to pre-ACA values [1,2]. There are little data on the effects these post-1990 mergers had on GME programs, including a complete absence of case studies in the merger of internal medicine residency programs [3–12]. Although the decision to merge institutions will be made at a level generally much higher than that of a department chair or program director in internal medicine (IM), it will be up to department chairs and program directors to operationalize the merger – or argue for continued independence.

Rochester Regional Health (RRH) was initially formed in 2014 with the merger of Rochester General Health System and Unity Health System. Two hospitals within that merger had GME programs, Rochester General Hospital and Unity Hospital. Rochester General Hospital is a 528 bedded facility in Rochester, NY with multiple GME programs, including a 57 (19/19/19) resident internal medicine residency programs. Unity Hospital is a 337 bedded hospital in Greece, New York, a suburb of Rochester, with only a single program, a 41 (13 + 2/13/13) resident internal medicine residency programs. At the time of the merger, there was no discussion of merging the IM programs; however, in 2018, the system asked the GME office for an assessment of merging the two programs. Both programs are considered community programs; therefore, the process offered an unusual opportunity to examine issues specific to that setting, as compared to the merger of two academic medical centers (AMCs) or an AMC with a community health system.

2. Methods

The exploratory process began with a consultation with the Review Committee for Internal Medicine (RC-IM) of the ACGME. This consultation reviewed the
accreditation requirements for merged programs, the process for merging the programs, and led to discussions with several other institutions that had recently undergone similar discussions. The RRH Designated Institutional Official (DIO) then performed structured interviews with the DIOs of these organizations. The interviews were coded using conventional content analysis, in which categories derived from the conversational data were created to identify common themes that could inform our process [13]. The questions within the structured interview included:

- What was the purpose of the merger?
- How did you sell the idea of the merger to multiple departments?
- If merged, did one culture become dominant, a new combined culture emerge, or did both cultures coexist? If one culture became dominant, did you find less engagement by the staffs at the less dominant facility?
- Were you able to realize all of your projected benefits?
- In retrospect, what were the biggest barriers to success?
- What would you suggest would be the most meaningful quick victory to generate positive feelings?
- Are there other lessons that you wish to impart?

A focused PubMed literature review using search terms of (internship and residency [mesh]) AND (health facility merger [mesh]) OR (internship and residency [mesh] AND merger [title]) OR (residency [title] AND merger [title]) identified 10 studies of GME program mergers that reported sufficient outcomes data to determine level of success [3–12]. The combination of the interviews with DIOs and the literature review led to a working lessons learned document. A workgroup of key stakeholders was formed, consisting of both Department of Internal Medicine chairs, both internal medicine residency directors, the system director of GME, the system DIO, and the system CMO. The workgroup performed a SWOT analysis of each residency program, and combined this with the lessons learned working document to explore four models on the continuum of integration:

1. Full independence
2. Administrative synergy only (shared administrative resources but not educational resources)
3. Administrative and educational synergy (shared administrative and educational resources and programming)
4. Full merger into a single program

Each model was then examined with a semi-quantitative rating system (Figure 1) to perform a risk-benefit profile in four domains: educational, financial, operational and cultural/political (Figures 2, 3). The workgroup brainstormed the pros and cons for each model and advised on placement within each category, but only the system personnel (GME director, CMO and DIO) performed the final scoring in an attempt to mitigate bias. System personnel scoring was done collectively by consensus.

3. Results

3.1. Thematic analysis

The structured interviews and literature review indicate that the absence of a ‘burning platform’ leads to a significant threat to any merger intention. If faculty and department heads do not understand the value proposition of the merger and share in the vision of how the merger will improve the program overall, there will be significant resistance. Combining departments of medicine under a single leader can advance the proposed merger, but departures of clinical and departmental leadership are expected when this occurs. To allay this, preserving and celebrating local cultures while achieving system thinking is a facilitator of success. The interviewed DIOs expressed the feeling that merging into one program, especially if the distance

| Pros                          | Cons                        |
|-------------------------------|-----------------------------|
| Obvious benefit or strongly positive (+3) | Severe barrier to implementation or strongly negative (-3) |
| Moderate benefit or mildly positive (+2) | Moderate barrier to implementation or mildly negative (-2) |
| Unclear benefit or neutral (+1) | Slight barrier to implementation or slightly negative (-1) |

Figure 1. Semi-quantitative assessment scale.
between the two institutions is significant, will be a hindrance to recruitment efforts, as most applicants do not want to routinely rotate at multiple hospitals.

### 3.2. Model assessment

Models were collectively rated (Figure 4) and final recommendation was made to the system administrator to pursue a combined administrative and educational synergy model. This recommendation was approved. This was also the preferred model of the department chairs and program directors. As the next step in the process, the system requested development of metrics of success and a re-evaluation in 2 years.

### 4. Discussion

The merger of two health systems is seldom driven by academic need. However, the GME leadership in the merging systems will be responsible for the operationalization of the merger within educational programs – or advocating program independence. The potential merger of two successful GME programs is a significant and potentially traumatic event. The literature to guide GME leadership on assessing mergers of residency and fellowship programs is limited. Since approximately two-thirds of internal medicine residency training exist in the community hospital setting where there may be less emphasis placed on publication (e.g., the need to publish for academic promotion) or resource barriers to publication, these experiences are sparsely documented [14–17]. The existing literature consists of case studies such as this one, which limits the utility of our methodology and the generalization of the results, but several common themes and our own lessons learned do enable us to provide some guidance for GME leadership.

Common challenges facing GME leadership include different organizational culture, perceptions of ‘winners’ and ‘losers’ in the merger leading to mistrust of intentions, lack of the development and promulgation of a shared vision especially in the absence of a ‘burning platform,’ and lack of communication between merging organizations and the subsequent maintenance of siloed ‘us vs. them’ thinking. Our advice to those considering mergers is to start by attempting to establish shared

| PROS | Financial | Operational | Cultural/Political |
|------|-----------|-------------|-------------------|
| Enhanced access to ambulatory and ICU experiences | Reduce GME costs and enhance CMS Cap management | Broader view of GME needs | System-thinking while maintaining individual identity |
| Access to best teachers regardless of clinical site | Broader view of allocation of budget and resources | Reduction in needed office space | Individual program reputation aids |
| Shared SDOH, simulation opportunities | Shared SDOH, simulation opportunities | Consistent GME messaging | |
| Academic ½ Days | | | |
| Shared QI/research projects | Recruitment logistics “simple” | | |
| Shared L&D series | | | |
| Shared faculty development | | | |

Figure 2. Example of model assessment – pros of administrative and educational synergy.
values and examine synergies that are easy to enact and lead to early successes. Assessment of organizational compatibility is a key part of this process, and, if an objective assessment (which may require outside consultation) indicates low levels of compatibility, it may very well be best not to merge. Even where there is the possibility of synergy, setting a pace that takes into account organizational grief/sense of loss of ownership is needed, and this may delay the process or cause it to occur more slowly than system administration desires. The GME leadership must advocate strongly that the pace of change not occurs in a way that will result in degradation of the clinical learning environment. Maximizing faculty and resident interactions and performing combined QI projects, research, or didactics can build trust over time and change the cultural norm. Finally, even if residency programs in the same system do not merge, they should have common salaries and

| CONS | Educational | Financial | Operational | Cultural/Political |
|------|-------------|-----------|-------------|-------------------|
|   | Multiple educational sites may be viewed unfavorably by residency applicants | Increased travel costs for residents and faculty | Scheduling challenges | Faculty engagement if perceived as erosion of local culture |
|   | Quality of evaluations by residents and faculty reduced with less familiarity | Differences in resident benefits between sites | Decreased availability to program leadership and residents | Increased faculty burden |
|   | Quality of mentoring of residents may be reduced with less familiarity | Decreased clarity of expectations | Change management difficulties | |
|   | | | | Increased management and regulatory complexity |
|   | | | | Increased travel for GME staff |

**Figure 3.** Example of model assessment – cons of administrative and educational synergy.

| Model               | Pros | Cons | Total Score |
|---------------------|------|------|-------------|
| Full Independence   | 28   | -21  | 7           |
| Admin Synergy Only  | 36   | -32  | 4           |
| Admin + Educational Synergy | 38 | -25 | 13          |
| Single Program      | 42   | -40  | 2           |

**Figure 4.** Risk-benefit analysis of the four proposed models.
benefits to correct disparities that might hinder developing trust between programs.

5. Conclusion

Given that the pace of system mergers is increasing, and the effects of this reality on GME programs are little known, future research targeting the development of leadership and management best practices in directing the merger of residency and fellowship programs are needed. These studies should include a qualitative component to better understand the emotional and cultural elements of proposed mergers.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Richard Alweis https://orcid.org/0000-0002-4747-8066

References

[1] Dafny L. Hospital industry consolidation—still more to come? N Engl J Med. 2014;370(3):198–199.
[2] Tsai TC, Jha AK. Hospital consolidation, competition, and quality: is bigger necessarily better? JAMA. 2014;312(1):29–30.
[3] Cora-Bramble D, Joseph J, Jain S, et al. A cross-cultural pediatric residency program merger. Acad Med. 2006;81(12):1108–1114.
[4] Cousineau MR, Flores H, Cheng S, et al. Transforming a family medicine center and residency program into a federally qualified health center. Acad Med. 2013;88(5):657–662.
[5] Friedman SG, Greben C, Scher LA, et al. Standardizing vascular surgery residency: merger of two programs to create one model. Vasc Endovascular Surg. 2004;38(1):63–67.
[6] Hines JF, Satin AJ, Browne M, et al. Effect of residency program merger on undergraduate medical student education in obstetrics and gynecology. Obstet Gynecol. 1999;94(1):144–147.
[7] Lovejoy FH, Nathan DG, Zuckerman BS, et al. The merger of two pediatric residency programs: lessons learned. J Pediatr. 2008;153(6):731–732.
[8] Mellinger J, Bonnell B, Passinault W, et al. Resident and faculty perceptions of a surgical residency program merger. Curr Surg. 2001;58(2):223–226.
[9] Rider EA, Longmaid HE. A model for merging residency programmes during health care consolidations: a course for success. Med Educ. 2003;37(9):794–801.
[10] Smith M, Graham P, Holtrop JS, et al. Muddling through a merger: a qualitative study of two combined family practice residencies. Fam Med. 2003;35(7):482–488.
[11] Tackett JJ, Longo WE, Lebastchi AH, et al. Combining disparate surgical residencies into one: lessons learned. J Surg Res. 2015;198(2):289–293.
[12] Tasman A, Riba M. Strategic issues for the successful merger of residency training programs. Hosp Community Psychiatry. 1993;44(10):981–985.
[13] Hsieh HF, Shannon S. Three approaches to qualitative content analysis. Qual Health Res. 2005;15(9):1277–1288.
[14] Levine RB, Hebert RS, Wright SM. Factors associated with citation of internal medicine residency programs for lack of scholarly activity. Teach Learn Med. 2005;17(4):328–331.
[15] Alguire PC, Anderson WA, Albrecht RR, et al. Resident research in internal medicine training programs. Ann Intern Med. 1996;124(3):321–328.
[16] Young RA, Dehaven MJ, Passmore C, et al. Research participation, protected time, and research output by family physicians in family medicine residencies. Fam Med. 2006;38(5):341–348.
[17] Alweis R, Wenderoth S, Donato AA. Effectiveness of iterative interventions to increase research productivity in one residency program. J Community Hosp Intern Med Perspect. 2015 Dec 11;5(6):29203.