RAFT (Resident Assessment Facilitation Team): Supporting Resident Well-Being Through an Integrated Advising and Assessment Process

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BACKGROUND AND OBJECTIVES: During medical residency, indicators of well-being decline while rates of burnout increase. As part of a Preparing the Personal Physician for Practice (P4) innovation, this residency program used a relationship-centered periodic resident assessment process to reinforce values of adult learning within the curriculum. It was predicted that the revised assessment process would contribute to an improved educational climate for residents as reflected in global scores of well-being either remaining at the same level or improving throughout residency.

METHODS: Resident Assessment Facilitation Team (RAFT) is an innovative feedback process utilizing small-group dialogue that replaces the traditional semi-annual, faculty-wide review of resident performance. As a pilot study to investigate the impact of RAFT, the Arizona Integrative Outcome Scale (AIOS) was used to describe trends in the well-being of P4 resident cohorts from internship through PGY-3. A comparison group was derived from a resident cohort that started before full implementation of the P4 curriculum and also completed the AIOS.

RESULTS: ANOVA comparing AIOS scores across PGY cohort groups was not significant. An independent samples t-test comparing AIOS scores from the PGY-3 pre-P4 group with those of the PGY-3 post-P4 group was also not significant. Although this pilot study was not powered for a complete inferential analysis, the descriptive data suggest a downward trend in the pre-RAFT group and stable measures of well-being in the post-RAFT group.

CONCLUSIONS: The trend in our pilot data suggests a stability of well-being among our residents that contrasts with patterns of resident burnout noted in existing research. The RAFT has become a key feature of our assessment and advising culture that is intended to mitigate the deleterious effects of more autocratic assessment processes. It may also be an important factor in the stability of resident well-being indicated by this pilot.

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Further, unremittingly negative or poorly directed feedback\(^\text{13,14}\) can add to residents’ distress. A goal of the Preparing the Personal Physician for Practice (P4) innovations at Lehigh Valley Health Network Family Medicine Residency was to educate skilled family physicians without the distress traditionally associated with residency training.\(^\text{2}\)

We adopted several tenets of adult learning theory\(^\text{15,16}\) to redesign residents’ periodic assessment process. RAFT (Resident Assessment Facilitation Team) is an innovative method that integrates advising and assessment functions to include the voices of resident learners. Importantly, the RAFT process assumes residents’ capacity for self-direction, involvement in educational planning, and a decreased need for oversight as they mature. By modeling a dialogic, respectful, and inclusive conversation, the RAFT reinforces values of relationship centeredness\(^\text{9}\) that are core features of the residency curriculum and culture.\(^\text{12}\) The purpose of this paper is to report on a pilot study conducted with cohorts of residents with different levels of exposure to the RAFT innovation.

The negative impact of residency education on resident well-being is extensively documented\(^\text{13,14}\) and has implications for patient care and practice after graduation,\(^\text{4}\) namely, that residents risk beginning their careers with a sense of despondency and depleted empathy. Medical residency is undoubtedly stressful\(^\text{6,7}\) and it has been compared to surviving a dysfunctional family.\(^\text{8}\) Negative relational experiences have been shown to affect both current learning and future patient care.\(^\text{9,12}\)
Methods
Pre- and Post-educational Innovation

Prior to P4 (fall 2007), all members of the faculty conducted periodic assessment of residents three times per year. The half-day sessions occurred without resident involvement, were highly directive, with advisors subsequently relaying outcomes of the discussion to their advisees along with prescribed education plans.

The RAFT includes the program director, the resident’s advisor, a medical educator, a clinical psychologist, and the residency coordinator. The diverse members serve advisory, reflective, and analytical functions as the residents’ progress is assessed, and individualized educational plans are developed. The advisor, who works closely with the resident between RAFT meetings, protects the meeting’s integrity by ensuring that the most salient topics are raised. The resident and advisor bring an Educational SOAP Note documenting progress on curricular activities and competency-based assessment to the meeting. The supplementary material for this article provides an abbreviated version of the SOAP Note invented for the purpose of illustration. A sample Educational SOAP Note is available from the authors on request.

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Pre-RAFT and Post-RAFT Resident Cohorts

Residents in the pre-RAFT cohort included those who entered as PGY-1 residents in 2007 and graduated in 2010. Although study instruments were administered to this cohort, these residents were not exposed to the RAFT innovation until their PGY-2 year. Residents in the 2008 to 2010 PGY-1 cohorts were considered post-RAFT cohorts for the purpose of this pilot.

Data Collection and Exploratory Hypothesis

The study was reviewed by the Lehigh Valley Health Network Institutional Review Board and met the federal requirements for exempt research under 45 CFR 46.101(b)(1,1). Data collection involved administering the Arizona Integrative Outcome Survey (AIOS)17—a visual analogue scale18 that asks respondents to mark their global sense of well-being using an X on a 100-mm line, with the low anchor being “worst you have ever felt” and the high anchor being “best you have ever been.” Global well-being scores on the AIOS range from 0 to 100. In a validation study by Bell and colleagues in 2004, the control population of healthy (non-physician) adults returned a mean of 65.20 for well-being in the last 24 hours and 60.58 for well-being in the last month.17 The Arizona Integrative Outcome Scale was administered to the pre-RAFT cohort during residents’ retreats in summer of PGY-1, spring of PGY-1, and spring of PGY-3 and to the post-RAFT cohort in summer, fall, and spring of PGY-1, fall of PGY-2, and winter of PGY-3. Return of the AIOS was voluntary.

Results

Descriptive statistical data reflect relatively stable measures of well-being in the post-RAFT group (Figure 1) and suggest a downward trend in the pre-RAFT group (Figure 2). ANOVA comparing AIOS scores for between-group and within-group differences across the pre- and post-RAFT cohort groups was not significant (P=.635). An independent samples t test comparing AIOS scores collected during PGY-3 for the pre-RAFT group with those of the post-RAFT group was also not significant (P=.080).

Discussion

In contrast to other studies that report significantly increased rates of burnout by the end of residency,19 global ratings of well-being in the first PGY-1 and last PGY-3 data appear similar in the post-RAFT group (Figure 1). The scores of the pre-RAFT group (Figure 2) drop as one might expect between PGY-1 and PGY-3. However, the size of each cohort and non-significant P values mean that caution should be used when attempting to draw conclusions. As a pilot, the difference in
In a programmatic innovation such as P4, in which multiple changes occur simultaneously, it is impossible to determine a direct causal relationship between the adoption of the RAFT process and outcome measures of resident well-being. However, the assumptions related to adult learning and relationship-centered communication that underpin the redesign of our assessment suggest that learners’ experiences of residency would be relatively positive as a result. The RAFT takes more time in the residency schedule than the previous assessment meetings, and the individualized attention of the RAFT process may in and of itself impact residents’ sense of well-being in the program. However, theory would suggest that the collaborative and dialogic framework of the RAFT does more to counter the effects of the “hidden curriculum” than one could expect by merely increasing the time spent in advising and assessment.

Because it constitutes a cultural shift related to values and practices of assessment in medical education, adoption of a RAFT-type process in other residencies would initially involve an investment in faculty development to generate a shared understanding of the goals, expectations, and changes in process. Such a shift could require several faculty educational sessions over several months depending on existing residency culture and practices. For implementation, a program of similar size would need to accommodate 14 half days for RAFT sessions in the yearly schedules of up to five RAFT members.

This pilot is limited by a small population and voluntary sampling procedures that resulted in return rates from 36% to 100% (average 76.67%). It is possible that the residents who elected to complete and submit their measures felt more secure that their responses would be treated confidentially, were more responsive to requests, more organized, or simply more willing to provide feedback than those who did not respond. Despite these possible biases, further research is warranted. Subjective impressions of those involved suggest that the RAFT encourages learners to engage their education as adults by requiring them to voice the story of their educational goals, efforts, achievements, and gaps. Data related to lifelong learning, resident empowerment, and family medicine identity are being collected on all residents. It is hypothesized that in time these measures will show a positive trend from PGY-1 to PGY-3, and will be explicated through qualitative data analyses that have been initiated.

**Conclusions**

Although it cannot be claimed that RAFT is solely responsible for the residency’s capacity to maintain resident well-being as suggested by this pilot, it is an essential element of the culture change efforts that constitute the P4 redesign in this residency program.
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