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April 30, 2019 - present), and 24434 hits and 89 countries have registered to the Wordpress page that hosted the previous excel version (Sept 2017 - present). A limitation to the number of link hits is that an indeterminate degree of internet traffic is composed of bots.

Discussion: RadOnc Tables has become a cross platform service that provides fast access to clinical trial summaries and critiques to a wide user base in a number of countries.

Significance: The tables will continue to expand, adding key studies as they are released, and integrating feedback and contributions from users to aid in radiation oncology reference for decision-making, patient counseling, and education.

Keywords: RadOnc Tables, App, online

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Increasing Brachytherapy Mentorship and Representation Through #NextGenBrachy

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Purpose: Despite the critical role of brachytherapy in cancer treatment, recent trends show a decline in utilization. Additionally, women providers have been shown to be underrepresented. A resident survey identified high interest in on-the-job training. To address these challenges, a national mentorship program was developed with the aim of improving representation and on-the-job mentorship, with the long-term goal of increasing brachytherapy utilization.

Approach/Methods: #NextGenBrachy, a national brachytherapy mentorship program, was prospectively developed. Goals, mentee and mentor expectations, and format were determined through in-person and virtual discussions over nine months. Prospective mentees were invited to apply online. Other than membership in the American Brachytherapy Society (ABS), there were no costs or compensation for participating. Applications were evaluated based on active need, focusing on those practicing, and/or without mentors, and with a goal of increasing representation of women and those underrepresented in medicine (UIM). To improve the program, an anonymous REDCap survey was sent to mentees. A Linkert-type 5-point scale was used to measure initial brachytherapy comfort, confidence, and knowledge. Descriptive statistical analysis was conducted, with post-program surveys planned.

Results/Outcomes: Due to the number of qualified applicants, capacity was increased from a planned cohort of 10 mentees, to 17, each paired with 1-2 mentors. The initial welcome event was virtual due to COVID-19. Mentees were 24% UIM, 82% female, with varying amounts of years in practice. 100% reported currently practicing; 47% without current brachytherapy mentors. Survey response rate was 76%. 23% and 31% felt very knowledgeable regarding requirements for starting a brachytherapy practice, and the potential treatment issues that could arise during delivery of brachytherapy, respectively. 76% reported feeling minimally connected to the brachytherapy community.

Discussion: A national brachytherapy mentorship program was successfully developed and piloted. Mentees represented a range of years in practice, interests, and were majority women. Gaps identified in the survey can serve to inform future directions. Additional work is needed to evaluate the impact of the program on mentee practice. Benefits include a low cost, national reach, and ability to adapt to COVID-19 with virtual meetings.

Significance: Mentorship for early career brachytherapists from all backgrounds is critical for providing standard of care brachytherapy treatment to all patients. #NextGenBrachy provides opportunities to improve brachytherapy practice, career growth, and networking, through individualized

mentorship. Future work should focus on program growth to reach more mentees, serving as a catalyst to advance workforce diversity and improve brachytherapy utilization.

Keywords: Brachytherapy, Mentorship, Workforce Diversity

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Impact of the COVID-19 Pandemic on Postgraduate Training in Radiation Oncology

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Purpose: To report the degree to which post-graduate trainees in radiation oncology perceive their education has been impacted by COVID-19.

Methods: A cross-sectional online survey was administered in June 2020 to trainee members of Canadian Association of Radiation Oncology (CARO). The 82-item survey was adapted from a similar survey administered during SARS and included the Stanford Acute Stress Reaction and Ways of Coping Questionnaires. The survey was developed using best practices including expert review and cognitive pre-testing. Frequency statistics are reported.

Results: Thirty-four trainees (10 fellows, 24 residents) responded. Nearly half of participants indicated that the overall impact of COVID-19 on training was negative/very negative (n=15; 46%) or neutral (n=15; 46%) with a small number indicating a positive/very positive (n=3; 9%). Majority of trainees agreed/strongly agreed with the following statements: "I had difficulty concentrating on tasks because of concerns about COVID-19" (n=17; 52%), "I had fears about contracting COVID-19" (n=17; 52%), "I had fears of family/loved ones contracting COVID-19" (n= 29; 88%), "I felt socially isolated from friends and family because of COVID-19" (n=23; 70%), "I felt safe from COVID-19 in the hospital during my clinical duties" (n=15; 46%), and "I was concerned that my personal safety was at risk if/when I was redeployed from my planned clinical duties" (n=20; 61%). The changes that had a negative/very negative impact on learning included "the impact of limited patient contact" (n=19; 58%), "the impact of virtual patient contact" (n= 11; 33%), and "limitations to travel and networking" (n=31; 91%). Most reported reduced teaching from staff (n=22; 66%). Two-thirds of trainees (n=22, 67%) reported severe (>50%) reduction in ambulatory clinical activities, 16 (49%) reported a moderate (<50%) reduction in new patient consultations, while virtual follow-ups (n=25; 76%) and in-patient clinical care activities (n=12; 36%) increased. Nearly half of respondents reported no impact on contouring (n=16; 49%), on-treatment management (n=17; 52%) and tumor boards (n=14; 42%) with the majority of other respondents reporting a decrease in these activities. Electives were cancelled in province (n=10/20; 50%), out-of-province (n=16/20; 80%) and internationally (n=15/18; 83%).

Conclusions: Significant changes to radiation oncology training were wrought by the COVID-19 pandemic and roughly half of trainees perceive that these changes had a negative impact on their training. Safety concerns

for self and family were significant and strategies to mitigate these concerns should be a priority.

Significance: We report specific areas of impact on training due to COVID-19 which might be addressed by adaptations in program design and delivery. We also identify the significant concerns of safety, for self and family, which must be addressed.

Keywords: COVID-19 curriculum learning

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COVID-Era Medical Student Education: Creation and Implementation of an Informal Virtual Elective in Radiation Oncology

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Purpose: Most medical student (MS) away electives were cancelled during 2020 due to COVID-19. This hindered MS's ability to explore sub-specialties such as radiation oncology (RO) and evaluate potential residency programs. Credit-granting virtual electives¹ were not available at our institution. To address this deficiency, we created an informal virtual elective (IVE) to replace the educational and career development aspects of an onsite elective.

Methods: We identified the following key components: clinical education, research exploration, mentorship, and networking.² We designed activities to recreate these opportunities virtually. Students interested in our onsite elective were invited. As credit was not possible, all components were optional.

Results: We designed a weekly lecture series led by RO faculty. Topics included disease site-based educational lectures, research presentations, and research methods instruction. We paired students with resident and faculty mentors (based on clinical and/or research interests) for guidance through the upcoming interview season. IVE students were invited to four resident didactic sessions; these were also recorded for independent viewing. MSs were offered the opportunity to give a 15-minute presentation to our department. Additionally, MSs were invited to informal informational sessions with the residents (3), general faculty (1), educational program leadership (1), and division leadership (1). We invited 27 students to participate in the IVE, held from July to October 2020. A median of 11 students (range 7-18) attended the weekly lectures and informational sessions. Themes from post-program qualitative feedback included appreciation for the educational opportunities and introduction to our RO program and faculty. Suggestions for improvement included offering formal credit and scheduling activities outside of clinic hours.

Discussion/Significance: IVEs can be successfully implemented to provide exposure to a sub-specialty and institution. Students participated, despite conflicting responsibilities and lack of credit. This IVE format could widen exposure to subspecialties such as RO, even when onsite electives return.

Keywords: Virtual education, medical student, radiation oncology

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Development and Implementation of a Solid Tumor Oncologic Emergency Lecture for Internal Medicine and Emergency Medicine Residency Programs

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Purpose: Residents outside of radiation oncology have knowledge gaps with regards to general awareness of radiotherapy and its role in the management of oncologic emergencies.¹ We therefore developed and piloted a case-based solid tumor oncologic emergency lecture tailored to internal medicine (IM) and emergency medicine (EM) residents.

Approach/Methods: An interactive in-person lecture with small-group breakout sessions was planned for IM/EM residency programs at a single institution. Due to the COVID-19 pandemic, the lecture was transitioned to a virtual format. The material was adapted from Seminar 3 of the Radiation Oncology Education Collaborative Study Group Medical Student Introduction to Radiation Oncology curriculum,² with a greater focus on the initial management algorithm and the implementation of a case-based format. The EM session was evaluated with a pre- and post-survey to assess learner reaction and knowledge.

Results/Outcomes: In the 2020-21 academic year, 64 residents (N=30 IM, N=34 EM) attended one of three virtual lectures. 19/34 (56%) EM residents responded to all three pre-lecture poll questions and 8/34 (24%) completed the post-test. On the pre-lecture poll, 57% (12/21) reported never having had a radiation oncology lecture, 74% (14/19) were "not at all" or "slightly" likely to consult radiation oncology for an oncologic emergency, and 71% (15/21) were "not at all" or "slightly" confident regarding the initial algorithm for oncologic emergencies. On the post-test, 25% (2/8) of respondents were "not at all" or "slightly" likely to consult radiation oncology (both had not attended the lecture) and 37.5% (3/8) of respondents were "not at all" or "slightly" confident regarding the initial algorithm (2/3 had not attended the lecture). Regarding the post-survey knowledge-domain questions, the median score of the six respondents who attended the lecture was statistically higher than that of the two respondents who had not (89% vs 44%, Wilcoxon rank sum test p=0.018).

Discussion: Within the limitations of a small sample size, non-randomized design, and low post-test response rate (which is expected to increase with longer follow-up), this pilot project suggests that a single virtual lecture by a radiation oncologist may increase IM/EM resident awareness of radiation oncology's role in solid tumor oncologic emergencies and confidence regarding the initial management algorithm. Further study is needed.

Significance: A single lecture on solid tumor oncologic emergencies by a radiation oncologist delivered to IM/EM residents may increase their confidence in patient management and their likelihood to consult radiation oncology in the emergency setting.

Keywords: interdisciplinary education, survey study, oncologic emergency

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