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sites. Finally, additional administrative work in the RO-APM is expected to cost approximately 0.8% of the total reimbursement rate.

Conclusion: In our analysis using extracted clinical patterns from two separate clinics, lower fractionation patterns can lead to a higher return on investment in the RO-APM compared to the FFS-M, demonstrating viability of the proposed RO-APM.

Author Disclosure: A. Price: Travel Expenses; Sun Nuclear, ViewRay. J. Kavanaugh: Speaker's Bureau; Varian Medical Systems. N. Knutson: None. G.D. Hugo: Research Grant; National Institutes of Health, Varian Medical Systems, ViewRay, Inc., Siemens, American Heart Association. Consultant; Varian Medical Systems. Partnership; Cardiologica, LLC.; American Association of Physicists in Medicine, Practical Radiation Oncology, Physics In Medicine and Biology. C.R. Spencer: None.

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Telemedicine Use and Satisfaction Amongst Radiation Oncologists During the COVID-19 Pandemic: Evaluation of Current Trends and Future Opportunities

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Purpose/Objective(s): During the COVID-19 pandemic telemedicine became an attractive alternative to in person appointments. The role of telemedicine in patients who undergo frequent on-site treatment, such as radiation therapy, is unclear. The purpose of this study was to examine telemedicine use, physician satisfaction and barriers to continued use in radiation oncology.

Materials/Methods: An anonymous, electronic survey was distributed to radiation oncologists internationally. Participants described demographic and practice characteristics and a 5-point Likert scale assessed provider satisfaction, ease of use and overall utility of telemedicine. Analyses include descriptive statistics and subgroup comparisons using Chi-square and Fisher's exact test.

Results: 232/5343 (4.3%) completed the survey, 63.8% of whom were male, 52.6% age 50 or younger and 78.0% from the United States (U.S.). Only 14.2% used Telemedicine previously, which increased to 93.1% during COVID-19. Amongst all telemedicine users, usage rates were 77.9% for initial consultations, 97.2% for follow-up visits, and 35.9% for on-treatment visits. 69.8% report that < 25% of patients requiring treatment experienced delays due to COVID-19. Most conducted appointments from the workplace, with 40.1% also doing so from home. Satisfaction was high at 73.8%, perceived usefulness was 76.9% and 81.5% hope to continue using telemedicine after the pandemic. However, 82.4% had concerns with the inability to examine patients. Although 82.1% believed that telemedicine would improve patient access to health care services overall, 63.0% were concerned with patient ability to access required technology. 49.5% had concerns regarding continued billing/reimbursement; less commonly at government centers (18.8%) compared to academic/satellite facilities (52.7%) and free-standing centers/community hospitals (50.7%), $P=0.039$ for both comparisons. These concerns were also significantly higher amongst US physicians (53.2% vs 34.9%, $P=0.048$).

Conclusion: Widespread adoption of telemedicine by radiation oncologists occurred during COVID-19 with high rates of satisfaction and interest in continued use. Sustained reimbursement for telemedicine services is a significant concern, particularly in the US and outside of government facilities.

Abstract 2725 – Table 1: Demographic statistics of survey respondents

| Gender n (%) | Age n (%) | Country n (%) | Subspecialization n (%) | Practice Setting n (%) |
|-------------------|------------------|---------------------------|-----------------------------|--------------------------------------|
| Male 148 (63.8%) | < 41 55 (23.7%) | USA 182 (78.4%) | Breast 46 (19.8%) | Academic Center 100 (43.1%) |
| Female 84 (36.2%) | 41-50 67 (28.9%) | Outside of USA 50 (21.6%) | CNS 36 (15.5%) | Academic Center Affiliate 42 (18.1%) |
| | 51-60 66 (28.4%) | | Cutaneous 14 (6.0%) | Community Hospital 49 (21.1%) |
| | 61-70 39 (16.8%) | | Gastrointestinal 25 (10.8%) | Free Standing Center 24 (10.3%) |
| | 70+ 5 (2.2%) | | Genitourinary 47 (20.3%) | Government Center 17 (7.3%) |
| | | | Gynecologic 26 (11.2%) | |

Author Disclosure: A. Deshane: None. N. Damico: None. M.Z. Kharouta: None. A. Wu: None. G. Wang: None. A.M. Kumar: Stock; AbbVie. S. Choi: None. M. Machtay: Research Grant; AbbVie, Elekta Inc., AstraZeneca. Consultant; AbbVie, AstraZeneca. Advisory Board; AstraZeneca. Travel Expenses; Elekta Inc., Varian Inc., Mevion Inc., ViewRay Inc.; RTOG Foundation, NRG Oncology Group. A.D. Bhatt: Stock; Rite Aid, Marker therapeutics, Navidea biopharmaceuticals, Surgery partners, Inovio pharmaceuticals, Lineage cell therapeutics, Moderna Inc, Novavax Inc, Oncocyte corporation, Sorrento therapeutics, Unity biotechnology, Vaxart Inc.

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Delivering Cancer Care During a Pandemic: Patient and Healthcare Staff Experience in a High-Volume Radiation Oncology Department

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Purpose/Objective(s): The COVID-19 pandemic has shifted practices in oncology to prioritize patient and healthcare staff safety while maintaining necessary treatment delivery. We obtained feedback from both patients and healthcare staff on pandemic-based practices in our radiotherapy department to adapt policies and procedures to improve safety and quality of care.

Materials/Methods: We developed a piloted questionnaire which quantitatively and qualitatively assessed patients' pandemic-related concerns and satisfaction with specific elements of their care. Adult patients treated at the start of the pandemic with an initial consultation via telehealth and received at least 5 outpatient fractions of radiotherapy were invited to complete the survey by telephone or online. We simultaneously provided an online survey to our healthcare staff including radiation technologists, oncologists, dosimetrists, physicists and allied health professionals regarding workplace conditions and perceived safety. Relative frequencies of categorical and ordinal responses were calculated, and Mann-Whitney-U tests and t-tests were used to compare response rates between subgroups.

Results: A total of 53 patients (48% of eligible individuals) and 87 staff (44% technologists, 21% radiation oncologists, 36% other) responded to the surveys. Most patients responded positively to telehealth and pandemic department procedures, and all (100%) reported being satisfied with their treatment experience. Constructive criticism voiced in a minority of patients (13%) centered around hearing difficulties, appointment scheduling confusion, and a desire for access to more support services. In contrast, satisfaction with working conditions significantly decreased from 69% to 24% among staff, especially among technologists and oncologists. Multiple staff identified sub-optimal shift-scheduling, interprofessional communication gaps, and uneven assignment of tasks as the primary contributors to decreased morale. Of all the professionals surveyed, technologists were the most negatively affected, reporting increased workload, decreased efficiency, and dissatisfaction with work scheduling.

Conclusion: Patients have responded positively to new pandemic-related policies in our radiotherapy department and report overall satisfaction with their care. While patient satisfaction is high, the pandemic has resulted in decreased morale and the perception of increased workload among healthcare workers. Results from this study have been used to identify barriers to workplace satisfaction and have led to implementation of changes. This study highlights the importance of seeking feedback from both patients and healthcare workers to understand the complexities at play in preserving the quality of patient care and the work environment as we continue to work in the current reality.

Author Disclosure: V. Di Lalla: None. H. Patrick: None. N. Siriani-Ayoub: None. J. Kildea: None. T. Hijal: None. J. Alfieri: None.

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Radiation Oncology Provider Telehealth Satisfaction: Survey Results From a Single NCI-Designated Institution

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Purpose/Objective(s): Telehealth (TH) for radiation oncology services has emerged as a new modality for care delivery and will likely persist beyond the COVID pandemic. Data regarding radiation oncology provider satisfaction of TH are limited and essential to the sustainable adoption of this tool.

Materials/Methods: An anonymous electronic survey assessing TH experience was distributed in 11/2020 to all clinical radiation oncology physicians and APPs at a single large NCI-designated institution, including affiliate clinics. Those who utilized TH (phone or video) were invited to participate. The provider survey was designed using the technology-acceptance model (TAM), a validated method to predict use and acceptance of technology tools. Survey items included 4 assessing provider role, 1 regarding TH utilization, 26 assessing TH experience on a 5-point Likert scale, and 1 free response assessing current barriers to TH. Percent satisfaction is reported as the percentage of top 2 positive or affirmative responses on the Likert scale as a proportion of all responses.

Results: 19 of 34 radiation oncology providers (56%) completed the survey, including 15 attending physicians and 4 APPs. Providers specialized in central nervous system (n=3), head and neck (n=2), gastrointestinal (n=1), breast (n=2), genitourinary (n=4), gynecological (n=2), sarcoma (n=1), and general oncology (n=4). Providers reported having 1-10 (n=5), 11-15 (n=7), or > 20 years (n=7) in practice. Providers utilized TH for on-treatment visits (53%), follow-ups (86%), and consults (79%). 56% of providers enjoyed experimenting with new technology and 61% felt that technological advances improved care for patients. Regarding aspects of the TH clinical encounter: providers had high satisfaction with ability to document the visit (89%), obtaining patient history (83%), and ease of discussing radiation treatment decisions (71%). There was lower satisfaction with ability to create rapport (33%), ease of obtaining consent for radiation (33%), and ease of evaluating physical exam findings (19%). Regarding workflow: 39% felt that TH was compatible with existing oncology clinical workflow, 39% felt TH gave them greater control over work, 33% providers felt that TH improved their job efficiency, and 28% felt TH made them more productive. Regarding ease of TH use: 44% felt that interacting with TH services was frustrating and 39% felt that TH services did not require much training. 24% felt the TH adequately replaced face to face visits. Providers identified the following barriers to TH implementation: lack of MA/RN/APP support, interruptions to TH visits by treatment/simulation clinical duties, lack of dedicated TH template, and burden of navigating the electronic medical record.

Conclusion: Radiation oncology providers at our institution expressed mixed satisfaction to incorporating TH into their practice. Current strategies to address barriers, including implementation of a telehealth care coordinator, are underway.

Author Disclosure: D. Natesan: None. B.F. Koontz: Employee; Duke University Medical Center. Research Grant; Janssen Services LLC, Blue

Earth Diagnostics, Merck. Advisory Board; Blue Earth Diagnostics, Myovant. Royalty; Demos Publishing; ASTRO, AAPM, NCI GU Steering Committee, ASCO GU Symposium Steering Committee. R.C. Blitzblau: Research Grant; Gateway For Cancer Research.

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Patient Perceptions and Expectations of Radiation Therapy

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Purpose/Objective(s): While patients obtain information about radiation therapy (RT) from their physician, they may receive information from multiple other sources. There is currently limited data regarding patient expectations related to RT. This study sought to identify expectations regarding RT and to determine the potential value of assessing these expectations prior to initial consultation.

Materials/Methods: Patients with no prior history of RT were invited to complete an investigator-developed anonymous electronic survey. Patients were queried about their perceptions of RT and potential fears/concerns. The content validity index for survey items were scored with adequate construct validity. Survey items were scored descriptively through summary statistics. Relationships between respondent variables and responses to survey questions were analyzed by univariate logistic regression.

Results: From September 2020 through January 2021, 117 patients completed the survey. The most common cancer diagnoses were hematologic malignancies (20%), breast cancer (15%), and lung cancer (12%). 35% percent of patients reported having read or heard stories about "bad side effects" from RT. 22% percent of patients identified friends/family as their main source of information about RT, while 20% reported the internet, 14% physicians, and 1% scientific articles. 41% percent of patients reported a complete lack of knowledge about RT. Common misconceptions included beliefs that they could only receive RT once (46%), they will give off radiation (38%), and radiation will be excreted in their urine/stool (33%). The most commonly reported fears/concerns included RT-induced pain (71%), risk of infection (71%), and memory loss (61%). Related to quality of life (QOL), patients were most concerned about RT-induced fatigue and inability to conduct routine daily activities (62%). Females were more likely to be concerned about RT-induced pain (OR = 2.58, $P=0.03$), "skin burn" (OR = 2.31, $P=0.03$), and infections (OR = 2.58, $P=0.03$). Age > 81 yrs and being unmarried are associated with increased concern for daily transportation (OR = 25, $P=0.03$ and OR = 2.86, $P=0.02$, respectively). College educated or beyond individuals were less likely to be concerned about excreting radiation in urine/stool (OR = 0.12, $P < 0.01$). Individuals who identified as Hispanic were more concerned about giving off radiation (OR = 4.6, $P < 0.01$), secondary malignancies (OR = 4.56, $P < 0.01$), and memory loss (OR = 5.13, $P < 0.01$) compared to Caucasians.

Conclusion: Prior to initial consultation, a majority of patients acquire information about RT from non-physician sources, which results in misconceptions. Fears/concerns related to RT toxicities and impact on QOL were common. Routine pre-consultation assessment on patients' expectations regarding RT may help physicians address misconceptions and fears/concerns early, as well as potentially identify needs.

Author Disclosure: J. Novak: None. C.J. Ladbury: None. J.V. Brower: None. B. Evans: None. Y. Chen: None. J.Y. Wong: Research Grant; Accuray Inc. Honoraria; Accuray Inc.; City of Hope Medical Group Medical Foundation. T.M. Williams: National Cancer Institute, National Institutes of Health. I am the Gastrointestinal Cancers liaison; NRG Oncology. V. Sun: None. M. Loscalzo: None. A. Amini: Honoraria; AstraZeneca, RefleXion. Speaker's Bureau; Takeda.