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Purpose/Objective(s): The process of radiation treatment planning is a critical component in the overall quality of radiation treatment. Inherent to patient safety is a stream-lined treatment planning workflow that allows all stake-holders an adequate amount of time to complete treatment planning tasks. At our multi-site academic radiation oncology program, overdue treatment planning tasks resulted in rushed dosimetry, physics, and therapist plan checks. The purpose of this study was to evaluate the existing treatment planning workflows, develop adequate timelines for each team member based on planning complexity, create hard stops at each point of hand off within treatment planning, and develop a method for tracking specific timeliness to improve quality and safety.

Materials/Methods: Data was collected on the percentage of overdue contours and plan approvals, which were tasks assigned to radiation oncologists within the facility's patient information system. Previous treatment planning workflows were 5 days or less. The time allotment for each physician, dosimetry, physics, and therapist group to complete their assigned tasks was changed based on creating an optimized workflow with designated workflows for 5-, 7- and 10-day time periods from simulation to treatment start. Workflows were created in the patient information system to reflect these changes. A "hard stop" was implemented such that a patient's start date was rescheduled if a task was not completed within 2 hours of its due date. The data was then collected on total number of overdue contours and plan approvals after this new workflow was introduced.

Results: From 2018-2019 with the previous 5-day workflows, data was collected on a total of 1051 patients. The average number of overdue treatment planning tasks per month was 39.4% of physician contours and 41.3% of physician plan approvals. An optimized workflow with 5, 7 and 10 days was introduced in November 2020. For the first 3 months of this new workflow, data was captured on 512 patients. The data reflected improvement of timeliness with only 21% of contours and plan approvals overdue during this time.

Conclusion: An optimized workflow utilizing the patient information system and delaying treatment starts, if tasks are overdue, has significantly reduced the team burden of overdue tasks within a multi-site academic radiation oncology center. This workflow could be easily applied to other centers and is a cost-effective approach to improving patient safety and workflow efficiency.

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Survey of Healthcare Providers Utilization and Perception of Telehealth On-Treatment Visits During COVID-19 Pandemic

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Materials/Methods: As part of this IRB-approved single institution study, a survey was developed to capture the percentage of OTVs that were conducted via telehealth and provider perceptions on management effectiveness. Participants included attending and resident physicians and advanced practice providers (APPs). Likert scale questions assessed the provider perceptions in the following areas: ability to fully evaluate patient, manage symptoms, minimize acute care, and prevent COVID19 exposure. The survey was sent at 3 timepoints: April 15th, May 22nd, and December 18, 2020 (1, 2, and 7 months since declaration of COVID-19 as a national emergency). Respondents were not linked across the 3 surveys. Response frequencies and percentages are presented for each survey and global trends in responses are described.

Results: Surveys were sent to 34 radiation oncology providers. 22 (65%), 20 (59%), and 21 (62%) participants responded to the April, May, and December survey, respectively. 13, 12, 13 attending physicians; 8, 6, and 3 resident physicians; and 2, 2, and 5 APPs responded to the 3 surveys, respectively. In the April survey 59% of respondents indicated that 75-100% of patients were evaluated weekly by telehealth. This percentage dropped to 8% in May and 0% in December. Most respondents reported agreement with the ability to fully evaluate patients (70% vs 55%; 55%), manage symptoms (80% vs 59%; 60%) and minimize acute care (70% vs 64%; 60%) with in-person OTVs (% December vs April; May). Agreement of an appropriate balance of patient care and COVID-19 risk prevention dropped from 86% in April to 75% in May and 68% in December. Respondents reported a preference for patient-specific management strategies (telehealth vs in-person visits) at all time points (95% in April and May; 90% in December).

Conclusion: Based on our results, telehealth was widely used during the beginning of the pandemic, but shifted to essentially zero by December 2020. The increase of in person visits by December appears to correlate with agreement to fully evaluate a patient, manage symptoms, and minimize acute care. However, as in person OTVs increased, there was more concern for COVID-19 prevention by providers. By implementing systems into our electronic medical record that can accurately predict patients that may imminently require acute intervention, we may strike a balance of providing the best care for our cancer patients and minimize exposure risk.

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Attitudes and Beliefs Towards Medical Checklists in Radiation Oncology

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Purpose/Objective(s): Pre-procedural medical checklists have been robustly shown in the surgical literature to be associated with numerous clinical improvements, including reductions in postoperative complications and death. The use of pre-procedure checklists within radiation oncology is poorly understood. We sought to assess the use of checklists