Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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and the majority of patients were treated with curative intent (n = 872, 58%). A total of 369 modifications on 269 (17.9%) simulation directives were recorded and parsed into 17 categories. The most common modifications resulted from omission of pregnancy testing orders (n = 92, 24.9%), immobilization device changes (n = 88, 23.8%), changes in the radiotherapy care path (n = 56, 15.1%), and arm positioning (n = 43, 11.6%). Modifications were less likely to occur if the directives were entered within 1 week of simulation (15.6% vs. 21.7%, P = 0.0028). Significant differences were also observed across tumor sites (P = 0.0091) with the highest modification rates observed for stomach, esophagus, and pelvis sites (40%, 30%, and 26.9% modified, respectively). A significant change in department workflow and clinic visits occurred in March 2020 as a result of COVID-19, with transition to virtual platforms. An increased rate of simulation directive modifications was also observed for patients simulated after these changes were implemented (April – December 2020 19.3% vs. Jan – March 2020 13.5%, P = 0.013). No differences in modification rates were observed by modality, i.e., photon or proton therapy (P = 0.20). Overall, with this prospective peer review process, only 14 patients (0.9%) needed re-simulation during the entire study period.

Conclusion: Prospective peer review prior to simulation in radiotherapy identifies actionable change in approximately 18% of procedures, and results in an extremely low, < 1% rate of re-simulation. SSRRs ordered > 1 week before from simulation and gastrointestinal and pelvic sites were at higher risk of requiring modifications during peer review. As departmental processes transition to virtual meeting platforms, more thorough attention is needed to identify patients at higher risk of simulation modifications.

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Optimizing Radiation Oncology Consult Visits Using Patient Flow Analysis (PFA)

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Purpose/Objective(s): An efficient workflow in the oncology ambulatory care setting can improve patient experience and decrease provider burnout. The purpose of this study was to identify inefficiencies, develop an optimized workflow, and measure the resulting post-implementation impact in a high-volume radiation oncology department.

Materials/Methods: We conducted an IRB-approved study in Gastrointestinal Radiation Oncology (GIRO) at a large academic cancer center. Patient Flow Analysis (PFA) was used to track 556 consults from check-in to check-out. Process maps were created and an improved clinical workflow was designed based on the findings. The specific roles and responsibilities of each clinical team member were defined and clearly communicated. Timepoints were collected using the electronic medical record (EMC) status board, which was updated by clinical staff. Pre- vs. post-implementation metrics, including total clinic cycle times, waiting times, rooming times, and time spent with each clinical team member were compared.

Results: Initial PFA led to recommendations targeting four principal inefficiencies: (1) protracted patient rooming, (2) delays due to inefficient communication, (3) duplicated tasks, and (4) ambiguous clinical roles. There were 485 pre- and 71 post-implementation consults available for analysis. The optimized workflow resulted in reduction in overall median cycle times by 21% (91 vs. 72 min; P < 0.001). Consults > 2 hours in duration occurred in 22% of pre-implementation vs. 0% of post-implementation visits (P < 0.001). Similarly, the proportion of visits requiring < 1 hour was 16% pre- vs. 34% post-implementation (P < 0.001). Patients spent significantly less time in the waiting room (14 vs. 5 min; P < 0.001) despite no significant differences in the proportion of patients arriving early, on-time, or late. Overall, wait times at each step in the visit process were reduced by 55-70% (Table 1).

Conclusion: PFA can be used to identify clinical inefficiencies and optimize workflows in radiation oncology. Utilizing this patient-centric model reduced waiting times and total consult duration, which may improve patient satisfaction, decrease staff burnout, and provide a framework for financial savings through innovative staffing models. Efforts are currently underway to expand this process across all sections within our department.

Abstract 181 – Table 1: Pre- and post-implementation metrics reported in minutes (median and interquartile range)

| Metric                        | Pre IQR | Post IQR | Delta | P-value* |
|-------------------------------|---------|----------|-------|----------|
| Waiting room                  | 8-26    | 5        | 3-14  | <0.001   |
| Arrived > 15 min early        | 11-41   | 10       | 4-20  | <0.001   |
| Arrived within 15 min         | 7-19    | 4        | 3-12  | <0.001   |
| Arrived > 15 min late         | 5-15    | 2        | 1-8   | <0.001   |
| Rooming (RN/MA)               | 9-18    | 12       | 9-14  | 0.066    |
| Waiting for APP/Resident      | 5-20    | 3        | 3-8   | <0.55    |
| With APP/Resident             | 12-32   | 19       | 12-26 | 0.490    |
| Waiting for MD                | 11-33   | 6        | 3-15  | <0.001   |
| With MD                       | 25-48   | 23       | 15-31 | <0.001   |
| In Room to with MD            | 39-72   | 47       | 33-60 | 0.003    |
| Total cycle time              | 71-114  | 72       | 52-82 | <0.001   |

* Mann-Whitney U test

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Incident Learning During the Early COVID-19 Pandemic

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Purpose/Objective(s): To assess the impact of the early COVID-19 pandemic on incident learning through evaluation of events reported to RO-ILS: Radiation Oncology Incident Learning System®. The Radiation
The Utility of Video-Based Pre-Treatment Peer Review in the COVID Era

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Purpose/Objective(s): Pre-treatment peer review has been suggested to be useful within Radiation Oncology. With the COVID-19 pandemic, our previously-applied face-to-face format was replaced with a video-based format. We herein quantify the usefulness of daily video-based peer review within a busy radiation oncology practice.