Avoid, Delay, Shorten. Results of Radiation Oncology’s COVID19 Patient Exposure Risk Mitigation Guidelines
Alex Kubli MS, Lilya Babinski BS, Angelia Landers PhD, Christian Fernandez MD, Amy Harrison PhD
Department of Radiation Oncology, Thomas Jefferson University

Introduction

• Therapeutic radiation is given over multiple treatments (fractions), requiring patients to come into the department daily.
• Cancer patients are at increased risk of infection and death from COVID19 (Liang W. Lancet Oncol 2020).
• We implemented evidence-based COVID19 guidelines on 3/16/20 to minimize patient exposure risks by avoiding, delaying, and shortening patient treatments when possible.
• We analyzed the effectiveness of our COVID guidelines by comparing the number of new patient starts and number of treatments before and after implementation.

Methods

• Radiation prescriptions at Bodine Cancer Center since implementation of COVID19 guidelines were reviewed and compared to volume 4 weeks prior.
• Descriptive analysis of number of new prescriptions, number of fractions (treatments) per patient, and overall number of fractions was performed.
• Data was binned into each week and separated into fractionation groups of ≤5, 6-15, and ≥16 fractions per prescription.

Conclusion

Our department successfully decreased patient exposure risk by reducing new prescription starts, rates of longer treatment courses, and overall number of treatment encounters in an evidence-based approach.

Results

Fig 1. New prescriptions per week by prescribed number of treatments (fractionation, fx). New starts decreased by ~40%.

Fig 2. Linear regressions of each fractionation group. Longer treatments course have decreased. Shorter treatment courses have increased.

Fig 3. Total number of fractions overall, by prescription, and by fractionation group. Overall number of treatments have decreased.