



**AMERICAN SOCIETY
FOR RADIATION ONCOLOGY**
251 18th St. South, 8th Floor
Arlington, VA 22202

Main: 703.502.1550
Fax: 703.502.7852
www.astro.org · www.ranswers.org

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December 15, 2021

Elizabeth Fowler
Director, CMS Innovation Center
Centers for Medicare and Medicaid Services
US Department of Health and Human Services
7800 Security Boulevard
Windsor Mill, MD 21244

Dear Ms. Fowler,

On behalf of the members of the American Society for Radiation Oncology¹ (ASTRO) we are writing to provide comments in response to the recently issued *Driving Health System Transformation – A Strategy for the CMS Innovation Center’s Second Decade* publication, specifically the content associated with health equity.

During a December 8th virtual round table on the topic, Agency officials heard from several thought leaders on the following topics:

1. What approaches or interventions should the CMS Innovation Center prioritize when building models to eliminate health inequities?
2. CMS is currently exploring options for expanding collection of self-reported demographic and social needs data. What could the CMS Innovation Center do to support collection of self-reported data? What are successful approaches for such collection?
3. What are the most significant obstacles for safety net providers who want to participate in a CMS Innovation Center or another value-based, accountable care model, and how do you recommend the CMS Innovation Center help these providers overcome these obstacles?

ASTRO has also considered these and other questions as they apply to addressing health equity in the delivery of radiation oncology, specifically

¹ ASTRO members are medical professionals, who practice at hospitals and cancer treatment centers in the United States and around the globe and make up the radiation therapy treatment teams that are critical in the fight against cancer. These teams often include radiation oncologists, medical physicists, medical dosimetrists, radiation therapists, oncology nurses, nutritionists and social workers, and treat more than one million cancer patients each year. We believe this multi-disciplinary membership makes us uniquely qualified to provide input on the inherently complex issues related to Medicare payment policy and coding for radiation oncology services.

as it applies to the RO Model. Radiation oncology care frequently involves daily treatment regimens that take place over a period of several weeks. This presents a challenge for minority and rural patients who are frequently labeled “non-compliant” and effectively blamed for their inability to initiate or continue treatment². Delays or interruptions in radiation treatment can negatively impact a patient’s ability to control disease progression. Resource investment and interventions are necessary to address the barriers facing these populations to ensure that they have adequate access to treatment, otherwise disparities in care will persist.

A properly designed value-based payment initiative represents an unprecedented opportunity to address health inequities in radiation therapy. ASTRO is committed to improving quality and reducing costs as part of the RO Model, including improving outcomes for underserved populations. However, as currently designed, the RO Model does not provide sufficient resources to help minority and underserved populations overcome barriers to accessing and completing cancer treatment. In fact, as described below, the severe discount factors, waiver of the Advanced APM bonus on technical payments, and the onerous reporting requirements associated with the RO Model inhibit efforts to improve access to high quality care and potentially exacerbate health disparities.

Impact of RO Model on Healthcare Disparities

A Mayo Clinic analysis of the RO Model indicated that practices caring for socioeconomically disadvantaged populations may face significant revenue reductions, resulting in access to care issues for the communities they serve.³ According to the analysis, late-stage disease was historically reimbursed higher than the RO Model base rates. The result is a dramatic reduction in reimbursement for practices that treat patients with advanced disease, which disproportionately impacts minority and rural populations. A recent ASTRO survey indicated that more patients are presenting with advanced disease due to care delays associated with the COVID-19 pandemic.

Decades of research has demonstrated that minority and rural populations frequently present with advanced stage disease due to limited access to preventative services. African Americans (12.3%) and Hispanics (10.5%) present with clinically advanced-stage prostate cancer more frequently than whites (6.3%)⁴. Additionally, African American women are more likely than white women to receive a breast cancer diagnosis at an advanced stage of disease⁵.

² Marquez, BS, MPH, Rachel. “Implementing a Transportation Hub: A Holistic Approach to a Systemic Problem.” [ACCC-Cancer.Org](https://www.aicc-cancer.org/). Vol. 36, No. 3, 2021

³ Waddle, MD, MR, Stross, MD, WC, Vallow, MD, LA, et al. “Impact of Patient Stage and Disease Characteristics on the proposed Radiation Oncology Alternative Payment Model (RO-APM).” *Int J Radiation Oncol Biol Phys*, Vol. 106, No. 5, pp. 905-911, 2020. <https://doi.org/10.1016/j.ijrobp.2019.12.012>

⁴ Richard M. Hoffman, Frank D. Gilliland, J. William Eley, Linda C. Harlan, Robert A. Stephenson, Janet L. Stanford, Peter C. Albertson, Ann S. Hamilton, W. Curtis Hunt, Arnold L. Potosky, Racial and Ethnic Differences in Advanced-Stage Prostate Cancer: the Prostate Cancer Outcomes Study, *JNCI: Journal of the National Cancer Institute*, Volume 93, Issue 5, 7 March 2001, Pages 388–395, <https://doi.org/10.1093/jnci/93.5.388>

⁵ Baquet, Claudia R et al. “Breast cancer epidemiology in blacks and whites: disparities in incidence, mortality, survival rates and histology.” *Journal of the National Medical Association* vol. 100,5 (2008): 480-8. doi:10.1016/s0027-9684(15)31294-3

Frequently, patients with advanced stage disease receive palliative radiation therapy, which reduces pain and improves quality of life for patients with metastatic cancer. Despite this benefit, African American patients with prostate cancer are 20% less likely to receive palliative radiation therapy and, for colorectal cancer, 28% less likely to receive palliative radiation therapy when compared to white patients.⁶ The RO Model could potentially exacerbate these health inequities because the 90-day bundle only recognizes and reimburses for one disease site.⁷ There is no recognition or payment adjustment in the model that accounts for patients with advanced stage cancer that will likely present with a primary diagnosis to one part of the anatomy that also requires treatment of metastatic disease that has spread to another part of the anatomy.

In addition to limited access to preventative care resulting in advanced stage disease, minority populations also struggle with access to care once diagnosed. Preliminary analysis of Medicare data shows that minority patients are nearly one-third more likely than white patients to not even begin their radiation therapy treatments, despite having completed the treatment planning process. While it is unclear and we are exploring what prevents some minority patients from beginning radiation therapy treatment, evidence points to lack of transportation, lower socioeconomic status, lack of childcare, inability to take the necessary time off work, underinsured/uninsured, and limited social supports (housing, access to fresh food, etc.) as key barriers. By stripping resources from practices required to participate in the model, instead of capitalizing on the opportunity to address the social determinants of health leading to this gap, the RO model risks worsening health inequities.

Impact on Rural Communities

Cancer incidence and mortality rates in the US are declining, but rural-urban differences in access and outcomes persist. Rural health care providers and their patients face many challenges in the delivery of care, including limited availability of physicians, treatments, transportation barriers, and financial issues among many other difficulties. These challenges often apply acutely to radiation oncology care in rural areas, where studies have long documented health disparities between rural patients and their urban/suburban counterparts. Among the most significant challenges facing rural radiation oncology care is the ability to attract and retain radiation oncology physicians, as well as ensuring access to state of the art and efficient treatments.

While approximately 15 percent of Americans live in rural communities, less than 6 percent of radiation oncologists practice in these communities. Rural communities across the country share common healthcare risk factors, including physician shortages, poverty, and remote locations, which contribute to limited access to care. Similar to minority populations, rural populations also present with later stage disease and more complex conditions.⁸

⁶ Murphy JD, Nelson LM, Chang DT, Mell LK, Le QT. Patterns of care in palliative radiotherapy: a population-based study. *J Oncol Pract*. 2013 Sep;9(5):e220-7. doi: 10.1200/JOP.2012.000835. Epub 2013 Apr 16. PMID: 23943892.

⁷ Parsa Erfani, Jose F. Figueroa, Miranda B. Lam, Reforms to the Radiation Oncology Model: Prioritizing Health Equity, *International Journal of Radiation Oncology*Biophysics*Physics*, Volume 110, Issue 2, 2021, Pages 328-330, ISSN 0360-3016, <https://doi.org/10.1016/j.ijrobp.2021.01.029>.

(<https://www.sciencedirect.com/science/article/pii/S0360301621000894>)

⁸ Warshaw, Robin. "Health Disparities Affect Millions in Rural US Communities." *AAMCNews*. October 31, 2017. <https://www.aamc.org/news-insights/health-disparities-affect-millions-rural-us-communities>

CMS selected 1,797 rural zip codes to participate in the RO Model, representing 20 percent of Model participants. Many of these rural practices are either freestanding centers or affiliated with small community hospital centers.

A recent analysis demonstrates that there is a significant disparity between urban and rural RO Model participants capacity to deliver high value treatments, such as stereotactic and brachytherapy services.⁹ Therefore, rural practices are less likely to have technology that supports shorter, more cost-effective radiation treatment regimens for patients. Additionally, the GAO has recently issued a study on the *Transition to Alternative Payment Models by Providers in Rural, Health Professional Shortage, or Underserved Areas* that further underscores these concerns.¹⁰ The report states that providers in rural, shortage, or medically underserved areas face financial, technology, and other challenges in transitioning to APMs due to a lack of capital to finance the upfront costs of transitioning to an APM, including purchasing electronic health record technology; and challenges acquiring data analysis necessary for participation. Cuts, in lieu of investments, are likely to further disadvantage rural clinics and their patients.

Health Equity Achievement in Radiation Therapy (HEART)

ASTRO has recommended numerous reforms to the RO Model to ensure it achieves the goals of higher quality, while still reducing costs for Medicare and patients. These reforms and others should also be made to address health inequities. For instance, rather than require radiation oncology practices to collect quality measure reporting data that has a limited impact on the quality of care delivered during the episode, CMMI and practices could proactively identify at-risk patient populations and intervene with the provision of wraparound services designed to help them successfully access and complete radiation treatments.

ASTRO recommends the establishment of a Health Equity Achievement in Radiation Therapy (HEART) payment for wraparound services to address healthcare disparities. This concept is very similar to the Monthly Enhanced Oncology Services (MEOS) payment that is applied in the Oncology Care Model. HEART payments could support services, not currently billable, such as:

- Triage patient needs 24/7;
- Provide patient care navigation, including patient education and symptom management, as well as financial support;

⁹ Mantz CA, Thaker NG, Pendyala P, Hubbard A, Eichler TJ, Shah C, Orio PF 3rd, Petereit DG. Disproportionate Negative Impact of the Radiation Oncology Alternative Payment Model on Rural Providers: A Cost Identification Analysis of Medicare Claims. *JCO Oncol Pract*. 2021 Sep 16:OP2100330. doi: 10.1200/OP.21.00330. Epub ahead of print. PMID: 34529516.

¹⁰ Government Accountability Office. (2021). Information on the Transition to Alternative Payment Models by Providers in Rural, Health Professional Shortage, or Underserved Areas. (GAO Publication No. 22-104618). Washington, D.C.: U.S. Government Printing Office

- Assess and address patient’s nutrition, transportation and lodging needs, personal support system and identify resources to address barriers to accessing treatment and compliance with treatment care plan;
- Coordination of care and communication of information following evaluation and treatment with other care providers engaged in the patient’s treatment;
- Established care plan that contains 13 components of the Institute of Medicine Care Management Plan that is documented and reviewed during each patient visit; and
- Documented survivorship plan that is developed in coordination with the patient, as well as other care providers and issued upon completion of treatment.

Symptom management clinics or triage units established in oncology settings have proven to be successful at reducing costs and ensuring patients have access to resources that improve their quality of life during their treatment. These units are typically run by nurse care managers that meet with patients during regular clinic visits to assess symptoms associated with radiation therapy and provide guidance regarding self-management, as well as treatment follow up. A 2017 UNC Chapel Hill study demonstrated significant savings associated with the implementation of a symptom management program leading to reduced unnecessary emergency department visits and inpatient admissions¹¹. Programs such as this are currently not reimbursable -- and therefore difficult for smaller practices to establish -- yet have a significant impact on the patient’s quality of life and the cost of care.

Additionally, a similar initiative pursued by Cone Health, a regional multi-hospital health system in Greensboro, NC, created a transportation hub to remove barriers to treatment by identifying patients at risk for not pursuing or completing treatment through the establishment of a real-time registry managed by care navigators.¹² Treatment completion historically showed statistically significant Black-White differences (Blacks 79.8% vs. Whites 87.3%). The disparity lessened within the intervention period to 88.4% for Blacks and 89.5% for Whites. The program also was found to improve survival over time for black and white patients and reduce the racial gap in survival among lung and breast cancer patients. A HEART payment could support initiatives such as these to ensure that underserved populations achieve improved health outcomes.

Radiation oncologists typically report that transportation barriers disproportionately impact underserved populations, leading to interrupted and incomplete treatments that lower outcomes. It is possible that RO Model participants would need waivers from Medicare to provide transportation services to eligible patients, with protections against abuse similar to the safe harbor for local transportation for rural beneficiaries issued by the HHS OIG¹³.

¹¹ Chera, Bhashamjit S., Reducing Emergency Room Visits and Unplanned Admissions in Patients with Head and Neck Cancer, University of North Carolina Cancer Hospital Lineberger Comprehensive Cancer Center, Clinical Journal of Oncology Nursing – June 2017.

¹² Stern, Joseph. Tackling racial disparities in cancer care by creating new ways for institutions to operate.” Washington Post, 25 October, 2021

¹³ <https://www.federalregister.gov/documents/2020/12/02/2020-26072/medicare-and-state-health-care-programs-fraud-and-abuse-revisions-to-safe-harbors-under-the>

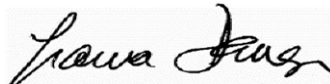
Data associated with those episodes with a HEART payment could be collected and used to determine the effectiveness of HEART interventions. By learning more about what causes these disparities and understanding what interventions are most effective and are closing gaps, the model could test measures to ensure participants are accountable for reducing disparities. Over time, measures could potentially involve treatment refusals, interruptions and completion of the RT episode of care, and duration of treatments.

As previously stated, ASTRO is committed to the establishment of an alternative payment model for radiation oncology. We continue to believe that, if crafted appropriately, the model can be a significant step toward value-based payment and health equity. We appreciate your continued collaboration. If you have any questions, please contact Anne Hubbard, ASTRO Director of Health Policy at 703-839-7394.

Sincerely,



Laura I. Thevenot
Chief Executive Officer



Laura Dawson, MD, FASTRO
Chair, Board of Directors

cc:

Christina Ritter, Acting Deputy Director CMMI and Director, CMMI Patient Care Models

Ellen Lukens, CMMI Director Policy and Programs Group

Purva Rawal, MD, CMMI Chief Strategy Officer

Lara Strawbridge, Director, CMMI Division of Ambulatory Models

Marcie O'Reilly, Health Insurance Specialist, CMMI