

Radiation Oncology Hypofractionation

Preparing for Changes
in Treatment and
Payment Models



ClinicalPath



Challenge

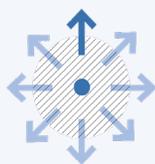
Hypofractionation has been shown to produce comparable outcomes to conventional regimens in prostate, bladder and breast cancers, among others; it also has been used in the treatment of bone metastases.ⁱ Despite this evidence, hypofractionation remains underutilized in the United States as compared to other developed nations. This **soon is expected to change**.

With the shift to risk-based models, CMS recently announced its intent to implement a mandatory radiation oncology payment model, projected to begin in 2020 and end on December 31, 2024. CMS plans to make prospective, episode-based payments that cover radiotherapy services in a 90-day episode for 17 cancer types (which make up 84% of all radiotherapy episodes). This would require cancer centers to consistently adopt hypofractionation practices across clinical sites, where appropriate, to successfully participate in this model.ⁱⁱ

Opportunity

ClinicalPath (formerly Via Oncology) pathways have been shown to be effective in:

- accelerating adoption of changing practice patterns
- standardizing care system-wide, across academic and community sites
- helping institutions realize cost savings and optimizing outcomes.



In radiation oncology, our pathways have demonstrated measurable benefits, including:

- Increased adoption of hypofractionated whole breast irradiation for patients over age 70 following breast-conserving surgery by 20-fold. This resulted in an annual savings of \$154,000 for a large integrated cancer center network.^{iii,iv}
- Increased adoption of hypofractionated whole breast irradiation for patients under age 50 from 4% to 95% within one year.^v
- Increased single-fraction utilization rates for bone metastases from 7% (in line with national rates) to 15%. Within a year, over 90% of courses were delivered with less than 10 fractions across both academic and community sites.^{vi}

How Elsevier's ClinicalPath Can Help Your Institution

As you prepare for the shift to radiation oncology alternative payment models, ClinicalPath pathways can help you at the provider, team and institution levels.



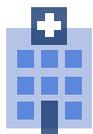
For your providers:

- ClinicalPath radiation oncology **pathways cover 94% of cancers**, providing guidance for simulation, contouring, planning and treatment delivery.
- Where clinically appropriate, hypofractionation recommendations are presented as the first on-pathway choice, accelerating **adoption of evidence** into clinical practice.
- Integration of Elsevier's pathways into your EHR and radiation oncology workflow tools **streamlines the clinical workflow** for your clinicians.



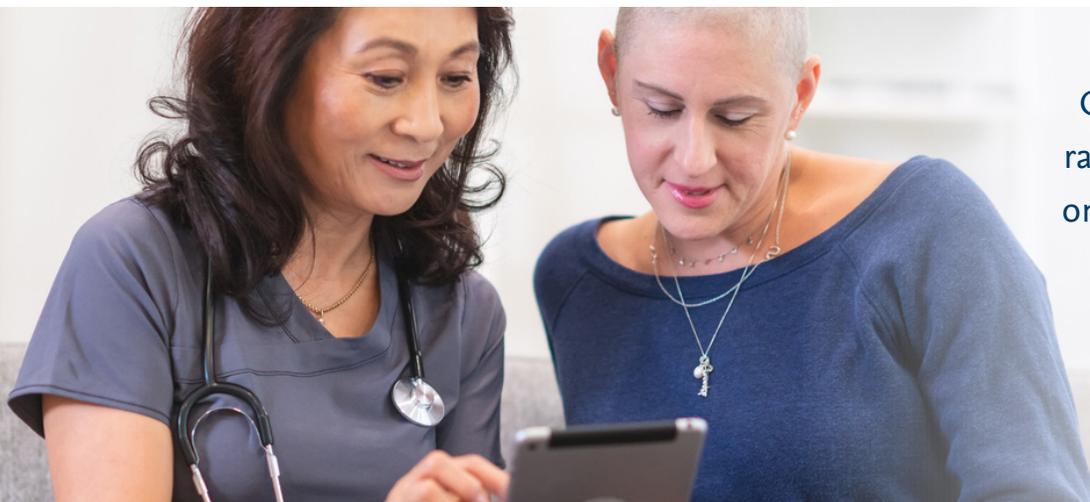
For your multi-disciplinary team:

- ClinicalPath provides **consistent guidance** for medical, surgical and radiation modalities.
- Multi-disciplinary pathways retain information entered by each team member to minimize duplicate data entry and **support multi-modal care coordination**.



For your institution:

- ClinicalPath provides detailed analytics on patient presentation, radiation method, dosage and fractions delivered and on-pathway rate, supporting your leadership team in the reporting requirements for **quality programs and alternative payment models**.
- Your leadership team can use these analytics to standardize practice variation across sites, optimize clinical review processes and **achieve cost savings**.
- ClinicalPath also provides detailed reports on accrual to clinical trials, which can be used to **optimize your research portfolio**.
- Using less fractions results in less total machine time per patient, freeing up your equipment to treat more patients.



ClinicalPath has a radiation oncology on-pathway rate of **over 90%**.

Resources

- i Cost-containment in hypofractionated radiation therapy: a literature review, *Journal of Medical Radiation Sciences*, March 13, 2018, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5985996/>
- ii Azar Announces Mandatory Oncology Payment Model Is Coming, *American Journal of Managed Care*, November 8, 2018, <https://www.ajmc.com/newsroom/azar-announces-mandatory-oncology-payment-model-is-coming>
- iii Clinical Pathways: A Catalyst for the Adoption of Hypofractionation for Early-Stage Breast Cancer, *International Journal of Radiation Oncology, Biology, Physics*, November 15, 2015, <https://www.ncbi.nlm.nih.gov/pubmed/26530754>
- iv Changing practice patterns for breast cancer radiation therapy with clinical pathways: An analysis of hypofractionation in a large, integrated cancer center network. *Practical Radiation Technology*, March-April, 2015, <https://www.ncbi.nlm.nih.gov/pubmed/25748004>
- v Lag Time Between Evidence and Guidelines: Can Clinical Pathways Bridge the Gap?, *Journal of Oncology Practice*, 2019, <https://ascopubs.org/doi/abs/10.1200/JOP.18.00430>
- vi Impact of dynamic changes to a bone metastases pathway in a large, integrated, National Cancer Institute-designated comprehensive cancer center network, *Practical Radiation Technology*, November-December 2015, <https://www.ncbi.nlm.nih.gov/pubmed/26432676>

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