Medical oncology pathways have arisen in the past several years as a means to standardize care, improve patient outcomes, and structure clinical/financial arrangements so that practices can more easily work with payers.

That approach is now being attempted on the radiation oncology side by D3 Radiation Oncology Solutions, an affiliate of the University of Pittsburgh Medical Center (UPMC), which has also created the Via Oncology pathways.

Dwight E. Heron, MD, chief medical officer of D3 and vice-chairman of Radiation Oncology at UPMC Department of Radiation Oncology, discussed the similarities and differences between medical and radiation oncology pathways.

"In many ways, both types of pathways aim to get to the same place," Dr Heron said. Although the National Comprehensive Cancer Network guidelines integrate radiation therapy into their pathway process, this guidance is fairly broad, Dr Heron said. And the many components of radiation care—selecting the appropriate patients, treating them with the right technology, and determining the correct number of treatments—leave loopholes for variability. As with medical oncology, radiation pathways evolved from the recognition of this wide variation in treatment patterns.

Radiation pathways aim to ensure quality and minimize toxicity, and, in the scope of the overall package, to also minimize cost. For example, some of the technologies recommended in the pathways are more expensive, Dr Heron acknowledged, but in looking at the big picture, they are beneficial in terms of side effects.

"In the prostate cancer and the GYN malignancies that we treat, the upfront cost of treatment may be slightly more (by using intensity-modulated radiation therapy vs 3D conformal therapy), but if you look at the significant reduction in toxicities (ie, reduction in diarrhea or bowel complications that require hospitalization or surgery), the additional costs may be worth it."

Looking at the big picture is important, Dr Heron emphasized. "In a patient who’s only going to live 2 months, to take an entire month to treat them palliatively is a problem, particularly when there is evidence that a shorter course of treatment is just as effective."

Two Lines in the Pathway Family
Kathleen G. Lokay, president and chief executive officer of D3 and Via Oncology, suggested that there are more similarities than differences between radiation and medical oncology pathways.

Both use disease-specific committees chaired by academic-and community-based physicians; both follow the same hierarchy of efficacy, toxicity, and cost; and with both, the goals are the same.

Unlike pharmaceutical-based pathways, however, the radiation oncology evidence base changes less frequently. Another key difference with this pathway is that it "attempts to ensure that the delivery of the dose is what the physician intended," she said.

The 2 pathways—medical and radiation oncology—are linked when used together so that referral for a patient needing care in both areas is seamless.

Finally, pathways need to rely on the evidence base to retain their integrity, said Ms Lokay, and this may result in recommendations for using a technology not possessed by the organization using the pathway.

An organization may be reluctant to do this, and although a physician can opt to go off pathways in
such cases, she believes that the best evidence of the pathway is what should be adhered to.