US urology clinics overprescribe prostate radiotherapy

The US Government Accountability Office is investigating allegations that urologists are reaping hundreds of millions of dollars by overprescribing intensity-modulated radiotherapy (IMRT) for prostate cancer. Since 2002, Medicare, the federal health insurance programme for elderly patients, has paid generously for IMRT—up to US$40 000 per patient.

The "disproportionate reimbursement" for IMRT versus other treatments creates an incentive to overprescribe IMRT, explains Benjamin Falit, Yale School of Medicine, CT, USA. Because costs have dropped faster than reimbursement rates, urology clinics offering IMRT have proliferated—to the detriment of patients and existing cancer centres, critics say.

The federal Stark law prohibits physicians from referring Medicare patients to facilities that they own, but the law contains exceptions for simple procedures like radiographs and blood tests, which can be conveniently offered on-premises. Companies like Urorad Healthcare (McAllen, TX, USA) use this loophole to market IMRT systems to private urology practices.

"If two things had not happened, there would be no Urorad model", Anthony Zeitman, President of the American Society for Therapeutic Radiology and Oncology, told The Lancet Oncology. First, Zeitman said, urologists lost an important revenue stream from frequently unjustified prescriptions for leuprolein, a hormone agonist, for prostate cancer. "They received the drug at very low prices from the manufacturer and billed Medicare at the full rate to trouser the difference", Zeitman said. "There was no evidence of benefit for low-risk prostate cancer, which represents the majority of patients. The practice was investigated and in 2003 the federal government fined the pharmaceutical industry $800 million. After that, use of the drug plunged."

"But then creative people looked around and saw IMRT as a big billing opportunity. They discovered the Stark loophole and presto: a new model refilled urologists' pockets", Zeitman explains. "The counties where these facilities are operating have seen dramatic declines in prostatectomies. Brachytherapy too—and brachytherapy is the best bargain around in prostate cancer treatment."

At least 37 urology practices across the US now offer IMRT, mostly in Texas, Florida, New York, and Pennsylvania. They can be extremely profitable. One small clinic in Oregon doubled its prostate cancer billing to Medicare during its first year of IMRT operations, charging the government $3.8 million in 2008, according to a joint investigation by the Center for Public Integrity and The Wall Street Journal. A urologist at the Oregon clinic claims "pent-up" demand from patients explains much of the increase. Healthcare economist Vivian Ho (Rice University, Houston, TX, USA) disagrees. "These clinics are not being demanded by patients", Ho told The Lancet Oncology. "The bulk of it is physicians entering a market to go after financial incentive. If it were demand-driven, we would have seen more uniform increases across the US."

Urorad clinics pose serious problems for patients and hospitals, says sceptics like Arand Lalaji, The Radiology Group, Atlanta, GA, USA. "These centres use refurbished machines that are more prone to failure and error", Lalaji said. "Hospital services are also significantly regulated under joint commissions. Smaller facilities do not have those safeguards. We worry if somebody gets an extra CT scan but that is peanuts compared with radiation therapy doses. If you use IMRT unnecessarily, you will be creating new tumours."

"Very elderly men who should be left alone are also receiving IMRT at private clinics", Zeitman adds. "It is almost elder abuse. There is zero evidence of benefit. It is desperately disturbing, and I hate to say it, but there is only one explanation. Urologists also frequently diagnose prostate cancers and channel patients to IMRT without presenting other choices. Certainly they are not presenting the no treatment option. That narrowing of choice disturbs me."

The long-term effects are substantial for teaching hospitals as well, Zeitman argues. "When a teaching hospital is near a Urorad centre and suddenly its prostate business disappears, there are residents who will not see many of those cases", Zeitman said. "And if prostate cases go away, hospitals can no longer afford to care for patients with breast and lung cancer. We are already seeing a number of smaller general cancer centres closing."

Hospitals use IMRT primarily for irradiation of complex head-and-neck and lung tumours, rather than comparatively simple prostate tumours, Zeitman said. "But reimbursement is for IMRT, not prostate IMRT or lung IMRT", Zeitman notes. "The obvious thing to do would be to create different reimbursement rates. But Medicare is just not that sophisticated. The risk is that IMRT reimbursement will be slashed across the board."

Closing the Stark exemption to Urorad clinics is one alternative, he and others said. "There will almost always be an incentive to overutilise expensive technology if the referring physician keeps a percentage of the technical revenue", Falit said. "This is the dark side of medicine", adds Zeitman. "But it can be deincentivised."

Bryant Furlow