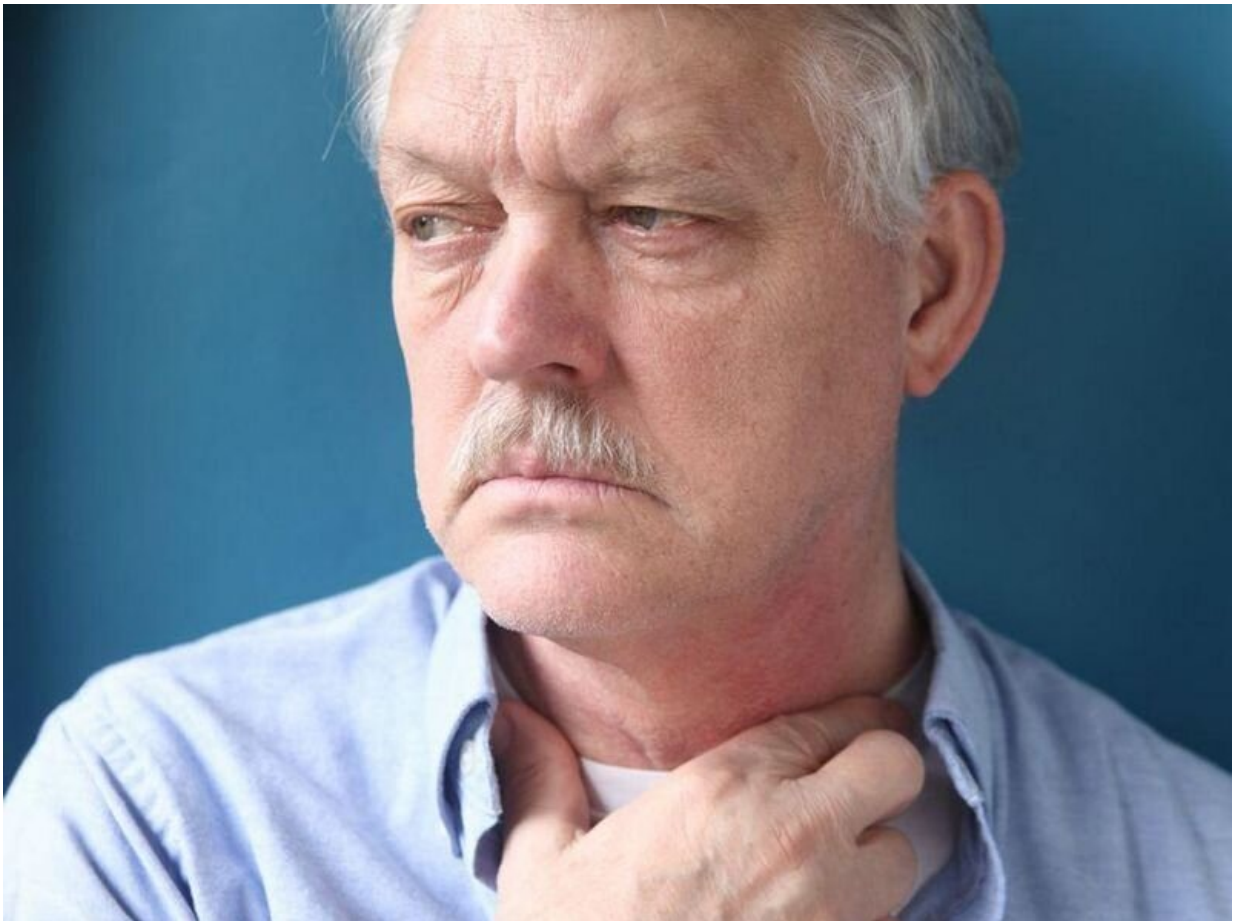


# Model can predict postoperative RT delay in head & neck cancer

April 24 2023, by Elana Gotkine

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A model incorporating individual-level factors with health literacy and

community-level factors predicts postoperative radiation therapy (PORT) delay for patients with head and neck squamous cell carcinoma (HNSCC), according to a study published online April 19 in *JAMA Otolaryngology-Head & Neck Surgery*.

Tuleen Sawaf, from the University of Kansas Medical Center in Kansas City, and colleagues examined individual and community-level factors associated with PORT delay in a prospective cohort of patients with untreated HNSCC (mean age of 61.0 years; 94.2 percent were White; 61.4 percent were men). The risk of PORT initiation delay (>42 days from surgery) was examined using individual-level (demographic, healthy literacy, and [clinical data](#)) and community-level information (area deprivation index [ADI] and rural-urban continuum codes).

The researchers found that 104 of 171 patients (60.8 percent) had PORT delays. Most participants had employer-based and public insurance (38.5 and 44.4 percent, respectively). The mean ADI was 60.2, and 41.8 percent of participants resided in rural communities. Oral cavity was the most common tumor (71.9 percent); at presentation, 63.5 percent were classified as stage 4. A model including individual-level factors with [health literacy](#) and community-level factors was most predictive of PORT delay (area under the curve, 0.78).

"The current study assessed the individual- and community-level influences on delays and found that a predictive model incorporating multiple levels of influence from the social-ecological framework outperformed a model based on individual-level factors alone," the authors write.

Two authors disclosed financial ties to Castle Biosciences.

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