Cancer is a leading cause of death worldwide. Many individuals have significant symptoms related to this disease. Palliative radiation therapy (PRT) can relieve symptoms at the end of life for those with metastatic cancer. PRT is underused in treating patients with symptomatic cancer at the end of life, particularly in rural and remote settings, despite the evidence that supports it. The purpose of this evidence-based practice study is to (a) assess the knowledge of rural primary care providers about PRT, (b) disseminate evidence on the indications for PRT, and (c) increase palliative referrals.

AT A GLANCE
- Offering PRT is a practical approach to treating patients with a symptomatic cancer diagnosis.
- Educating healthcare personnel on PRT indications is imperative to proficiently manage this at-risk population.
- Using evidence-based guidelines for the indications of PRT can increase efficacy of the healthcare system, ultimately improving the quality of care for patients.

**KEYWORDS**
palliative radiation therapy; primary care providers; evidence-based education

**DIGITAL OBJECT IDENTIFIER**
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The goal of palliative care is to assist individuals who have health concerns related to symptoms like pain, nausea, anxiety, depression, constipation, difficulty breathing, fatigue, and insomnia (Mayo Clinic, 2017). Offering palliative radiation therapy (PRT) is important in the interprofessional approach to cancer care.

This article reports an evidence-based practice educational project completed in a multicenter rural outreach site of a tertiary medical center. Permission was obtained to adapt the Iowa Model of Evidence-Based Practice to Promote Quality Care in a pre-/post-test design to evaluate primary care providers’ (PCPs’) knowledge about the indications and factors influencing referral for PRT. A preintervention survey was emailed to 51 PCPs in rural healthcare settings, and the response rate was 31% (N = 16, 5 medical doctors, 9 nurse practitioners, and 2 physician assistants). The results of the survey indicated that PCPs lacked knowledge of PRT, patient eligibility, and the availability of PRT within local facilities. Figure 1 shows the survey results of knowledge of PCPs prior to and after the educational sessions. Additional measurements on the knowledge of indications of PRT included what was known about PRT related to mental status changes, dyspnea, pain, and stopping symptoms related to disease.

The Alberta Health Services (AHS, 2010) guidelines for palliative radiotherapy were used to teach the evidence for PRT and its indications. Educational sessions on PRT were held at a staff meeting using a Microsoft PowerPoint® presentation, which included a case study, description of and indications for PRT, PCP initiatives, available resources, and guidelines. A PRT educational brochure for PCPs was also developed to provide guidelines for best practices. The brochure featured the indications for PRT, PCP initiatives in assessing appropriate patients, expected outcomes for those receiving PRT, and guidelines to use in practice. The brochures were mailed to the PCPs in the associated rural health clinics after the educational sessions. The AHS (2010) guidelines were also added to the rural health system’s intranet. PCPs were notified of the electronic availability of the guidelines.

**Results**
The presurvey, education, and post-survey took about 30 days to complete. Comparisons were drawn between PCPs’ knowledge of PRT and referral behaviors before and after the educational sessions. PCPs demonstrated an increased knowledge of symptoms that may improve with PRT, such as brain and bone metastases; malignant epidural spinal cord compression and malignant superior vena cava obstruction; upper aerodigestive tract obstruction, compression, or invasion; and malignancy-associated urogenital or gastrointestinal bleeding or hemoptysis (AHS, 2010). However, the number of PRT referrals did not increase from pre- to posteducation.