Colorectal cancer is common in men and women. More than 56,000 people will die of the disease in the United States in 2005 (Jemal et al., 2005). Including Europe, the number rises to about 200,000 deaths (Midgley & Kerr, 2000b). Early diagnosis with better screening has improved overall survival for patients with colorectal cancer. Unfortunately, more than 50% of new patients present with stage III or metastatic disease, and half of all people with colorectal cancer are diagnosed with recurrent or metastatic disease (Xiong & Ajani, 2004). Therefore, screening and early diagnosis are crucial in helping to reduce mortality.

Because more patients with colorectal cancer present with later-stage disease, effective treatments are needed. Treatments usually include systemic chemotherapy. Patients often receive a combination of surgery, chemotherapy, and possibly radiation therapy in the treatment of stage III or advanced colorectal cancer. Although improvements have been made in surgical and radiation therapy techniques in the treatment of advanced colorectal cancer, 5-fluorouracil (5-FU) has been the mainstay of chemotherapy for this patient population (Midgley & Kerr, 2000a; Rich, Shepard, & Mosely, 2004). Chemotherapy options have changed dramatically since 2000 and will be the focus of this article.

Colorectal cancer is one of the most common cancers affecting men and women in the United States. In 2005, 10% of all new cancer cases in men will be colorectal; for women, 11% of new cases will be colorectal. The disease is the third most frequent cancer occurring in both sexes. Colorectal cancer also is the third most frequent cause of death for men and women, and more than 56,000 cancer deaths in 2005 will be attributed to colorectal cancer. Chemotherapy options for treatment of the disease remained relatively stagnant until the approval of irinotecan in 1996 followed by capecitabine, oxaliplatin, and the new targeted agents. The new agents have improved efficacy of treatment for colorectal cancer and the lives of patients with advanced disease. With the new options for treatment come increased nursing and patient-teaching responsibilities, as well as increased costs associated with the newer drugs in the armamentarium of chemotherapy agents. Formulary budgets are seeing dramatic increases in expenditures for the new, targeted therapy treatments; discussion of the most appropriate therapies may be considered. This article will discuss epidemiology of colorectal cancer, treatment options in advanced colorectal cancer, and nursing care crucial to patients undergoing chemotherapy. Discussion of economic impact also will be presented.

The introduction of irinotecan in 1996, followed by the first new platinum analog agent, oxaliplatin, in 2002, offered considerable advances in chemotherapy for advanced and metastatic colorectal cancer (Schrag, 2004). An oral fluorouracil agent, capecitabine, was released in 1998 and has been shown to have activity in colorectal cancer. Two new monoclonal antibody agents, bevacizumab and cetuximab, were approved in 2004 for the treatment of patients with metastatic colorectal cancer. The agents are different in tumor effects and side-effect profiles and may...