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- Research Interests:**
- Physical function and falls across the cancer trajectory
 - Long-term care in the community setting, fall and polypharmacy prevention
 - Oral chemotherapy agent adherence, side effects and symptom management
 - Automated voice response systems and text messaging to promote treatment adherence
 - Motivational interviewing and cognitive behavioral therapy to promote treatment adherence
 - Self-management of chronic and/or comorbid conditions in older adults and the elderly



Sandra Spoelstra PhD, RN

A person with cancer may experience functional decline as an association between the physiological processes of aging, existing comorbid conditions and subsequent medications, and their cancer history. The goal of Dr. Spoelstra's research is to understand how the addition of a cancer diagnosis or cancer treatment alters physical function and falls in those with cancer. The objective is to identify what interventions clinicians can do to promote a level of physical function that helps those undergoing cancer treatments to limit physical function decline, to recover more rapidly after treatment, to prevent falls and fractures, and subsequent hospitalization or nursing home placement. The next step is to refine measures of physical function in those with cancer and to conduct descriptive studies to better understand function and falls across the cancer trajectory.

Over the past decade the use of oral chemotherapy is transforming how oncology care is delivered. This new treatment paradigm shifts the care from a safe, controlled, monitored process in hospitals or clinics, to patients' homes where the medication becomes the patient and family responsibility. Complex dosing regimens, managing side effects, and preventing complications from polypharmacy are challenging to manage. The problem is especially grave for cancer patients because poor adherence may lead to disease progression. Clinicians need a cost effective and efficient means to monitor adherence, guide patient self-management of symptoms from side effects, while assuring therapeutic doses are attained. Dr. Spoelstra is studying the mechanism surrounding adherence.

With adults aged 65 and older comprising 15% of the population there is concern as to how to care for this growing demographic. Dr. Spoelstra aims to deliver high quality care tailored to the needs of patients within the home in order to lower the rates of transfers and decrease the length of time elderly patients spend in nursing homes. These concerns are most relevant among older persons who are medically indigent and therefore eligible for coverage under both Medicare and Medicaid. This necessitates more research to identify factors that predict nursing home placement and the development of strategies to support and retain the elderly in their homes. 🌱