

# Development and Pilot Testing of Four Desired Health Outcomes Scales

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**Purpose/Objectives:** To develop and pilot test scales to measure desired health outcomes hypothesized to result from high-quality cancer nursing care: Fortitude Scale, Trust in Nurses Scale, Cancer Patient Optimism Scale, and Authentic Self-Representation Scale.

**Design:** Instrument development.

**Setting:** Community cancer support organization.

**Sample:** 66 recently treated patients with cancer who attended a cancer support organization workshop. The sample was predominately white, middle-aged, well-educated females.

**Methods:** Items for each scale were generated from qualitative data and the literature. The scales' properties were evaluated using expert panel assessment of content validity, cognitive interviews of patients with cancer, and reliability and validity testing of each scale with the Multitrait/Multi-Item Analysis Program-Revised (MAP-R) statistical program.

**Findings:** Participant responses to the four scales did not include the lowest possible score. Responses yielded evidence of adequate Cronbach's alpha internal consistency reliability for each scale: 0.81 for the Fortitude Scale; 0.81 for Trust in Nurses Scale, 0.75 for Cancer Patient Optimism Scale, and 0.71 for Authentic Self-Representation Scale. The MAP-R statistics yielded evidence of acceptable convergent validity and discriminant validity.

**Conclusions:** The data provided preliminary evidence of acceptable psychometric properties for four scales designed to measure desired outcomes of cancer nursing care. Support was found for careful use of scales. Further psychometric testing with large samples is recommended.

**Implications for Nursing:** These scales represent an initial effort toward providing measures of the desired health outcomes that patients with cancer attributed to high-quality cancer nursing care.

Keeping patients safe is imperative, and nursing care affects patient safety (Page, 2004). Suboptimal nurse-staffing levels have been linked to adverse patient outcomes, including infections, decubitus ulcers, failure to rescue, and mortality (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Mark, Salyer, & Wan, 2003; Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002). The goals of nursing care, however, extend beyond ensuring that care is safe and that adverse events do not occur. Goals of care include the achievement of desired health outcomes along with the avoidance of adverse outcomes (Committee on Quality of Health Care in America, Institute of Medicine, 2001). In the broadest sense, desired health outcomes are the positive intended results of care and include patients attaining optimal levels of physical functioning and intellectual performance, as well as psychosocial and emotional well-being (Harris-Wehling, 1990). The purpose of this study was to

## Key Points . . .

- ▶ Current measures of the outcomes of nursing care mainly focus on adverse patient outcomes.
- ▶ Four scales were developed and pilot tested to measure desired health outcomes: Fortitude, Trust in Nurses, Cancer Patient Optimism, and Authentic Self-Representation scales.
- ▶ Preliminary evidence of acceptable psychometric properties was found for each scale.

develop and pilot test four scales to measure desired health outcomes that were hypothesized to result from high-quality cancer nursing care.

This study focused on the specific psychosocial and emotional outcomes identified in a middle-range theory of high-quality oncology nursing care. The theory was generated in a qualitative study with 22 patients with cancer (Radwin, 2000); theory concepts were designated as attributes or outcomes of high-quality oncology nursing care. Theory concepts generated as attributes included professional knowledge, continuity, attentiveness, coordination, partnership, individualization, rapport, and caring. The Oncology Patients' Perceptions of the Quality of Nursing Care Scale (OPQNCs) subsequently was developed to measure the attributes described in the middle-range theory (Radwin, Alster, & Rubin, 2003).

The middle-range theory of high-quality oncology nursing care included five desired health outcome concepts: fortitude, a sense of well-being, trust, optimism, and authentic self-representation. The literature was searched for extant scales to measure these concepts. Berwick et al.'s (1991) five-item

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