

## **Pulse Check: A Tool for Real-Time Monitoring and Managing Nursing Workflow**

Ann M. Adsem, BSN, RN and Abigail Marshall, BSN

**Purpose and Background:** Workflow varies constantly on the oncology unit. This makes staff assignments and teamwork challenging, and contributes to workplace stress. Pulse checks are a tool to help with this.

A Pulse Check is a brief targeted survey conducted at frequent intervals and allows for a dynamic measurement and response cycle. It originates in organizational psychology research. Research indicates that employees who are able to cope with daily job demands are better able to cope with negative events, more productive, more committed to the organization, and less prone to burnout and turnover. Pulse checks are normally deployed at the interdepartmental and managerial level. There is no research on its use at the patient care unit level.

This abstract describes how we apply pulse checks in an ongoing effort to improve nurses' coping with daily job demands and manage workflow on a busy inpatient oncology unit.

**Methods:** Nursing staff are asked to rate their personal work stress levels from 1 (calm and controlled) to 4 (unmanageable). Pulse checks are collected on all nursing department staff at 4-hour intervals. Pulse checks may be collected more frequently during particularly hectic days or a nurse may self-report a high score during intervals. A pulse of 3 or 4 will immediately result in unit resources being deployed to help a struggling teammate.

**Evaluation:** Staff were surveyed at one, six, and twenty-four months to determine how they perceived pulse checks effected their work. Staff response to pulse checks is very positive. 45% and 73% of staff rated pulse checks as valuable to extremely valuable at one and six months respectively. 95% of staff felt pulse checks increased their awareness of unit workflow. 91% of staff felt pulse checks greatly improved teamwork. 86% of staff felt pulse checks improved response times when they need help. Positive perspectives by staff have been sustained through the 24-month survey.

Pulse check average daily scores were analyzed to determine trends in nursing staff's perceived stress. Graphic analysis of day and night shift scores showed different patterns of initial response with the biggest impact being shown on day shift. Pulse check scores were compared using t-tests for the 30 days pre- and post- staffing changes and quantitatively demonstrated the impact of these changes at  $p=0.05$ .

**Discussion:** Pulse checks allow for real-time measurement of nurses' stress. This in turn allows team resources to be deployed efficiently and quickly reduce the overall stress level of the unit. It also allows for accelerated evaluation of workplace changes. Ongoing analysis to optimize data collection intervals and explore relationships with nursing sensitive patient outcomes is ongoing and may yield more benefits.