Abstract

Telehomecare usage requires that patients, home-helpers and nurses interact as a group using remote communication technology. Group interaction produces many levels of social variance that contribute to outcomes. It is unknown how social variances in remote interaction influence outcomes. Social Relations Model (SRM) approach is currently used to analyze individual, relational and group influences on family outcomes. SRM applied to telehomecare groups contributes to better understanding of the influence of remote relationships on patient outcomes.

Problem

Telehomecare is a new healthcare delivery method addressing the triple challenge of healthcare; access, cost and quality. Telehomecare is the utilization of electronic communication technologies to provide and support home health care when distance separates providers from patients. Home-helpers are an integral part of providing quality care to remote patients for that decreases cost. Greater responsibility for using technology and interpreting information is deferred to patient helpers in the home. Successful homecare outcomes depend on a three-way interaction within diverse patient, home-helper and nurse triad groups that integrate technology into the patient’s health regime. No analysis method for evaluating the multiple variances that occur in remote interactions has been used. Therefore, it is not known which, if any, components of relationships influence outcomes in telehomecare

Purpose

Apply Social Relations Model to telehomecare triads.

Methodology

This methodology uses a quantitative human factor approach to determine social effects on outcomes. A complex round robin design substantiates the format for the questionnaire. Each triad member is asked to rate specific statements pertaining to their perception of social characteristics of the other members. The social characteristics are trust, interdependence and communication. SRM method of collecting data provides scores for individual, relational and group effect scores of social characteristics. The approach to measuring the members of the telehomecare triad differs procedurally and conceptually from a procedure where each member rates the group as a whole. Four categories of effect scores are calculated for each patient, home-helper and nurse triad to measure: 1) Perceiver - individual perception that is not shared by the other members, 2) Target – individual perception that is shared by the other members 3) Relational – perception of interaction between dyads within the group, and 4) Group – perception of entire group culture. Correlational analysis of social characteristic effect scores to patient outcomes is then performed. Patients only complete an outcome questionnaire on satisfaction, self-care and hospitalizations. Correlation of multiple effect scores for each group provides a rich data base for understanding each member and groups to other study participants.

Sample size: 60 triads (patient, home-helpers and nurse) consisting of 10 nurses, 60 patient and 60 home-helpers.

Evaluation and Results

Understanding the application of the SRM to telehomecare triads: 1) tests the assumption that telehomecare is a group effort 2) analyzes with no apriori assumptions about relationships between patient, nurse and home-helper, 3) acknowledges dependence on the home-helper as a valued group member, and 4) provides nurses with detailed best practice information for efficient and effective care with technology-mediation.