



**ADAPTATION OF AN OBSERVATIONAL RATING SYSTEM FOR  
COLLABORATIVE COMMUNICATION BETWEEN PATIENTS AND CAREGIVERS  
FOR SHARED ADVANCE CARE PLANNING DECISIONS**

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**Abstract**

**Introduction:** Effective communication and decision making can become difficult in stressful situations. The end of life is highly stressful that may require surrogate decision making by caregivers. Yet caregivers are under involved in advance care planning (ACP) with patients for future end of life decisions. Collaborative decision making between chronically ill patients and their caregivers could facilitate shared decision making.

**Background:** Communication quality between patients and caregivers can affect shared decision-making during ACP, which can be affected by emotional and relational influences. While collaborative communication can facilitate effective shared decision making, few rating systems exist to evaluate the quality of patient-caregiver collaborative communication for shared ACP decisions.

**Purpose:** The purpose of this study is to evaluate the applicability of the adapted Naïve Observational Rating System (NORS) for collaborative communication coding in shared patient-caregiver ACP.

**Methods/Materials:** Chronically ill patients (age 55+) and their chosen caregivers (age 18+) were recruited from a home health agency in Utah. Patient and caregiver dyads participated in a (10-41 minutes) video recording of a collaboration-focused shared ACP decision making conversation as part of a larger intervention study. Recordings were transcribed verbatim and two researchers coded verbal and non-verbal communication using an adapted version of the Naïve Observational Rating System (NORS)

**Results:** Eighteen patient-caregiver dyads were purposively recruited. The majority of participants were female (13 caregivers; 11 patients). The mean age for caregivers was 61.28 (SD= 13.60) and patients were 68.22 (SD=9.64). Two researchers coded using an adapted version of the NORS on a 10-point Likert Scale (1-10) using the following items: constructiveness, negative reciprocity, positive reciprocity, patient demand/caregiver withdrawal, caregiver demand/patient withdrawal, mutual avoidance, vulnerability/empathy-support, mutual acceptability of problem, naturalness, simplicity/complexity, persuasion, and power/influence. A consensus was reached between researchers on the definitions of the rating categories. The top three highest collaboration patterns were vulnerability/empathy-support ( $M=7.61$ ,  $SD=2.23$ ), constructiveness ( $M=7.33$ ,  $SD=2.00$ ), and simplicity/complexity ( $M=6.50$ ,  $SD=2.18$ ). The collaborations that were rated the lowest were negative reciprocity ( $M=1.44$ ,  $SD=0.86$ ), patient demand/caregiver withdraw ( $M=1.50$ ,  $SD=0.92$ ), and caregiver demand/patient withdraw ( $M=1.72$ ,  $SD=1.02$ ). Constructiveness was positively correlated with negative reciprocity ( $r=0.53$ ,  $p=0.02$ ) and mutual acceptability of the problem ( $r=0.53$ ,  $p=0.02$ ); and negatively correlated with caregiver demand/patient withdraw ( $r=-0.54$ ,  $p=0.02$ ) and mutual avoidance  $r=-$

0.52,  $p=0.02$ ). Positive reciprocity was negatively associated with patient demand/caregiver withdraw ( $r=-0.58$ ,  $p=0.01$ ) and associated with caregiver persuasion ( $r=0.53$ ,  $p=0.02$ ).

**Conclusion:** No observational rating system exists for the study of collaborative communication between patients and caregivers during shared ACP decisions. This study demonstrated the applicability of an adapted version of the NORS for collaborative ACP decision making. Future steps would include triangulation of qualitative analysis to contextualize quantitative ratings.