

# The Impact of the Carer Support Needs Assessment Tool (CSNAT) in Community Palliative Care Using a Stepped Wedge Cluster Trial

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## Abstract

Family caregiving towards the end-of-life entails considerable emotional, social, financial and physical costs for caregivers. Evidence suggests that good support can improve caregiver psychological outcomes. The primary aim of this study was to investigate the impact of using the carer support needs assessment tool (CSNAT), as an intervention to identify and address support needs in end of life home care, on family caregiver outcomes. A stepped wedge design was used to trial the CSNAT intervention in three bases of Silver Chain Hospice Care in Western Australia, 2012-14. The intervention consisted of at least two visits from nurses (2-3 weeks apart) to identify, review and address caregivers' needs. The outcome measures for the intervention and control groups were caregiver strain and distress as measured by the Family Appraisal of Caregiving Questionnaire (FACQ-PC), caregiver mental and physical health as measured by SF-12v2, and caregiver workload as measured by extent of caregiver assistance with activities of daily living, at baseline and follow up. Total recruitment was 620. There was 45% attrition for each group between baseline and follow-up mainly due to patient deaths resulting in 322 caregivers completing the study (233 in the intervention group and 89 in the control group). At follow-up, the intervention group showed significant reduction in caregiver strain relative to controls,  $p=0.018$ ,  $d=0.348$  (95%CI 0.25 to 0.41). Priority support needs identified by caregivers included knowing what to expect in the future, having time for yourself in the day and dealing with your feelings and worries. Despite the challenges at the clinician, organisational and trial levels, the CSNAT intervention led to an improvement in caregiver strain. Effective implementation of an evidence-informed and caregiver-led tool represents a necessary step towards helping palliative care providers better assess and address caregiver needs, ensuring adequate family caregiver support and reduction in caregiver strain.

## Strengths:

- Large sample size (n=620 at initial recruitment, n=322 at study completion)
- Comprehensive description of methods and study design, using a stepped wedge cluster trial
- Use of well-validated measures for outcome variables
- Control for potential confounding variables/covariates (i.e. age of caregiver, effect on caring on work, diagnosis of patient, length of palliative care and length of home hospice admission)
- Initial training and follow-up refresher sessions for nurses involved in providing intervention
- Use of pilot study initially to address potential study design issues

## Weaknesses:

- Limitations as identified by authors
  - High attrition rate (45%)
  - Unbalanced design (233 in intervention group and 89 in control group)
  - Data analysis based on study completers as opposed to intention-to-treat analysis, which may have overstated the effect of the intervention
  - Potential gatekeeping by nursing staff, which may have resulted in sample selection bias (not all caregivers were approached)
  - Start times for intervention implementation were not randomized
- Interventions were not standardized and may have been influenced by the individual nurse providing the intervention(s)

## Relevance to Palliative Care:

Family caregivers of palliative patients may experience substantial psychological, emotional, social and spiritual distress associated with their caregiving roles. Support for caregivers at end of life can result in better long term outcomes, including less emotional distress and better bereavement outcomes. The use of a structured tool for assessing caregiver needs, such as the Carer Support Needs Assessment Tool (CSNAT), could help identify potential family members who may benefit from additional support.