Scoring Suffering to Address Patient Needs in Palliative Care | The "Maslow Score"

Michael Aref¹, MD, PhD, FACP, FHM, Cathy Simpson² MSW, LCSW, Emily Malecki², RN, ACNP-BC, and Barb Nation², RN, CHPN

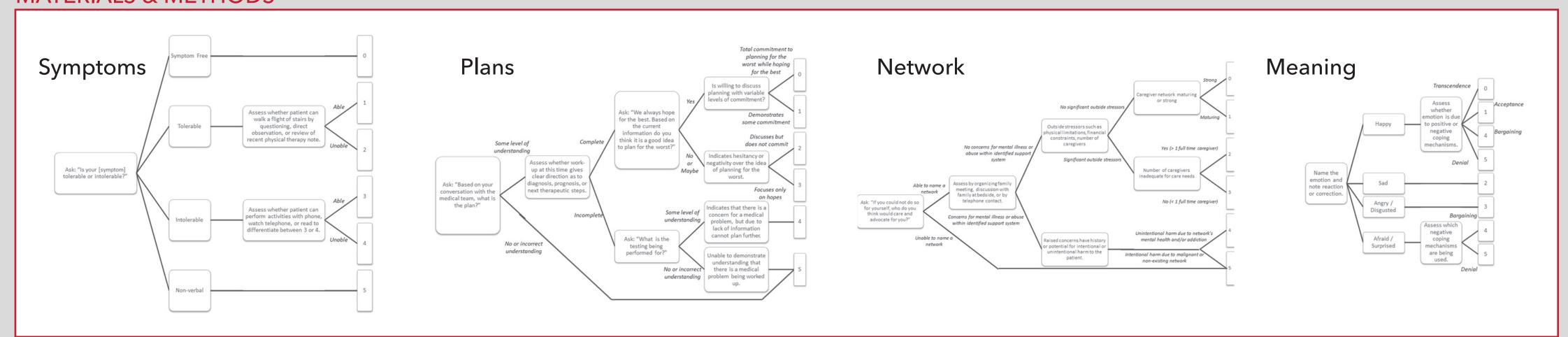
¹Carle Hospital and Physician Group, Urbana, Illinois | ²Indiana University Health, Indianapolis, Indiana

INTRODUCTION

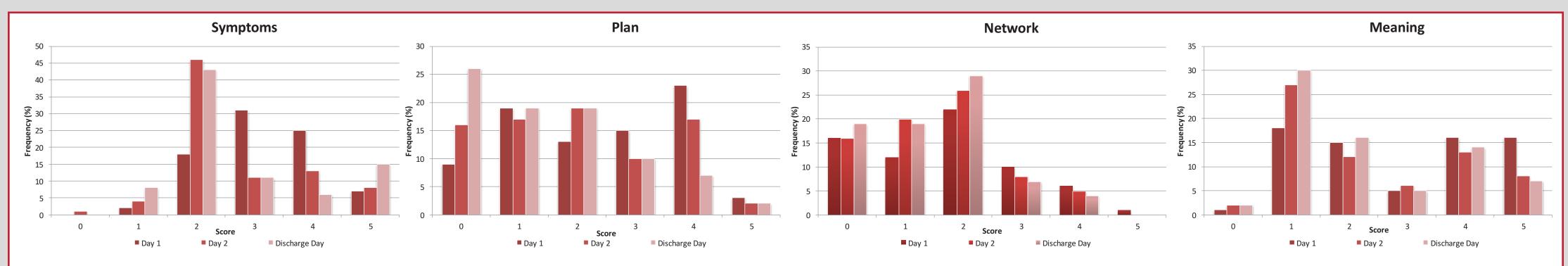
Palliative care patients have been scored by their physical and psychological symptoms, Edmonton Symptom Assessment Scale (ESAS)¹ and revised version (ESAS-r)², and performance status, European Cooperative Oncology Group (ECOG) Scale of Performance Status³, Karnofsky Performance Status⁴, and Palliative Performance Scale (PPS)⁵ but not their multi-dimensional suffering, needs, and wants. The 4-digit "Maslow Score" seeks to use Maslow's Hierarchy⁶ to score the current patient situation based on a palliative care assessment of symptom burden (physiological), plan (safety), network (love/belonging), and meaning (esteem/self-actualization) using a scale derived from a 0-5 functional pain scale⁷. The aim of this score is to better triage use of palliative care team resources, assess benefits of various interventions, increase efficiency of patient hand-offs, and better optimize care for each interaction.

Meaning

MATERIALS & METHODS



RESULTS



	Day1	Day 1	Day 2
	to	to	to
	Day 2	Discharge	Discharge
Symptoms	< 0.0001	0.0002	0.7
Plan	0.03	< 0.0001	0.0002
Network	0.02	0.01	0.2
Meaning	0.002	0.006	0.9

Table 1: P-values obtained from paired t-test of differences between scores at initial consultation (day1), first follow-up (day 2), and day of discharge (or death).

All patients on our in-patient service are scored by consensus at the end of the day. If the observers feel ambivalence or disagreement over which score more accurately represents the situation, the higher score is selected. If the observers are unable to assess a score, the score was deferred and marked with an "x". The analysis above was of in-patients in a two-month period (N = 115) who were new consults and discharged during this period (N = 112) who were seen at least twice (N = 83). Symptom scores were statistically improved between initial consultation and follow-up but did not statistically improve from follow-up to discharge, that is, symptoms were optimized after initial consultation. The plan statistically improved between initial consultation, first follow-up and discharge. Network and meaning statistically changed between initial consultation and follow-up as well as between initial consultation and discharge, but did not change between follow-up and discharge.

DISCUSSION

Our observations and quantification appear to demonstrate that the palliative care team can rapidly improve symptom burden between initial consultation and follow-up. It would also appear that patients goals-of-care are improved by palliative care intervention throughout their hospitalization. Statistically significant changes in network appear early in palliative care consultation, likely as a result of family responding to stressors of anticipating care for a chronic, progressively and likely terminally ill family member. The significant change between consultation and discharge and the lack of significant change between follow-up and discharge could be explained by the transfer of information typical of family meetings which are more likely to occur at our institution in follow-up rather than during initial consultation. The significant improvement in meaning between initial consultation and follow-up is likely from a combination of normal progression through Kübler-Ross' Stages of Grief⁸, palliative care support, and baseline coping. The lack of statistically significant change following that supports the lack of observations that coping and finding meaning can occur in a single hospitalization. This is a nascent study with many sources of error. Observer bias could influence our data as we are not only responsible for interventions that we believe will improve our patients' quality of life but we are not blinded to either interventions or score.

CONCLUSIONS

Intuitively palliative care makes sense, however there is a paucity of data to support this conclusion, a lack of evidence-based guidelines, and inadequate means to quantify the seemingly qualitative. It is critical that palliative care continues to improve individual's lives while research shows institutional and systemic value. The "Maslow Score" allows palliative care teams to record a patient's suffering in a common shorthand. This allows us to detect the effect of interventions, which are generally positive despite only a short period of care. Patients' symptom burdens are improved and remain better than on initial consultation. In addition they are finding appropriate goals-of-care with planning that continues throughout the hospitalization. Their networks would appear to become more organized and their ability to cope with disease appears to improve. The "Maslow Score" may be a mechanism to improve the delivery of high-quality palliative care by breaking down each patient situation and recording whether interdisciplinary palliative care interventions have been efficacious.

FUTURE DIRECTIONS

The "Maslow Score" needs to be further refined. Independent and blinded scoring could then be done to demonstrate more conclusively the effects we observed. It is also necessary to test validity against other scoring tools already applied to palliative care, social work, and psychology.

REFERENCES

- 1. Bruera E, Kuehn N, Miller MJ, Selmser P, Macmillan K. The Edmonton Symptom Assessment System (ESAS): a simple method for the assessment of palliative care patients. J Palliat Care. 1991 Summer;7(2):6-9.
- 2. Watanabe SM, Nekolaichuk C, Beaumont C, Johnson L, Myers J, Strasser F. A multicenter study comparing two numerical versions of the Edmonton Symptom Assessment System in palliative care patients. J Pain Symptom Manage. 2011 Feb;41(2):456-68.
- 3. Oken M, Creech R, Tormey D, et al. Toxicity and response criteria of the Eastern Cooperative Oncology Group. Am J Clin Oncol. 1982;5:649-655.
- 4. Karnofsky DA, Abelmann WH, Craver LF, Burchenal JH. The Use of the Nitrogen Mustards in the Palliative Treatment of Carcinoma with Particular Reference to Bronchogenic Carcinoma. Cancer. 1948;1(4):634-56.
- 5. Anderson F, Downing GM, Hill J, Casorso L, Lerch N. Palliative performance scale (PPS): a new tool. J Palliat Care. 1996 Spring;12(1):5-11. 6. Maslow AH. A Theory of Human Motivation. Psychological Review. 1943 50, 370-396.
- 7. Gloth FM III, Scheve AA, Stober CV, Chow S, Prosser J. The Functional Pain Scale: reliability, validity, and responsiveness in an elderly population. J Am Med Dir Assoc. 2001;2(3):110-114.
- 8. Kübler-Ross E. On Grief and Grieving: Finding the Meaning of Grief Through the Five Stages of Loss

