

## **Journal Watch GNH TPCU “End of Life Prognostication?”**

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### **References:**

1. Woelk, C.J. (2009). How long have I got?. *Canadian Family Physician*, Vol 55, 1202-1206.
2. Glare P, Christiakis N. Predicting survival in patients with advanced disease. *Oxford textbook of palliative medicine*. 3<sup>rd</sup> ed. New York, NY: Oxford University Press; 2004. p. 29-42.
3. Anderson F et al. How accurate are physicians' clinical predictions of survival and the available prognostic tools in estimating survival times in terminally ill cancer patients? A systematic review. *Clin Oncol* 2001; 13(3):209-18.

**Background:** Historically the main reasons for consulting physicians have been for diagnosis and prognosis, with treatment assuming a prominent role only in the past century. Common situations physicians are asked to prognosticate include estimating a date of confinement, predicting back to work time, and estimating length of survival. This is relevant in palliative medicine as there can be limited benefits to providing intensive treatment to those with poor prognosis, in addition to availability of palliative services being dependent on the ability to give a prognosis to within a certain number of months. Researchers are now using defined population statistics to provide a more accurate population specific estimation to length of survival.

**Discussion:** When asked the question “How long have I got?” one must first clarify exactly what is being asked. Sometimes, the question is truly about time until hospital discharge or even time to onset of chemotherapy. Next, one ought to determine the patients reasoning behind the question. There may be legal, social, and psychiatric implications to such a question. Discussion of these topics with patients in a language they can understand is paramount.

The two components of prognostication are formulating an accurate prediction and communicating it to patients and their families. These two components are a mix of art and science. For example, most biliary tract cancers, pancreatic cancers, and malignancies of unknown origin are expected to have poor prognosis and progress rapidly, whereas metastatic breast and prostate cancer, while life limiting, are expected to pursue a slower course of progression. Clinical prediction of survival has been found to be erroneous 30% of the time in expert hands.<sup>3</sup> Two thirds of errors are based on overoptimism.

The most important factor in determining length of survival is the patients level of function, usually referred to as his or her performance status. Two other tools for clinically predicting survival include Table 1: Palliative prognostic score and Table 2: Palliative prognostic index. Using the palliative prognostic score, the 30 day survival probability is less than 30% with a score greater than 11 and more than 70% with a score of 0-5.5. Scoring greater than six on the palliative prognostic index predicts a survival of less than 3 weeks (Sn 80%, Sp 85%).

### **Strengths:**

Provides an approach to answering questions frequently posed to residents, GP's, and palliative care physicians. Evidence based prognostication tools including palliative performance scale, palliative prognostic score, and palliative prognostic index, are mentioned. Acknowledges the variability of disease progression and need for clinical gestalt in prognostication.

### **Weakness:**

Majority of studies are completed in cancer patients and may not be entirely relevant to palliative patients dying from non-cancer disease processes. Most studies do not include cancers & diseases that commonly affect the younger population (i.e., synovial sarcoma in a 20 year old).

**Relevance to Palliative Care:** Many patients on a palliative care ward can benefit from accurate prognostication. Underestimation can cause families to believe they were robbed of time. Overestimation may cause excessively aggressive use of toxic treatments or a delay in referral to palliative care services.