

## Ten Steps to Better Prognostication

The following table illustrates several aspects in the formulation (foresee) and communication (foretell) of prognosis. In utilizing these steps, the clinician begins with the primary illness including its current stage and complications. It is known that functional status is a significant factor affecting survival in advanced or terminal illnesses. There are also some symptoms and tests that are incorporated into prognostic models as noted. Further, although there is variance in clinicians' ability to predict survival, it remains valuable as one incorporates the prior information into the experience and judgment of the physician to arrive at a reasonable prognosis. How this is shared with the patient and family depends a lot on what their goals and hopes are as well as how much/little they want to know. Rather than giving a specific estimated time of survival, it is prudent to frame the discussion within a range of possible times and their probabilities, given the fact that no one knows for sure and a wide variation in what could happen for this individual. That is, prognostic tools provide a population based set of statistics but which cannot readily reflect the illness trajectory of any one patient. Finally, one needs to review and reassess the patient from time to time to revise the prognosis, as it is a process not a proclamation. Ultimately, "staying connected" throughout the final trajectory is in general what is most appreciated.

Concept		10 Steps to Better Prognostication			Action Steps
<b>Foresee</b>	<b>Science</b>	Disease	1.	Start with an Anchor Point	<ul style="list-style-type: none"> <li>Obtain details of known survival stats by stage of disease, SEER web, etc; speak with expert about 1-,5-,10-Yr survival stats</li> </ul>
		Function	2.	Assess changes in Performance Status (amount; rate of change)	<ul style="list-style-type: none"> <li>Use a functional status tool which is part of prognosis (eg. PPS, KPS, ECOG) to assess illness trajectory</li> </ul>
		Tests	3.	Known physical signs and laboratory markers related to prognosis	<ul style="list-style-type: none"> <li>Eg. ↑WBC, ↓%lymphocytes, ↓albumin</li> <li>Eg. Delirium, dyspnea, anorexia, weight loss, dysphagia</li> </ul>
		Tools	4.	Utilize palliative or end-stage prognostic tools	<ul style="list-style-type: none"> <li>PPS, PaP, PPI, SHFM, CCORT, CHESS, nomograms, etc</li> </ul>
	<b>Skill</b>	Judgment	5.	Clinician Prediction of Survival. Would I be Surprised?	<ul style="list-style-type: none"> <li>Use your clinical judgment to formulate</li> <li>See if it fits with the above prognostic factors &amp; adjust accordingly</li> <li>Remember common optimistic bias &amp; adjust further</li> </ul>
<b>Foretell</b>	<b>Art</b>	Centre	6.	What is important to my patient? To the family?	<ul style="list-style-type: none"> <li>Who/what do they want to know/not know?</li> <li>Is it 'how long' or 'what will happen'?</li> <li>What are their goals; what is hoped for</li> </ul>
		Frame it	7.	Use probabilistic planning and discussion	<ul style="list-style-type: none"> <li>Ball-park range; average survival; most will live ...; outliers; talk in time-blocks; etc</li> </ul>
		Cautions	8.	Share limitations of your prognosis	<ul style="list-style-type: none"> <li>No one knows for sure; exceptions do occur</li> <li>Changes can occur at any time</li> </ul>
		Changes	9.	Review and Reassess Periodically	<ul style="list-style-type: none"> <li>"What is" will change</li> <li>Especially if 'trigger's arise</li> </ul>
		Follow-up	10	Stay Connected	<ul style="list-style-type: none"> <li>Discuss advance care planning as things may change further at anytime</li> <li>Initiate effective symptom control</li> <li>Involve inter-professional &amp; home team; furthermore, patients want their physician to remain involved, even close to death, and will feel abandoned otherwise</li> </ul>

**10 Steps to Better Prognostication. © M. Downing, Victoria Hospice Society, 2009**

PPS=Palliative Performance Scale; KPS=Karnofsky Performance Scale; PaP=Palliative Prognostic Score; PPI= Palliative Performance Index; ECOG=Eastern Cooperative Oncology Group performance status; SEER=Surveillance Epidemiology & End Results; SHFM=Seattle Heart Failure Model; CCORT= Canadian Cardiovascular Outcomes Research Team; CHESS=Changes in end-stage symptoms and signs.

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