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**PHAX**  
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## Prognostication

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**A study by Nicholas Christakis MD, Ph.D. (author of *Death Foretold*) shows that doctors are poor prognosticators.**

Physicians tend to be overly optimistic when dealing with prognosis. A recent study by Christakis illustrates this point. He asked 343 physicians to provide survival estimates for 468 terminally ill patients at the time of a hospice referral. Only 20% of predictions were accurate (as defined as within 33% of actual survival). Overall, doctors overestimated by a factor of 5.3! Every type of doctor tended to overestimate, although the more experienced physicians had less error. Inaccurate predictions were given for all types of patients, including cancer patients and those with chronic non-malignant disease. Interestingly, as the duration of the physician patient relationship increased, prognostic accuracy decreased. In other words, the longer a doctor knew his/her patient, the less likely he/she was to correctly predict prognosis.

### Why does this matter?

Undue optimism may hurt patients in multiple ways. First of all, this study showed that a large number of DNR orders are written in the last 2 days of life, and that physician knowledge about patient DNR preference is poor. Why review issues surrounding EOL care when the prognosis is rosy? In the same vein, undue optimism may lead to late hospice referrals. Hospice care, however, is most beneficial when utilized for months, not days, as commonly happens. Lastly, an overestimation of prognosis may cause patients to request futile care. Learning the true prognosis of a disease very late in the course is a difficult pill to swallow, and makes for an abrupt transition from curative/life-prolonging care to palliative care.

Appropriate prognostic information is essential for informed advance planning decisions.

### What to do?

Innumerable reasons have been put forward for why we overestimate prognosis. Probably the most important step in correcting the problem is recognizing that it exists. Ask yourself, "Would I be surprised if my patient died in the next year?" Answering "no" may trigger a re-assessment of the patient's current state and immediate future. There are many scientifically derived models of patient survival probability that can be used. Metastatic cancer has the most predictable course; assessing where a patient is along the dying trajectory is relatively easy. Other diseases such as COPD, CHF or Alzheimer's are more difficult to predict. This uncertainty however, can be an excellent starting place for discussion with the patient and family; communicating that one of the possible outcomes of an exacerbation is death allows you both to plan accordingly.

## References

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