

Prognosis and Options of Care

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Goals and Objectives

- Be able to communicate the prognosis with patient and loved ones.
- Learn and use prognostic indicators.
- Use functional status and trajectory of decline to improve prognostication.
- Be able to use the prognosis to develop options of care near the end of life.

Tuesdays with Morrie

- “Everyone knows they are going to die, but nobody believes it.”
- “But if they did, they would plan better.”

Mitch Albom

The Problem with Prognosis

- A poor or terminal prognosis is unacceptable
- Scientific advances
- Second (maybe third) opinions
- Centers of excellence
- Miracles

The Problem with Prognosis

- We get it wrong

Prognostication

- 1563 predictions from 8 studies
- In 27% of cancer pts. survival was over estimated by 4 weeks.
- Only correct to within 1 week 25% of pts.

Glare P. et al. BMJ 2003;37

Prognostication

- Prospective cohort study:
- Only 20% of predictions are correct
- Survival was over estimated by a factor up to 5.3

Lamont & Christakis;
Cancer. 2002;94

Prognostication

- Physicians are optimistic
- Over optimistic by a factor of 3
- Drs. predicted 6 weeks and pts. lived 2
- We are better very near the end of life

Christakis et al. BMJ
2000; 320

Prognosis

- Minutes to hours
- Hours to days
- Days to weeks
- Weeks to months

Minutes to Hours

- Decreased responsiveness
- Breathing pattern changes (Cheyne Stokes, Biots)
- Airway secretions (death rattle)
- Vasoconstriction (mottled)
- Hypo perfusion (pale, cold, clammy)

Hours to Days

- Delirium
- Debility
- Incontinence
- Poor airway protection, aspiration
- Sallow skin, decreased turgor
- Unstable vital signs, low oxygen sats.

Days to Weeks

- Weakness, muscle loss
- Exhaustion
- Cachexia, emaciation
- Loss of appetite
- Hyper somnolence
- Confusion, forgetfulness

Weeks to Months

- Emotional dynamics
- Second opinions
- Frequent medical visits and hospital admissions
- Weight, sleep, eating changes
- Polypharmacy, polydiagnostics

C.A.R.I.N.G.

- C Cancer stage IV
- A Admissions to hospital (2 in one year)
- R Resident of a nursing home
- I ICU admission, multi organ failure
- N Non cancer, already on hospice
- G Guidelines

Admission to ICU

- Hospital stay > 10 days
- Age 80+ with two or more co morbidities
- Stage IV malignancy
- Status post cardiac arrest
- Hemorrhagic CVA requiring ventilation

Prognosis by Disease

- Cancer
 - Good at survival rates (per groups not per pt.)
 - Common to over estimate survival
- Non cancer
 - Very poor at prognosticating chronic disease
 - Dementia
 - End stage heart disease
 - Failure to thrive

Prognosis by Functional Status

- The less you can do, the worse you will do

Functional/Performance Status

- Karnofsky scale
- Palliative Performance scale

Trajectory of Decline

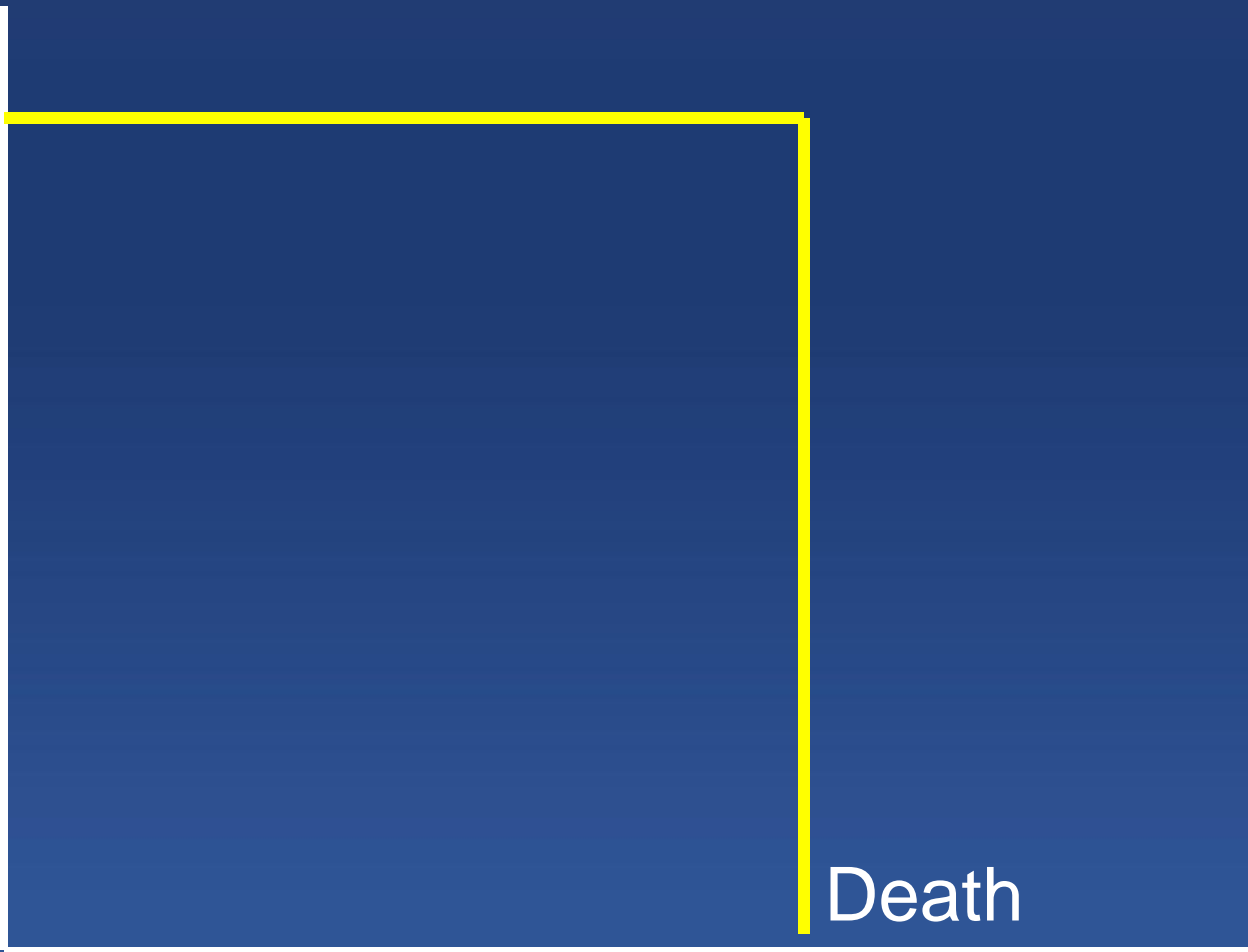
- Declining performance status
- Take a turn for the worse
- Dwindles
- Spiraling decline
- On the slippery slope
- One foot in the grave
- Circling the drain

Trajectory of Decline

- Dropped like a rock
 - 10% of deaths are sudden
 - Accidents, Asystole
- Steady decline
 - Metastatic cancer
 - Alzheimer's
- Good days and bad days
 - CHF, COPD, CVA

Sudden Death

Functional status

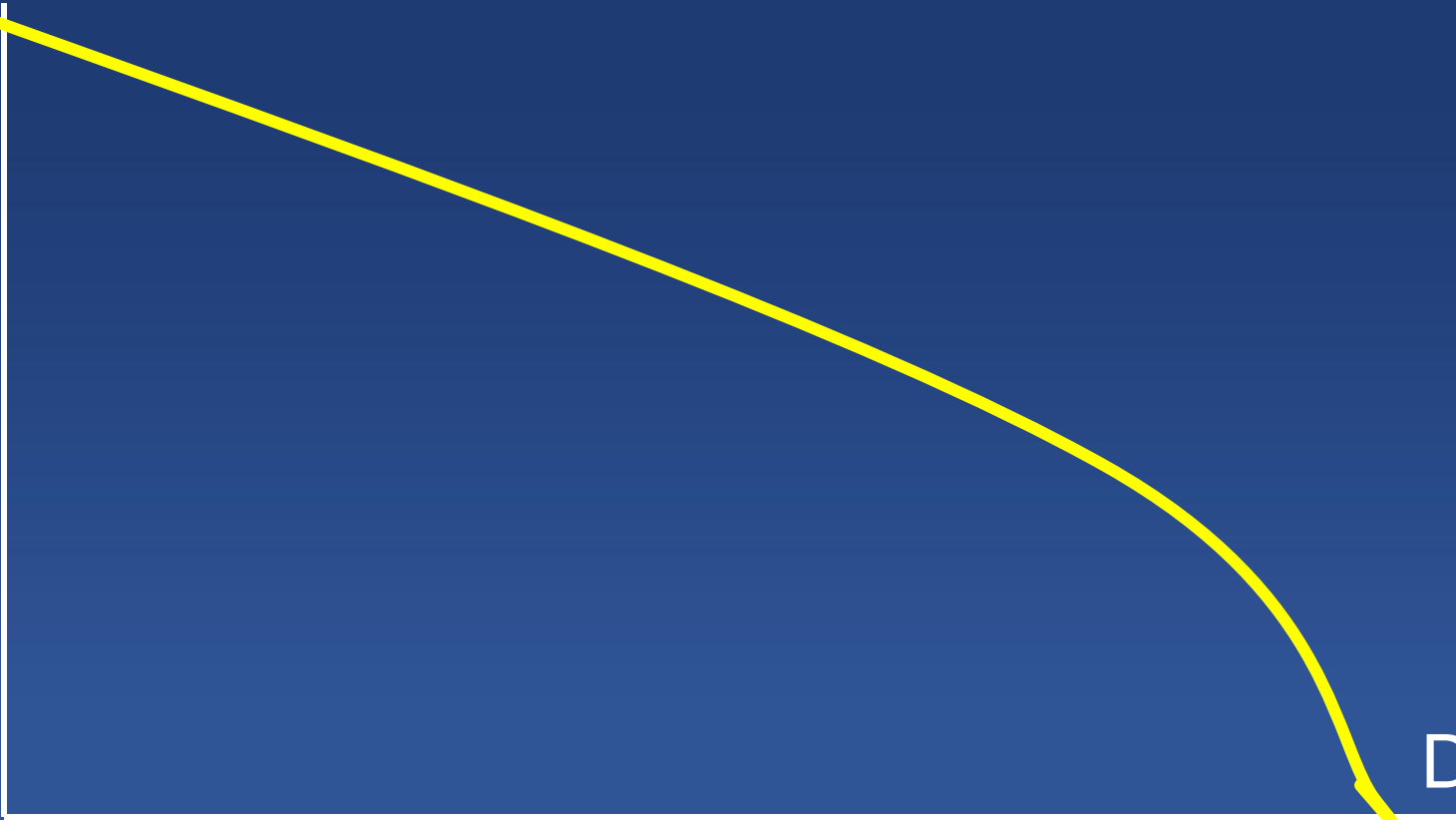


Time

Death

Gradual decline

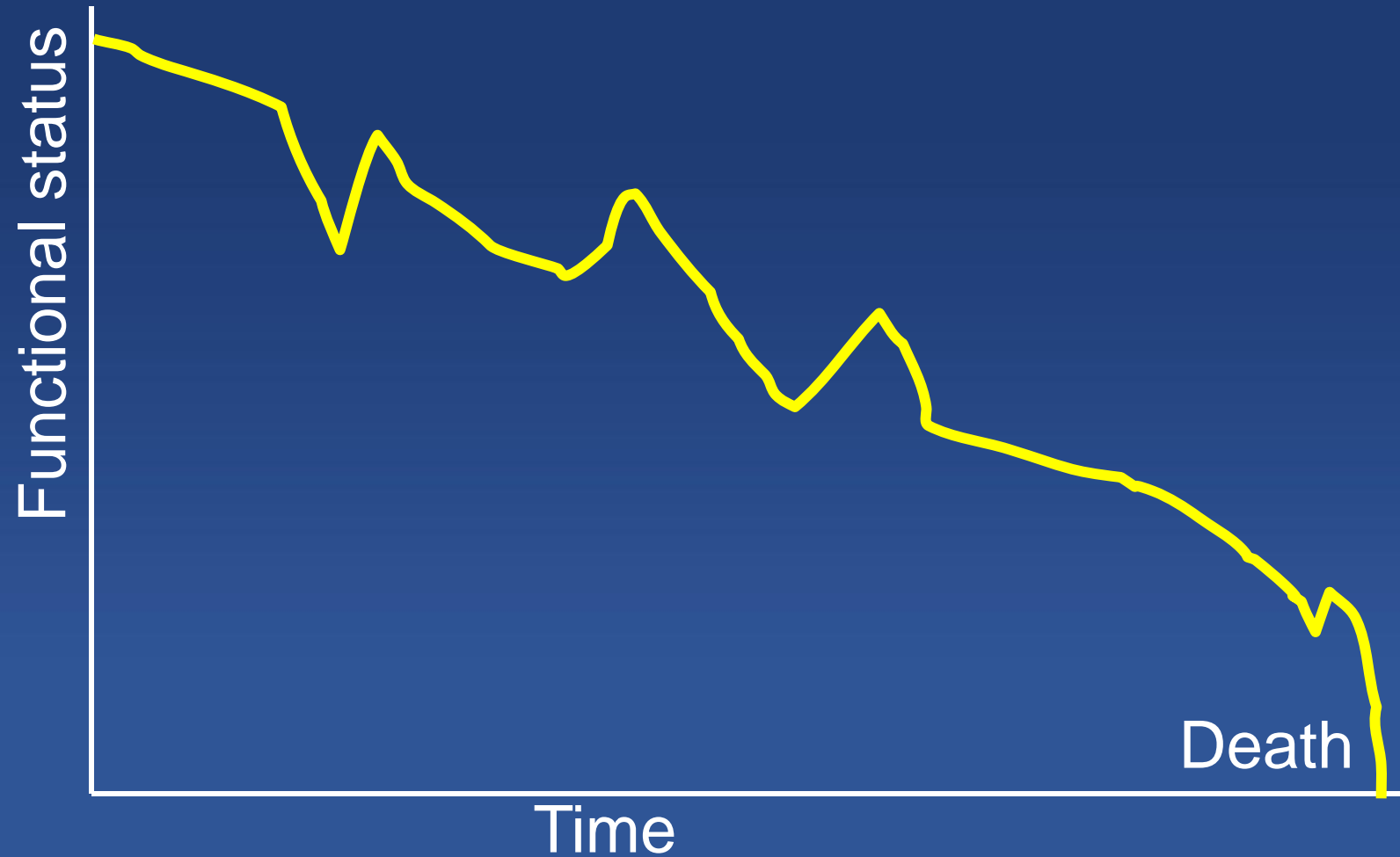
Functional status



Time

Death

Variable decline



Prognosis Markers

- Low lymphocyte count ¹
- Low albumin ²
- Low Body mass index

1. Am Heart J 2001;142

2. Peralta, Pinsky, Medscape 2012

Options of Care

- Hope

Options of Care

- Continue hospital care
- Home with family
- Home with Home Health Agency
- Nursing home
- Hospice (anywhere)

Thank you

