RESUSCITATION ETHICS:
Was CPR Meant for 90-yr olds?

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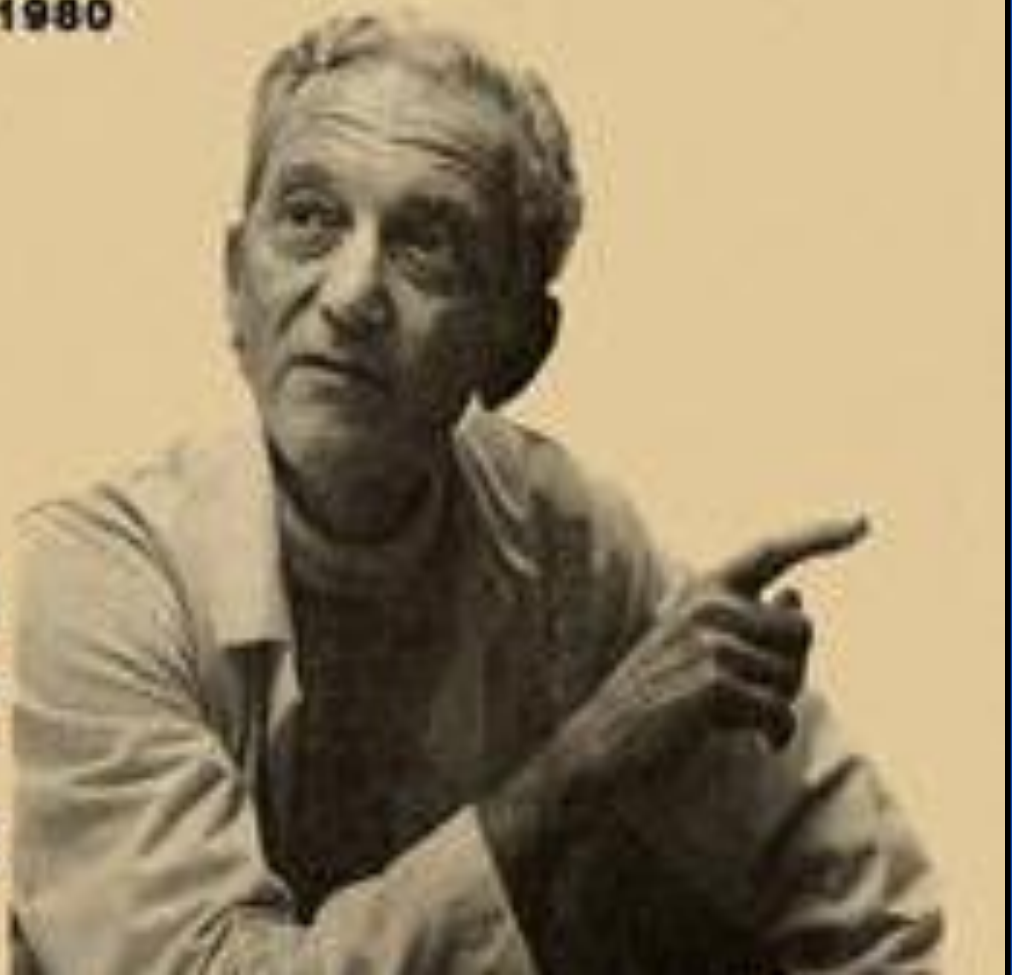
THE LION FOUNDATION
Here for good

PITT

AUGUST/1980

Resuscitation Research Center Opens



CPR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RESUS CITATE

BACKGROUND

Inappropriate care of dying is morally disturbing, expensive yet common the world over.

- 11% **total lifetime** costs spent in Last yr of life
- 7.8% **total lifetime** costs spent in Last 30 days!!
- Most of these costs due to Acute, life sustaining (death-prolonging) care-what WE do in ED! *Yu, 2008*

Hospitals resort to hiring doctors

PHYSICIAN SHORTAGE PROMPTING MOVE, ADMINISTRATORS SAY

Cows lose their jobs as milk prices drop

By By Scott Calvert

EASTON, Md. — As his 300 dairy cows hunkered over for their Monday afternoon milking, farmer Eric Foster pondered his sudden misfortune. Those Holsteins and Jerseys, pouring gallons during a recent milk

This unlikely combination of forces has hit Foster's milking parlor and other dairy operations with a vengeance. After soaring in 2007 and remaining high in much of 2008, milk prices paid to farmers have collapsed and are expected to remain flaccid, even as feed and fuel stay fairly costly.

Some dairy farmers have shut

going to be in the dairy b

Economists are concerne

Although consumers sho benefit from somewhat lo prices at the supermarket, drop in the value of milk p rests a grim outlook for th


HELP U
WE
NEEDS
FOODS

Agenda

- EOL Futility: Definition & Opinions
- Costs of EOL Care *(<costs NOT caring)*
- Factors Contributing to Costs
  - Patient / Family
  - Physician
  - Systemic
- Ethics: No Harm & Stewardship
- Future: What Can We Do?

Medical FUTILITY:
Tx that cannot achieve its medical goal

Working Definition:

Medically non-beneficial

DEATH-EXTENDING

"A physician has no ethical obligation to provide a life-sustaining intervention that is judged futile…even if the intervention is requested by the patient or surrogate."

ATS Statement. *Ann Intern Med* 1991; 115: 478

FUTILITY: 3 TYPES

(1)Physiologic futility: (DON'T START)

- Medical Nonsense/ineffective or harmful
- Medical Impasse: eg. Pt's illness makes it physiologically impossible for treatment to work

(2)**Probabilistic futility** (usu STOPPING)

- Very low chance of success
  (e.g. 1% chance of surviving CPR is futile CPR)
- Never absolute, entails **value judgments** @ what risks (%s) worth taking

(3)Doctor-pt. goal disagreements

- e.g. a vent may not promote health but family wants prolong life/death; v QOL/cost/3rd party duties

(2) PROBABILISTIC FUTILITY

(1) PRE-HOSPITAL

ALS TERMINATION RULE

(1) UNWITNESSED

(2) NO BYSTANDER CPR

(3) NO SHOCK DELIVERED B4 TXPRT

(4) NO ROSC PRIOR TO TXPRT

(BLS TERM RULE ALL BUT (2) ABOVE)

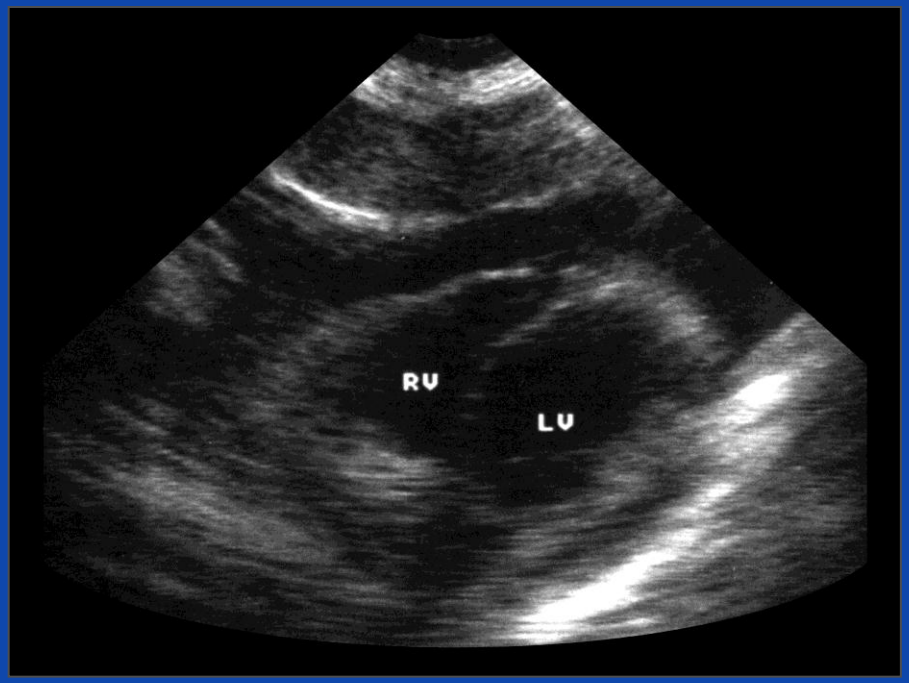
CEASE EFFORTS IF PT MEETS PREHOSP TERMINATION RULE WITHOUT ROSC

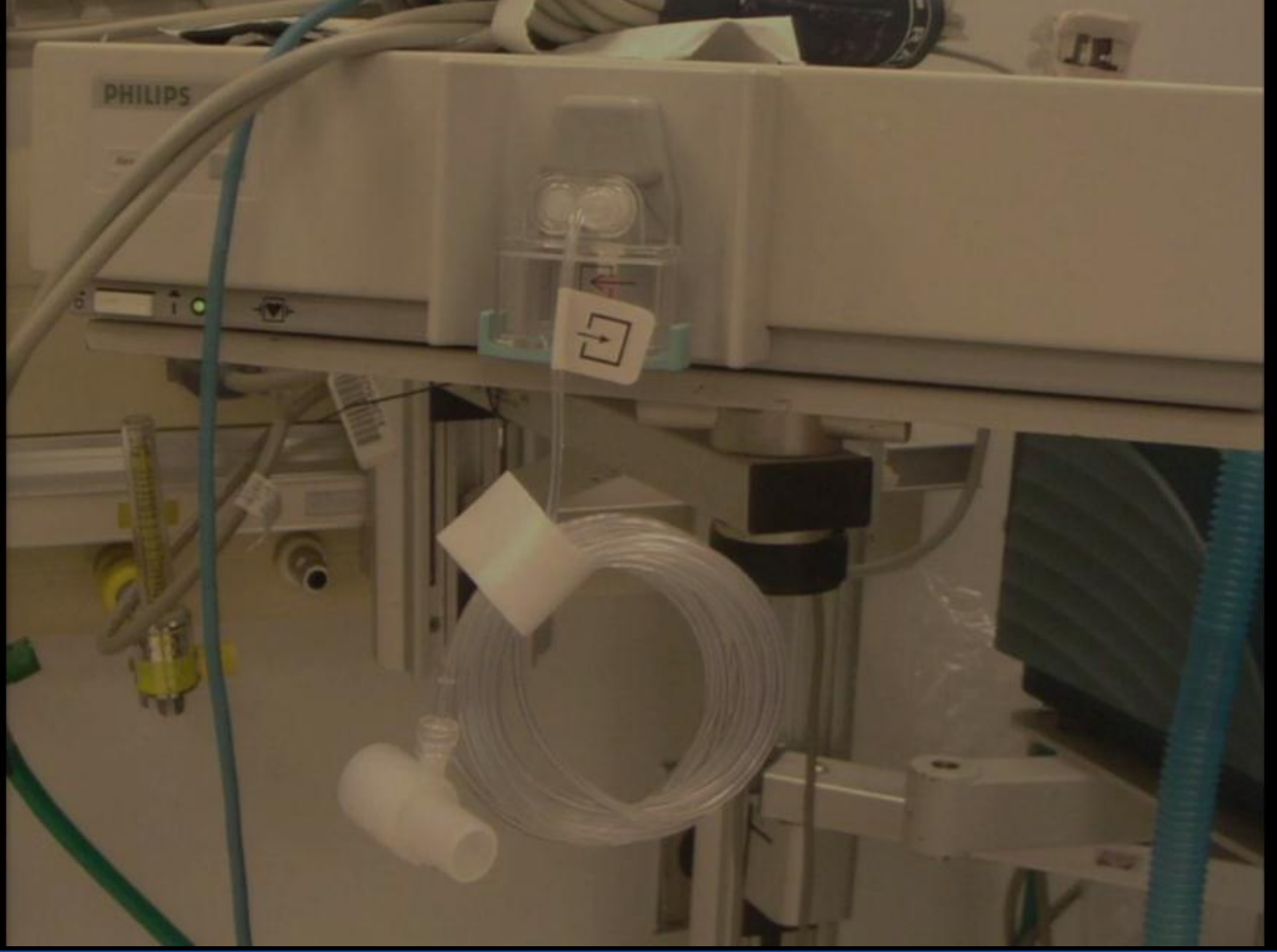
(2) PROBABILISTIC FUTILITY

(1)PRE-HOSPITAL

(2)IN-HOSPITAL (ED)

(1) BEDSIDE ECHO SHOWS STANDSTILL

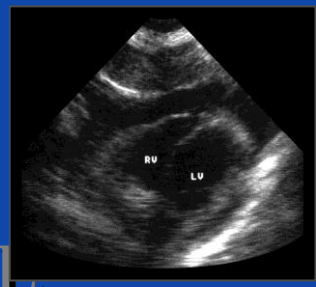



PHILIPS

(2) PROBABILISTIC FUTILITY

(1) PRE-HOSPITAL

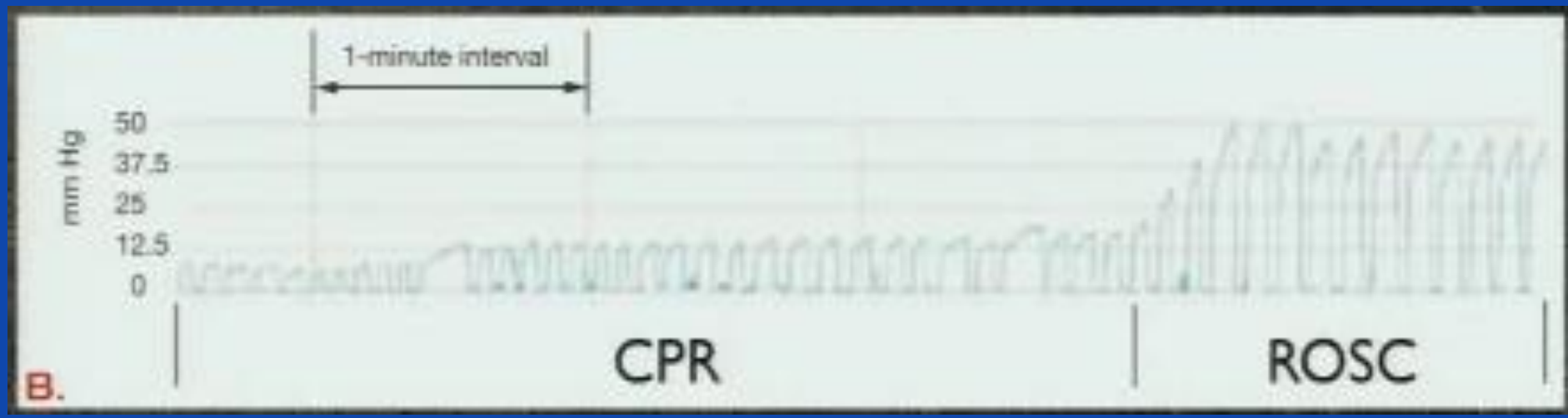
(2) IN HOSPITAL

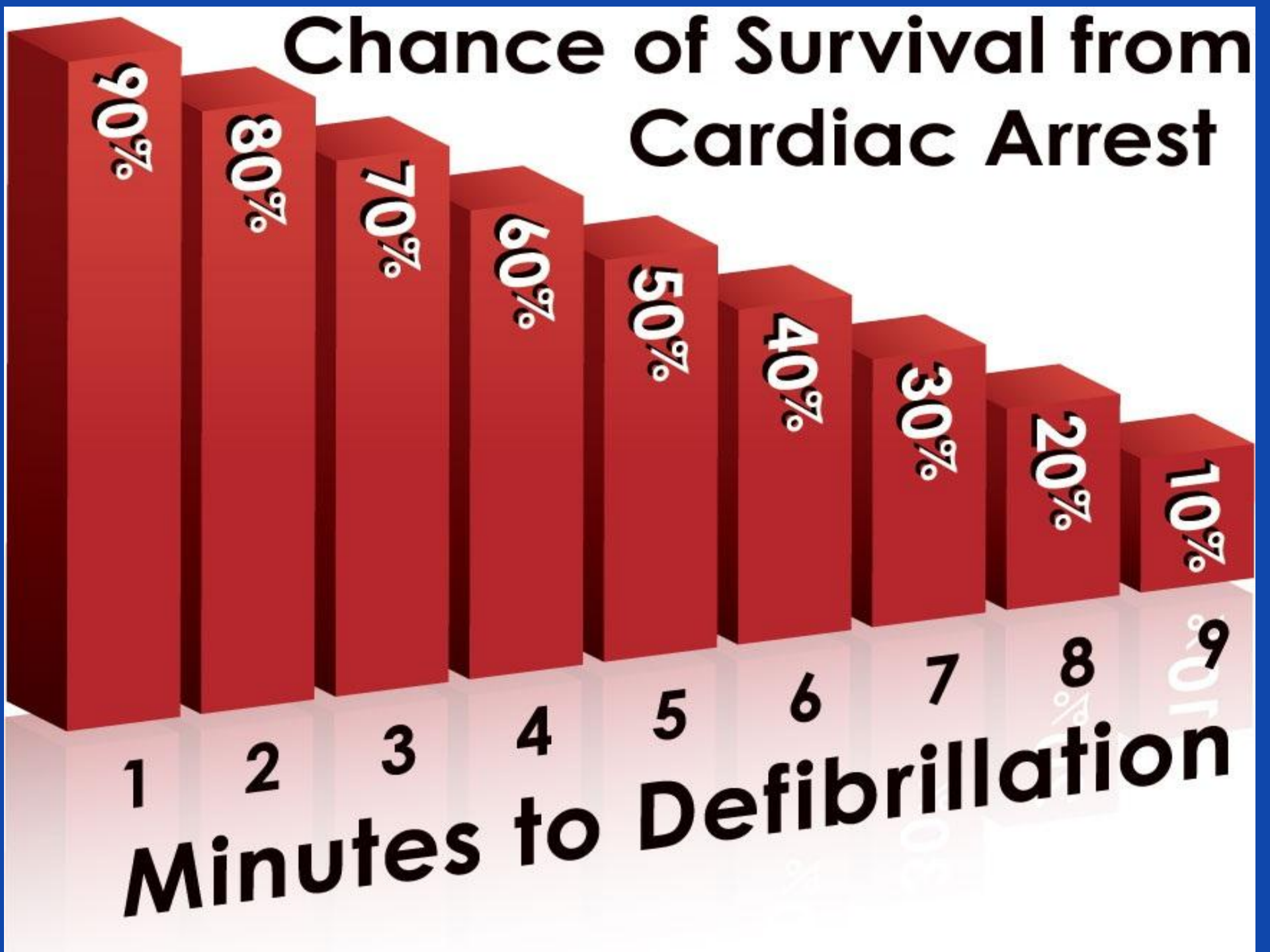


(1) BEDSIDE ECHO SHOWS STANDSTILL

(2) Low ET CO2 (<10-15 mmHg)

(1) After 20min ACLS, 100% NPV for survival




Chance of Survival from Cardiac Arrest
90%
80%
70%
60%
50%
40%
30%
20%
10%
1
2
3
4
5
6
7
8
9
Minutes to Defibrillation

AGE & RESUS FUTILITY?

(1) PRE-HOSPITAL (<80yrs?)

(2) IN HOSPITAL (NRCPR—Larkin et al)

NEURO INTACT SURVIVAL TO DISCHARGE

(1) U-SHAPED AGE CURVE

(2) SEPSIS, MALIGNANCY, MSOF: ALL STRONGER PREDICTORS THAN AGE

CONCLUSION?

AGE is **not** the strongest predictor & usually confounded with other issues (incl provider bias!).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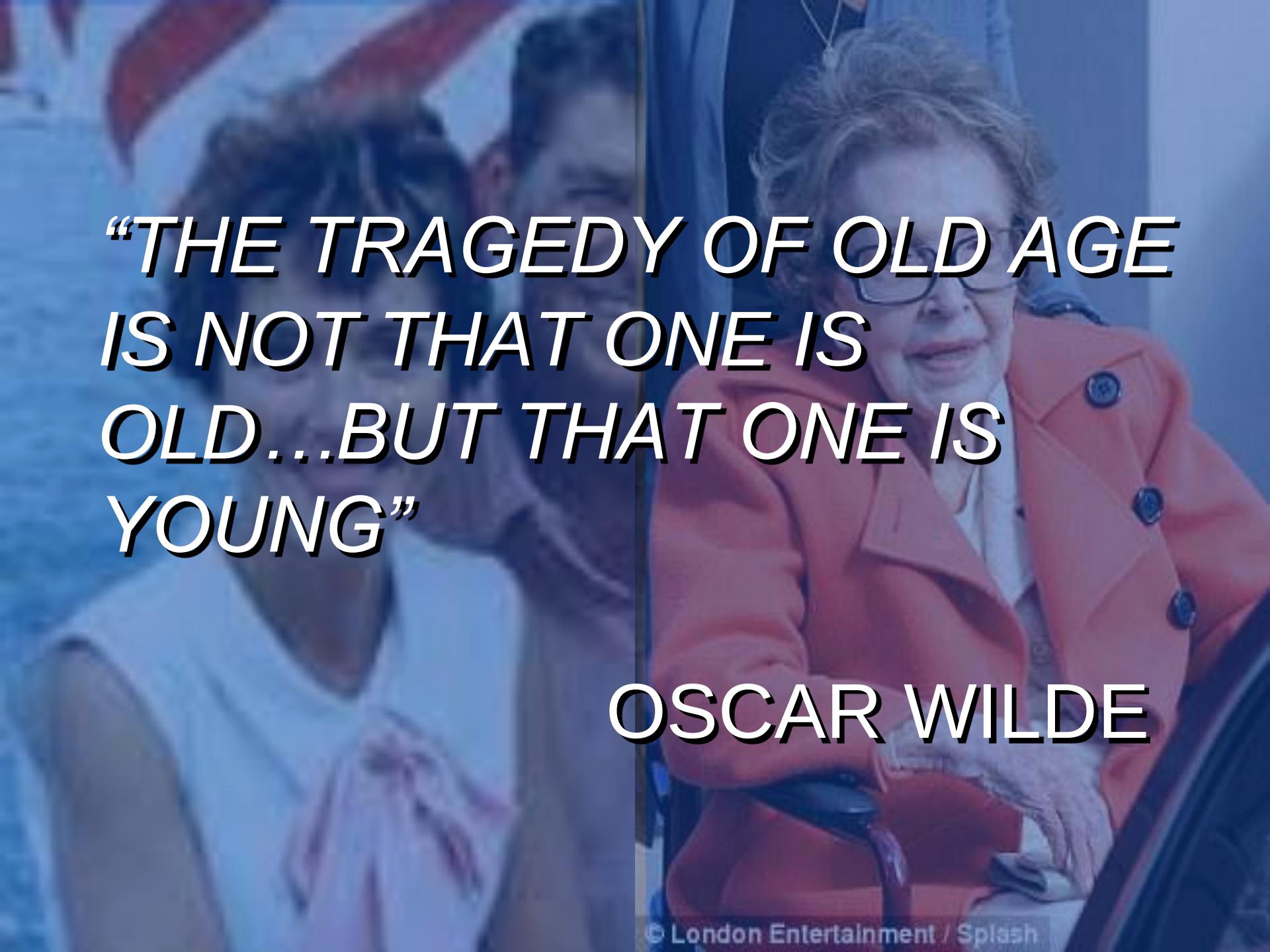
“THE TRAGEDY OF OLD AGE IS NOT THAT ONE IS OLD…BUT THAT ONE IS YOUNG”
OSCAR WILDE
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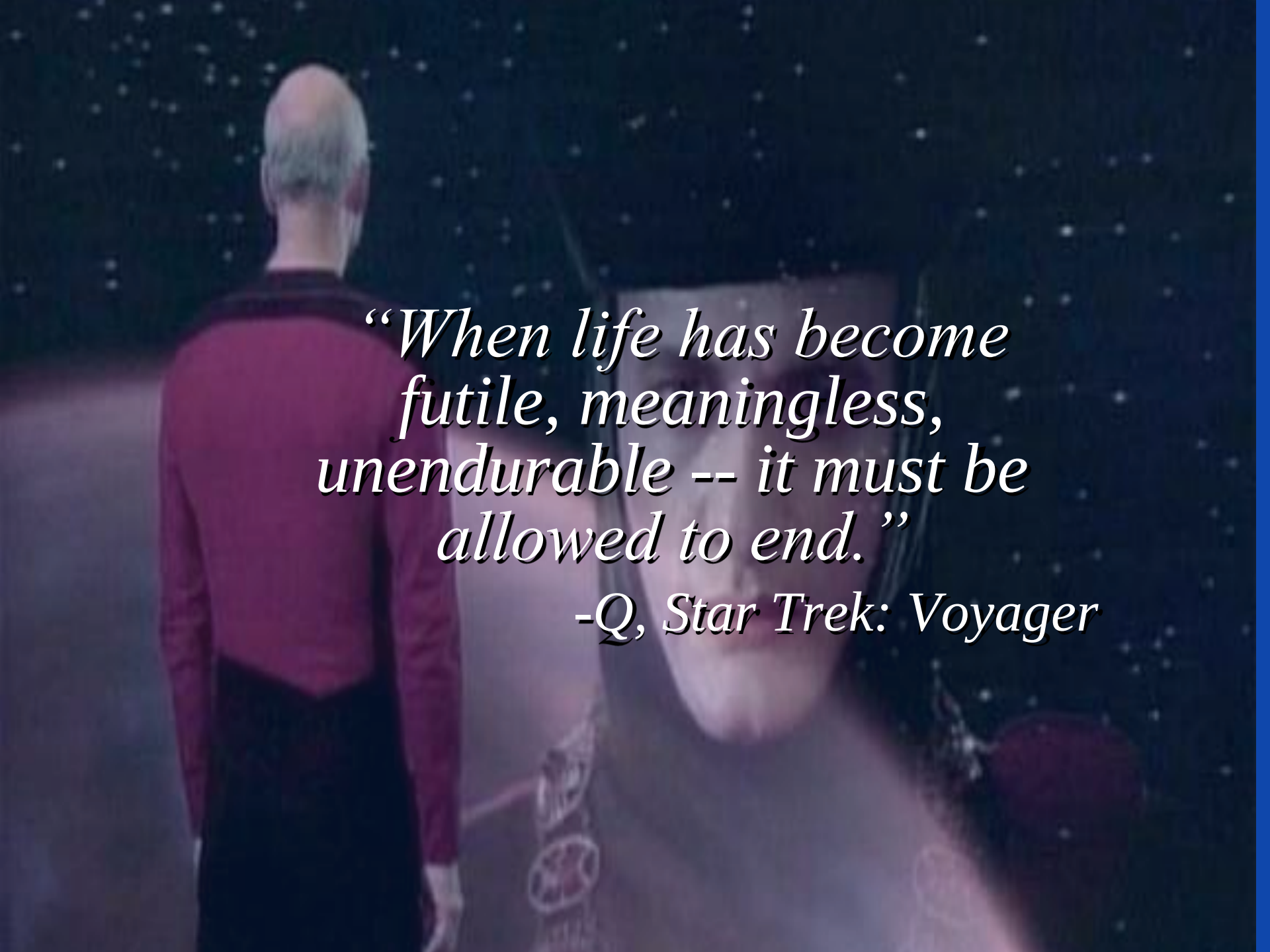

“When life has become futile, meaningless, unendurable -- it must be allowed to end.”
-Q, Star Trek: Voyager

EP OPINIONS ON FUTILITY

- Futile EOL resuscitation is on minds of ER docs the world over (Survey EuSEM; 34 of 40 Countries. Larkin, DeLoos, Goldfrankl)

- ~80% of clinicians believe physicians should not provide futile care (~20% believe they should)

- Futile ED EOL care is provided daily; justifications vary

- MDs believe futile care causes pain & suffering, wastes resources, undermines integrity, & is **unethical**

Bottom line: ***We don't believe in futile care,***

but we provide it all the time!!!☹

Higher Costs → Lower Quality of Death

-Zang et al Arch Int Med, 2009; 480-488.

2.4 Million Deaths/yr: 2.1 Million die under healthcare

Health Affairs 2004;23:194-200

Hospitals:
43% of deaths,
~15% of pts lim tx plans,
85% of deaths w/ lim tx plans

Nursing Homes:
21% of deaths,
~65% lim tx plans
90% of deaths have lim tx/DNAR
Eg. dementia

Home Hospice:
20% of deaths,
100% lim tx plans,
100% of deaths have lim tx. Eg. Pancreas cancer

1 in 5 US deaths occur in an ICU; *Angus et al*

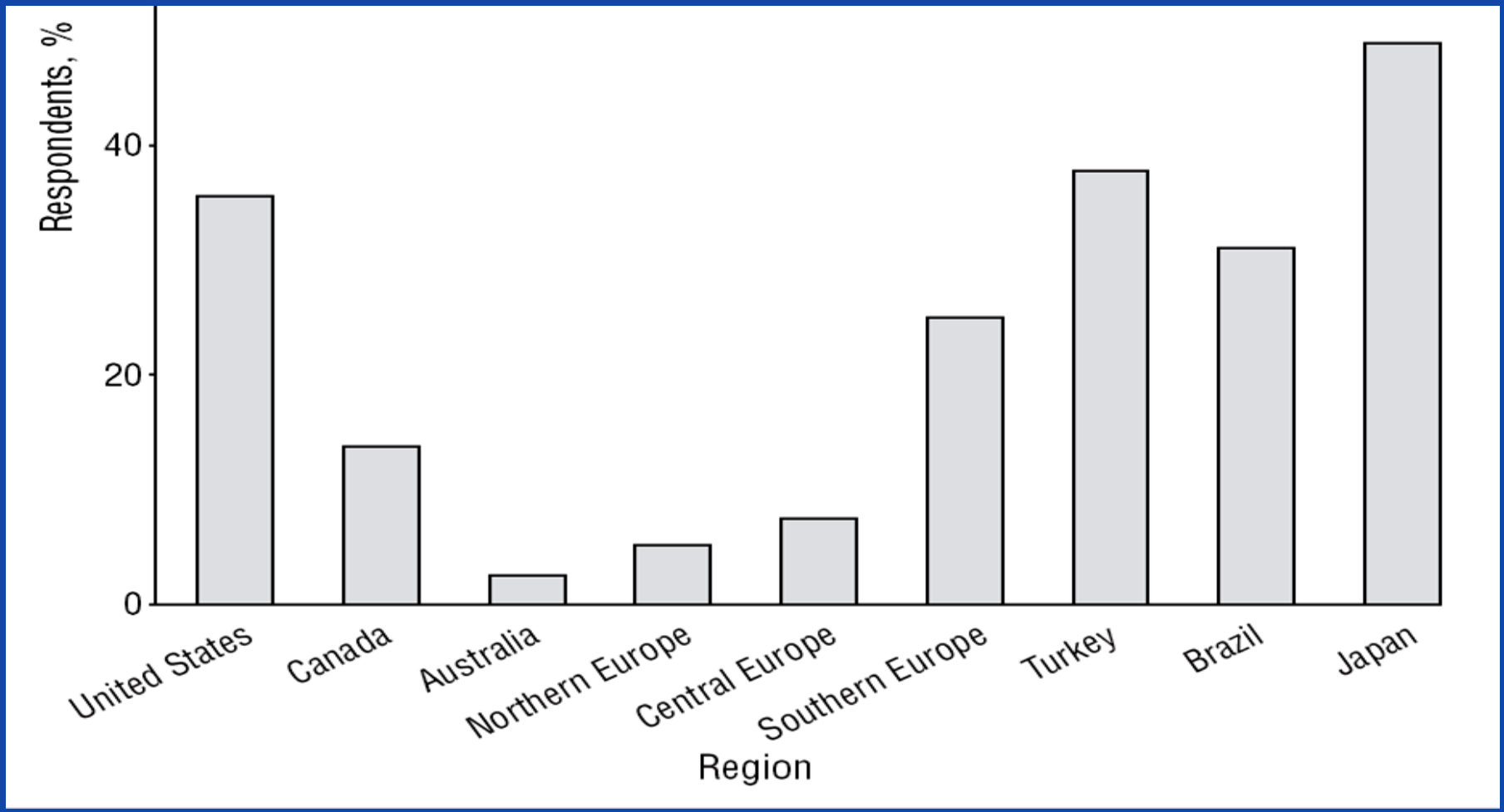
>75% die in institutions

20% die in hospice

EOL COSTS VARY

- 3-Fold Variation (Dartmouth Atlas of Care 2008)
- Profound regional & ethnic variation in resource use *-Fisher et al NEJM 2009*
  - Mass General: 17 days in hospital; 40 doctor visits
  - Mayo Clinic: 15 days in hospital; 24 doctor visits
- DNAR rates also vary: 10 fold!
  - Higher in Smaller, non-profit, non-academic settings - Arch Int Med 2005;165:1705-12.
- EOL Costs higher in large acad med centers

% Who Would **"Do Everything"** for a 55yo Patient in a Persistent Vegetative State?



Yaguchi A et al., Arch Intern Med. 2005;165:1970-1975

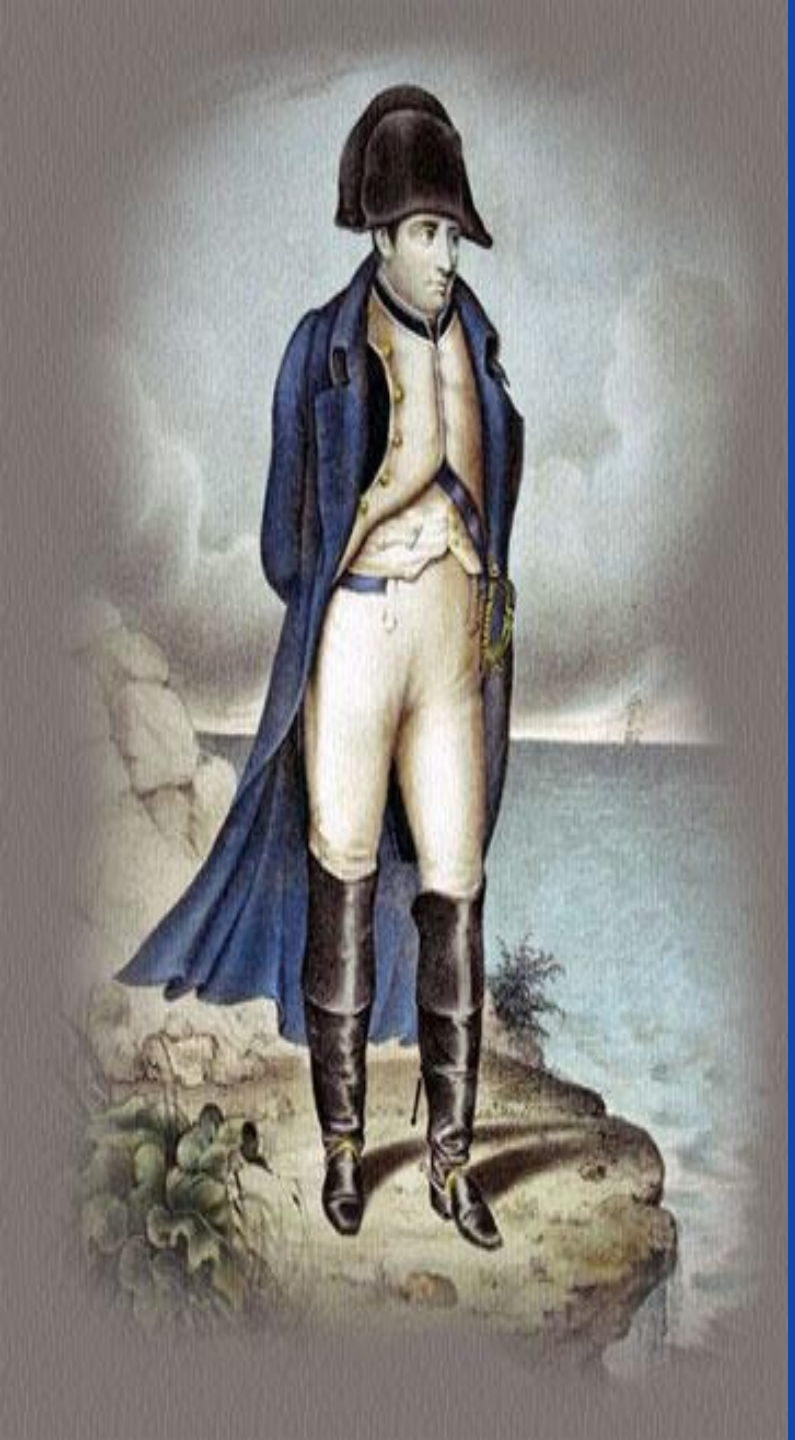
WHY EOL CARE $ EXORBITANT?
PATIENT FACTORS

- Only 43% patients claim some Advance Directive (AD)
  - only 25% say MD has copy
- Odds of AD increase w/ Age, reading ability, education (all P < .001)
  - Am J Med 2006;119:1088.e9-13. Prospective, 508 adults, 4 academic IM sites in NY, 2004. Multivariate
- **Desire to <u>avoid</u> life-prolonging tx**
  - **- Econ. hardship (OR= 1.3)**
  - - Pain (OR= 1.3)
  - - Age (OR= 1.3 per decade)
  - **- Depression (OR=1.5)** Arch Int Med 1996:156:173
- **Desire for <u>wanting ALL</u> measures to extend life**
  - **<u>Having dependent children</u>: (OR>>2)** Palliat & Supportive Care 2006; 4:407-17.
  - **<u>Religiosity</u>: (OR=2: 95% CI=1.1-3.6)** J Clin Onc 2007;25:555-60. <u>230 CA pts</u>.


Church Of
The Cross
DONT LET WORRIES
KILL YOU
LET THE CHURCH
HELP
United Methodist Church

WHY EOL CARE $ EXORBITANT? *PHYSICIAN* FACTORS

- 1/3 MDs uncomfortable discussing terminal care/EOL
  - Arch Int Med 1990:653 ;Psychol Rep 1998;83:123-8.; CMAJ 2000;163:1255-9
- If MD uncomfortable with death;
  - MORE likely to
    - Be an oncologist Cancer 2010;998-1006
    - "do everything"/Tx aggressively
    - Use derogatory/negative terms (Eg. "gomer")
  - LESS likely to
    - Disclose prognosis to Pt (v family)
    - Sit down & speak about goals of care to PATIENT!
    - Enroll a proxy decision-maker Death Studies 2007;31:563-572
- MDs overestimate survival by 5.3 fold
  - 63% over optimistic; 17% over pessimistic. Ann Int Med 2001;134:1096-105. Prospective,5 outpatient hospices, 343 MDs, 468 terminally ill patients on admit, median survival: 24 days.



“Doctors will have more lives to answer for in the next world than even we generals.”

Napoleon Bonaparte

Miscellaneous

■ **Dog attack** — Lower Duck Pond, Lithia Park, Ashland. Police responded to a report of two dogs running loose and attacking ducks at about 11:20 a.m. Sunday.

The officer cited a resident for the loose dogs. The duck refused medical treatment and left the area, according to police records.

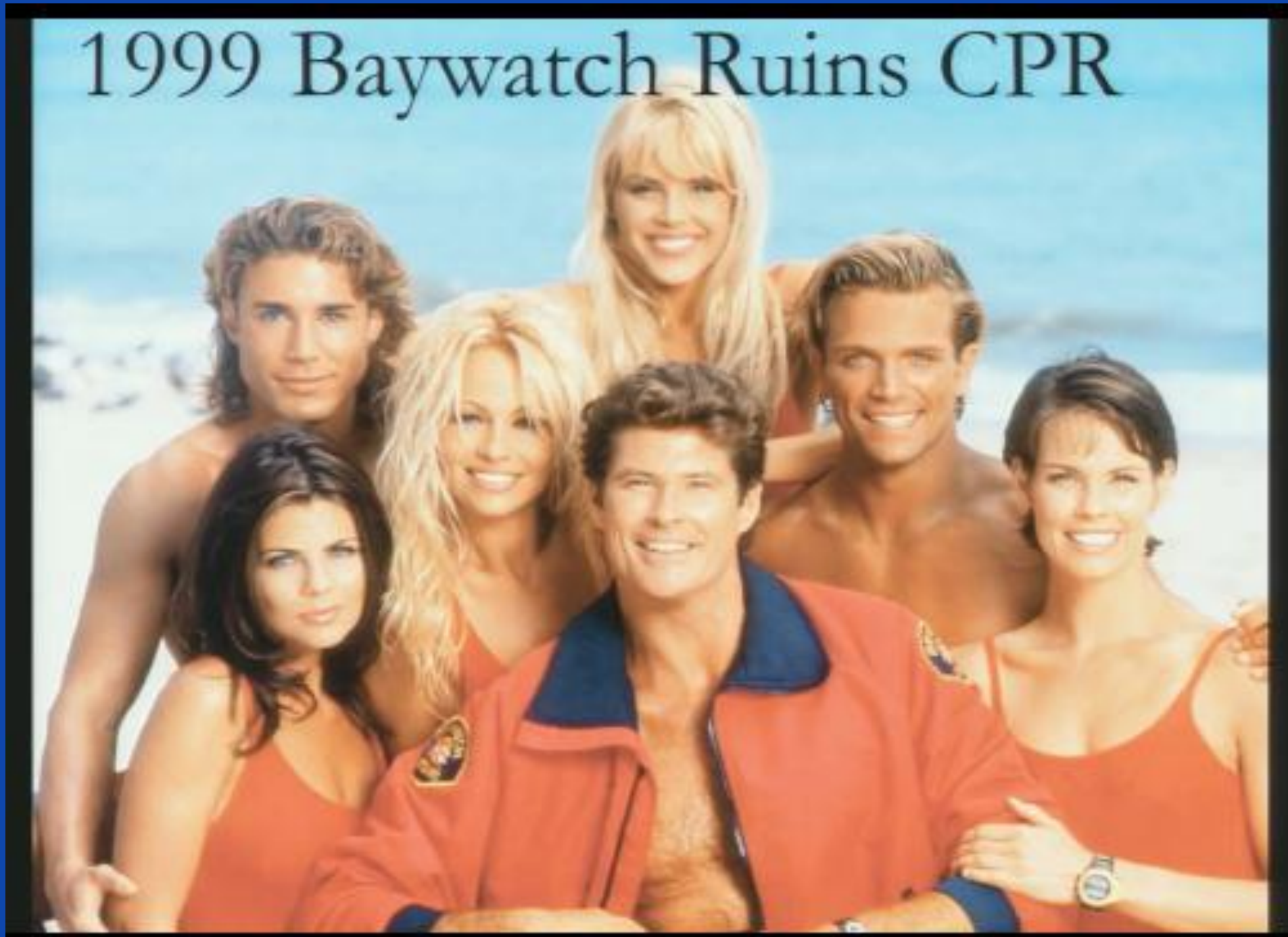
WHY EOL CARE $ EXORBITANT?
PUBLIC FACTORS

- Most EOL care determined by health care systems;
  - not pt wishes (Eg. UAR case)
- Policy failures: DNAR/DNR, POLST, ADs, etc.
  - SUPPORT Study shows desires of patients rarely honored
- Payors: Gross lack of **transparency** about costs
- FRAGMENTATION
- PRESS/Media madness --> medical mis-understanding, unrealistic expectations, requests for LST/CPR

50 YEARS OF CPR

Technology may enhance our ability to prolong life, but issues arise:

- "Appropriate use" at End Of Life
- Resulting QOL often burdensome to patients, families, & society (e.g. PVS)
- Marginal benefits to pts & families
- Micro & macroeconomic issue (e.g. Opportunity costs)
- The "CULTure" of Resuscitation


1999 Baywatch Ruins CPR

"ER/Chicago-Hope Effect"

All Chicago Hope, ER, & Rescue CPRs:

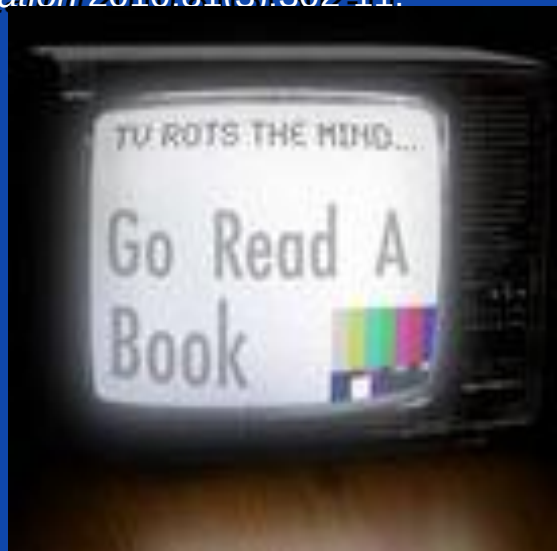
% survive to discharge?

67%- *NEJM* 1996;334:1578-82.

Public Perception:healthy survival after CPR = ***65%.***

- Larkin & Marco, *Acad Emerg Med* 2000;7:48-53.

REALITY: discharge after inpatient CPR is 18%, less w/ co-morbidities or OOHCPR. (# inflated by many DNAR opt outs) Larkin, Copes, *Resuscitation* 2010:81(3):302-11.



- Only 19% of pts know post-CPR prognosis.
- When informed of px, 37% change living will
  - J Crit Care 2005;20:26-34.325-bed hosp 82 pts w/ living wills

CPR: Ritual?

RESUSCITATION as RITUAL:
SCIENCE or RELIGION @ End of Life?

- Despite low successs restarting hearts "too good to die," **CPR** remains a modern death ritual

-Medic-Alert bracelets v. religious jewelry

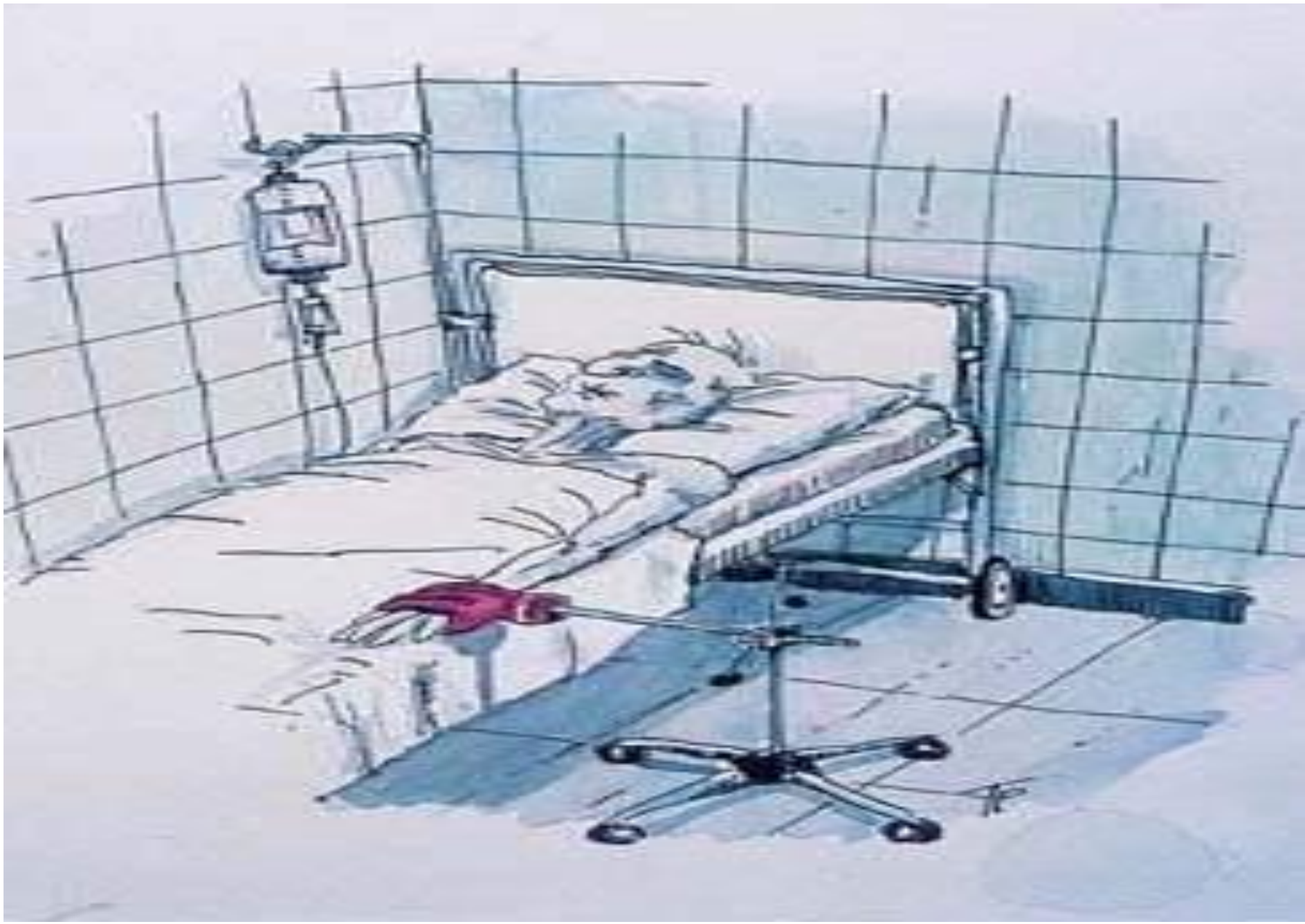
-AEDs adorn walls v. religious painting

-Call 911/EMS v. Calls to Clergy

-Chest compressions v. Laying on hands

-Epinephrine v. Holy Water

-Defibrillator gel v. **Anointing Oil**



"He summoned the Twelve and began to send them out two by two . . .
…**They anointed with oil many who were sick and cured them"**-(Mark 6:7-13).

IS FUTILE CPR STILL USEFUL?

YAŞAM RİTÜELLERİNİN SONU: BOŞUNA KARDİYOPULMONER RESÜSİTASYONUN YARARI

Gregory L. LARKIN, MD

***Turkiye Klinikleri J Med Ethics* 2004,** 12:157-163

. Larkin G

Turkiye Klinikleri J Med Ethics 2004, 12:157-163

- Bazı zamanlarda bir papaz ve bilim adamı olarak kanımca, mükemmel bir klinisyen, hastasının yararına öncelik tanımalı ve eninde sonunda hem sanat değeri, hem de bilimdeki sınırlarını görerek kardiyopulmoner resüstasyonun yararını dengelemelidir.

Rate Futile CPR:
1 to 10

- Grossly inappropriate *"goodbye"*?

or

- Reassuring EOL Ritual?

- 1=*worthless* 10=*awesome!*

Futile CPR:
Reassuring EOL Ritual?

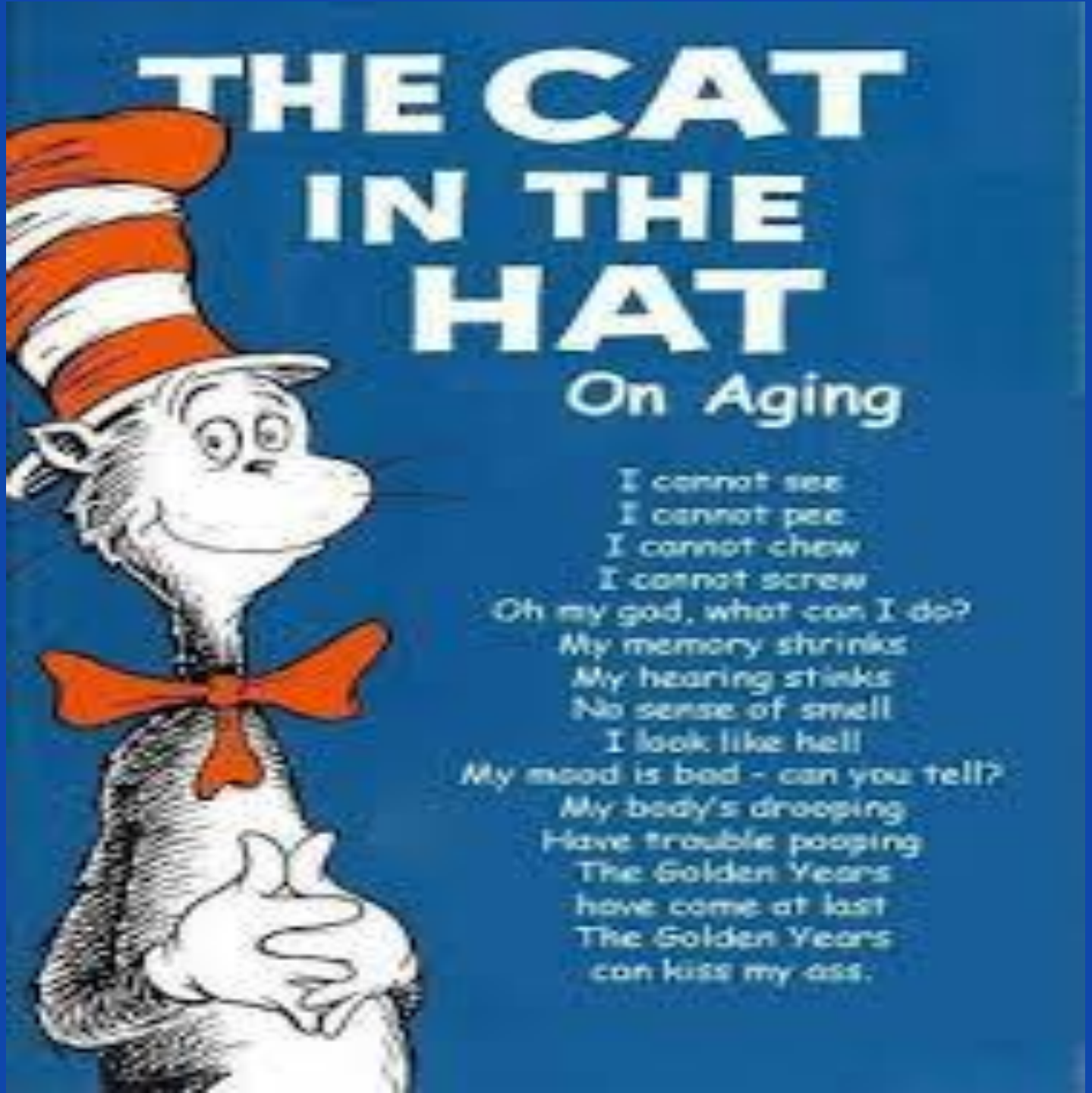
"Futile CPR has a limited but legitimate place in the practice of medicine." Truog RD. Is It Always Wrong to Perform Futile CPR? *N Engl J Med* 2010; 362:477

- 2 year old boy w/ large frontal encephalocele
- "At the time we began our resuscitation efforts, I believed that this child was beyond suffering, whereas the psychological needs of his parents were both clinically and ethically significant."

AGREE? …. DISAGREE?

…Have you ever run a *SHOW* CODE?

…Have you ever run a *SLOW* CODE?


THE CAT IN THE HAT
On Aging
I cannot see
I cannot pee
I cannot chew
I cannot screw
Oh my god, what can I do?
My memory shrinks
My hearing stinks
No sense of smell
I look like hell
My mood is bad - can you tell?
My body's drooping
Have trouble pooping
The Golden Years
have come at last
The Golden Years
can kiss my ass.

ACEP Futility Policy

- EPs have no ethical obligation to render treatments they judge have no realistic likelihood of medical benefit to the patient
  - EP judgments in these matters should be unbiased,
  - based on available scientific evidence, &
  - Societal & professional standards …

- [For] patients in cardiac arrest who have no realistic likelihood of survival…EPs should consider withholding or discontinuing resuscitative efforts, in both the prehospital and hospital settings
  - ACEP Non Beneficial ("Futile") Emergency Medical Interventions Policy (Approved 1998; Reaffirmed 2002; Reaffirmed 2008)

ETHICAL PRINCIPLES: *primum non nocere*

"first, no harm" *(nonmaleficence)*

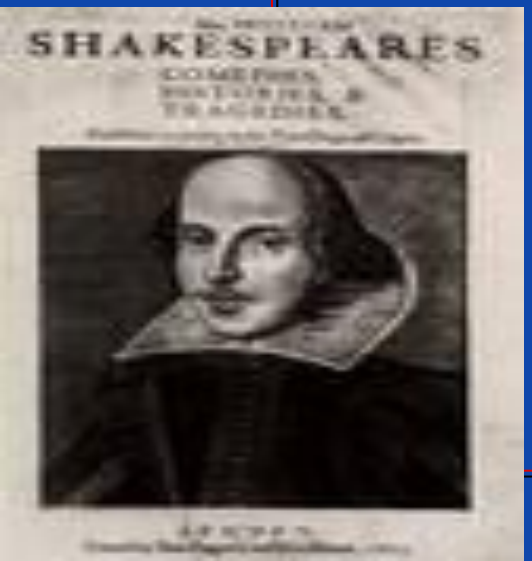
- Do non-beneficial treatments harm patient dignity if lead to poor outcomes (e.g. PVS) ?

- Do non-beneficial tx that threaten to bankrupt patients & families harm their legitimate economic interests?

- Do ED txs that exile pts to death in the ICU harm interests when they lead to PTSD in 14% (10-19%) & Depression in 18% (14-24%) of family members? -*Chest* 2010;137:280-7. Prosp, multivar, 226 families

"You do me wrong to take me out o' the grave." --- King Lear IV:vii

Vex not his ghost. O, let him pass!
He hates him
That would upon the rack of this tough world
Stretch him out longer.
-King Lear, v



WHY STEWARDSHIP?

- Dealing fairly & rationally with finite resources is key EP skill;
- EPs routinely make allocation & triage decisions, set in motion dominoes of diagnostic testing, treatment, transfers, referrals, & admissions.

- Legislative, judicial, & now economic mandates or **"shared accountability" schemes** have placed EPs @ eye of rationing storm.

- We must provide efficient/cost-effective services so ED/cc remains viable
- **Rationing is an inescapable consequence of living in a finite world.**

WHAT CAN WE DO?

Get comfortable with 5 things:

1. Death… (Thanatology & Euthanasia)
2. "Courage" & other priestly virtues
3. Allowing to die & termination of LSTx
4. Palliation..aggressively tx pain, anxiety, etc
5. Communication…micro, meso, & macro (POLST)

FERRY THE PATIENT THRU THE TRANSITION…

MAKE YOUR OWN ADVANCE CARE PLAN!!!!!!!

DEATH

It's permanent.

COMMUNICATE: ***GOALS***

"DNAR/Do not" Discussions

- Often Negative
- Technical, Confusing
- Raises fears of tx/MD & system abandonment
- Tacitly suggests choice of "treatment or nothing" when real issue is balancing **palliation v. prolonging** life/death as 1st tx goal.

Positive **"Goal"** Discussions

- Lets decide what's impt to pt & logical implications for tx.
- Address abandonment fears: "I'm going to be treating & caring for him/her. This meeting is about *how*."
- Enhance fam/pt sense of control
- Positive goals of tx assures family/pt they're being cared for by committed clinician to max. QOL- *even if we can't save them*.

COMMUNICATE: EMPATHY
Palliation & Care are never futile

- Attend to human **comfort** (n/v, ice chips, pillows, etc.)
- **Listen** (repeat back to patient/family to show listening)
- Avoid self-protective emotional distancing
  - Being a wounded healer is a good thing
  - Never abandon patient/family emotionally
- **Give Spiritual Support:** associated w/ enhanced Quality of Life ($p<.001$) J Pall Med 2006;9:646-57.)

***Remember**: Supportive communication impacts quality of life & more, quality of death*

Care, even if no Cure

- When deciding not to offer/ or withholding or withdrawing treatment
  - Still show *care* for patient & family
  - E.g. "DNR ≠ do not care"
- Includes:
  - Allowing families to be with the patient
  - Treating pain, dyspnea, & other symptoms,
  - Utilizing support personnel (e.g. nurses, chaplains, social workers, palliative care, pets)

PHYSICIAN-ASSISTED SUICIDE?

Courageous or Criminal?

"Neither will I administer a poison to anybody when asked to do so, not will I suggest such a course."

- Hippocratic Oath

"Too many die unnecessarily bad deaths -- deaths with inadequate palliative support, inadequate compassion, and inadequate human presence and witness. Deaths preceded by a dying marked by fear, anxiety, loneliness, and isolation. Deaths that efface dignity and deny individual self-control and choice." *-Jennings B, et al Hastings Ctr Report,2003;33 (2):S3-4.*

CONCLUSION

- Know Pre-hosp & In-Hosp FUTIILITY predictors
- Balance palliative & resuscitative needs of pts
- While cost containment should be societally determined, EPs are often best judge of what is medically appropriate (bedside rationing/stewardship is part of our job).
- We are called to be a Profession the public can ***trust*** to protect them from harms, including harms worse than death & traumatic/financially disastrous "futile" EOL care.
- We must Lead by **example,** as we **educate, palliate, & communicate** in debates about death & dying with patients, peers, policymakers, press & the general public

RESUSCITATION ETHICS:

Was CPR Meant for 90-yr olds?

NO!! NOT BACK IN THE DAY

TODAY?


46 Years Old
57 Years Old
70 Years Old


growing old is
mandatory,
but growing up
is optional.
Walt Disney


C'MON BOB!
pump
pump
pump
BREATHEZ!!!!


Questions?
Gregor.Larkin@gmail.com


Love's greatest gift
is its ability to make
everything it touches
sacred.
-Rumi