Variation in End of Life Services: Is it the Providers or the Patients?

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Are Regional Variations in End-of-Life Care Intensity Explained by Patient Preferences?

A Study of the US Medicare Population

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ORIGINAL ARTICLES

Racial and Ethnic Differences in Preferences for End-of-Life Treatment

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MONTHS TO LIVE

Weighing Medical Costs of End-of-Life Care

Ann Johansson for The New York Times

Dr. Tamara Horwich with Salah Putrus, right, and his brother-in-law, Fouad Abdulla. A change of drugs helped Mr. Putrus avoid a heart transplant.

By REED ABELSON
Published: December 22, 2009

LOS ANGELES — The Ronald Reagan U.C.L.A. Medical Center, one of the nation's most highly regarded academic hospitals, has earned a reputation as a place where doctors will go to virtually any length and expense to try to save a patient's life.

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Excellence or Excess?
This series is examining the

"If you come into this hospital, we're not going to let you die," said Dr. David T. Feinberg, the hospital

Tara Parker-Pope on Health

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By MICHAEL GRUNWALD Tuesday, Jun. 23, 2009

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ENLARGE PHOTO+

Outside the Mayo Clinic's Gonda building in Rochester, Minn.

Raoul Benavides for TIME

Ezekiel Emanuel got a memorable introduction to our haphazard health-care system on his first visit to a cancer ward as a medical student. The white coats were ordering a transfusion for a teenage girl, and since shyness does not run in his family — brother Rahm is President Obama's famously foulmouthed chief of staff, brother Ari a similarly silence-deficient Hollywood agent — he interrupted to ask why. Because she had Hodgkin's disease and her platelets were below 20,000, the team explained. Emanuel still had questions: Was there evidence for that protocol? Don't some hospitals wait until 10,000? Why 20,000? Because that's what we do here, one doc replied.

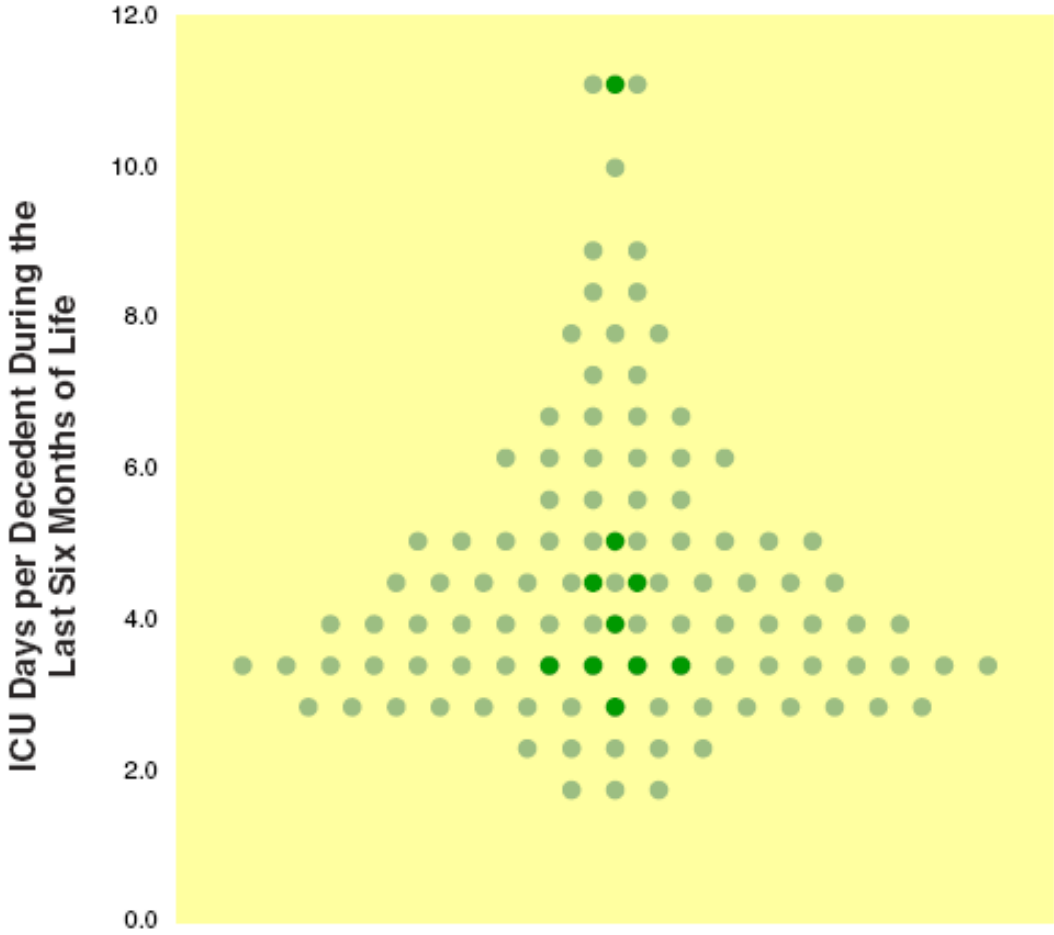
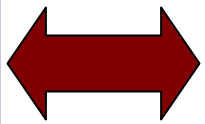


Figure 3.2. Average Number of Days in ICU per Decedent During the Last Six Months of Life Among Medicare Part A and B Decedents (1999-2003) Who Received Most of Their Inpatient Care at a COTH Academic Medical Center



In vivo

In vitro

In *vivo*

In *vitro*

Study Sites

	Lower intensity	Higher intensity
EOL cohort†		
ICU days L6M (high; int), d	2.9; 0.5	4.8; 6.9
Deaths with ICU, %	23.3	37.9
Terminal admissions‡		
ICU, %	50.6	74.0
ICU LOS (mean; median), d	4.0; 1	10.1; 3
Mechanical ventilation, %	34.1	44.8
Hemodialysis, %	10.4	14.4
Tracheostomy, %	1.9	10.6
Gastrostomy, %	1.4	3.1

†Dartmouth Atlas (2001-2005); ‡Calculations from EOL cohort (2003-2007)

“In *vivo*” study - participation

	Lower intensity	**Higher intensity**
Site visit	September 2008	January 2009
Beds (ICU)	550 (60)	425 (108)
ICU	16 beds, Med-surg	24 beds, Medical
Staff		
Shadowed CCM attendings	4	4
Surveyed	144 (62%)	43 (32%)
Interviewed	26	28
Patients		
Observed	83	73
Eligible patients	15 (19%)	19 (26%)
Surveyed	9 (60%)	8 (42%)
Interviewed	5 (33%)	5 (26%)

"In *vivo*" study - results

	Lower intensity	**Higher intensity**
Patients		
Case-Mix	Few chronically medically ill elders	Many chronically medically ill elders
Cultural	Few attributions; culture-specific solutions	Many attributions (e.g., Persians, referral pop'n)
Providers		
Attendings	Intensivists	Pulmonary specialists
Relationships	Unusually collegial	Conflict and tension
Goals of treatment	Time-limited trials (LSTs as "bridge" to something). The end gets discussed in the beginning.	Open-ended. The "end" only gets discussed when there's nothing left to offer,

"In *vivo*" study - results

	Lower intensity	Higher intensity
Providers (con't)		
"Futile" treatment	Rare: "nipped in the bud"	Common: cases drawn out and conflict emerges
Sunk costs	n/a	Continued treatment rationalized by prior heavy investment (e.g., tx) – spillover effect
Locus of control	High self efficacy (included in policy)	Low self-efficacy – eternalize control to families and consultants
Palliative care	Mature at institution; CCM competency	New (nb. ethics consultations active)
Clinical behavior	Parsimony; evidence-based Focus on forest	Unrestrained; anecdote Focus on trees

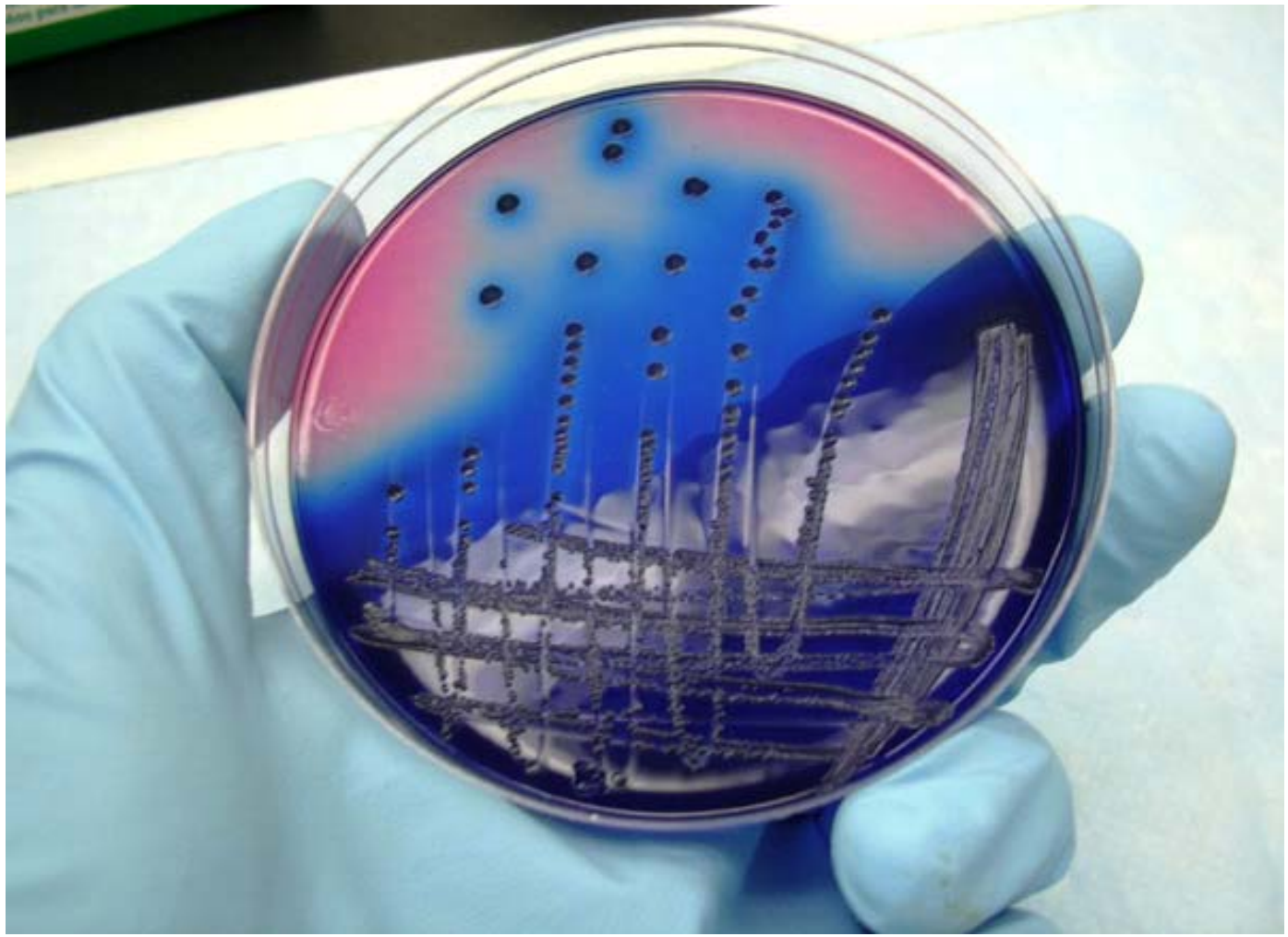
"In vivo" study - results

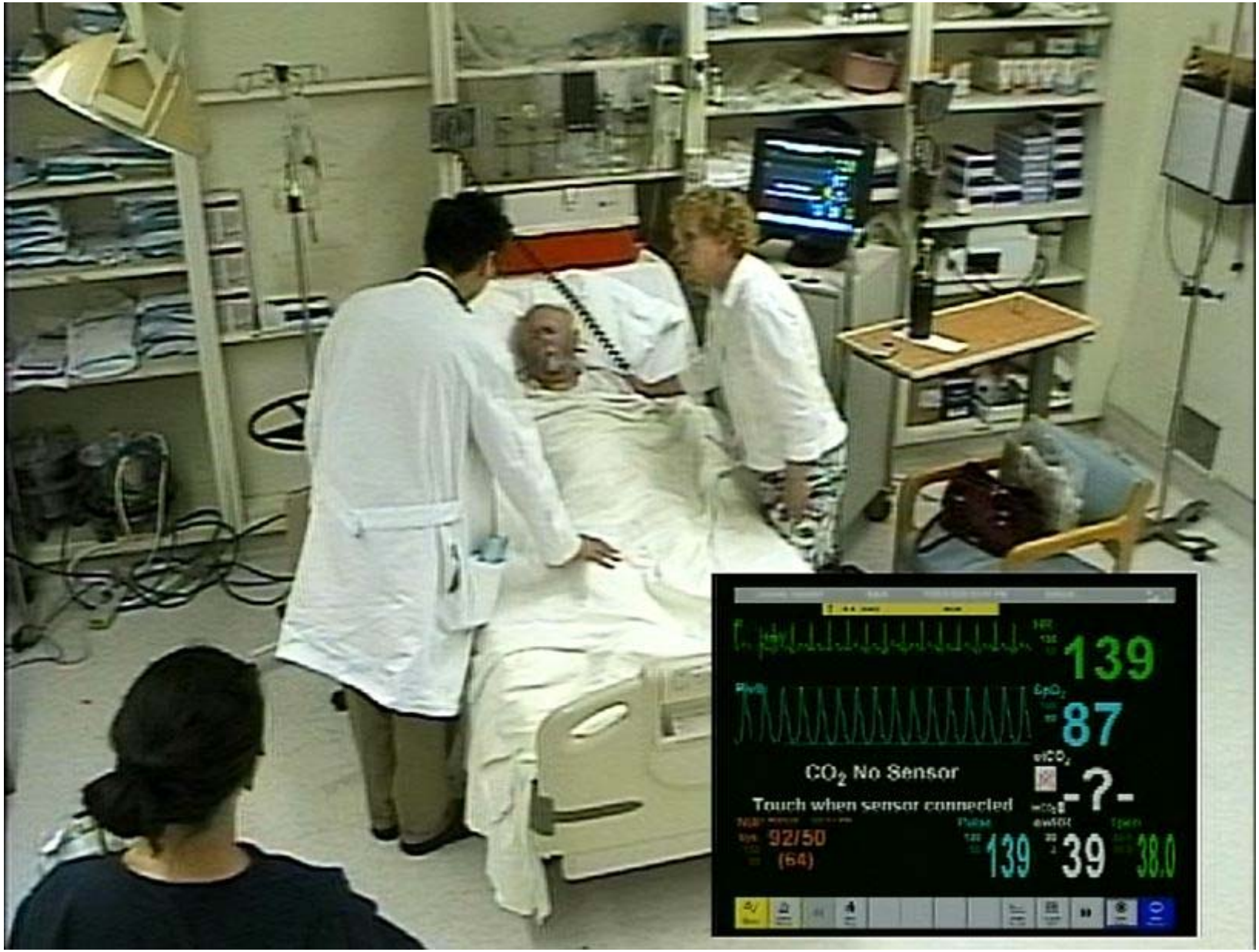
	Lower intensity	Higher intensity
Providers (con't)		
Protocols	No early tracheostomy Withdrawal of LST protocol	Early tracheostomy
Rounds	Teaching	Work
Housestaff	Independent	Dependent
Attendings	Home grown	Mix
Organization		
Hierarchy	Horizontal	Vertical
Incentives	To staff (includes housestaff, not attendings)	To leadership
Motivation	Self-preservation in difficult environment	Status as the "best"

Which came first?

"There's a lot of interest in decision making at the end of life…a lot of attention to engaging patients in thinking about whether aggressive care is the right way to go." (attending physician [lower])

"When you're in an environment where it's also very common to follow a very aggressive mode, a lot of patients will be swept up into that and begin to believe that that's their goal as well." (attending physician [higher])

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CO_2 No Sensor
Touch when sensor connected
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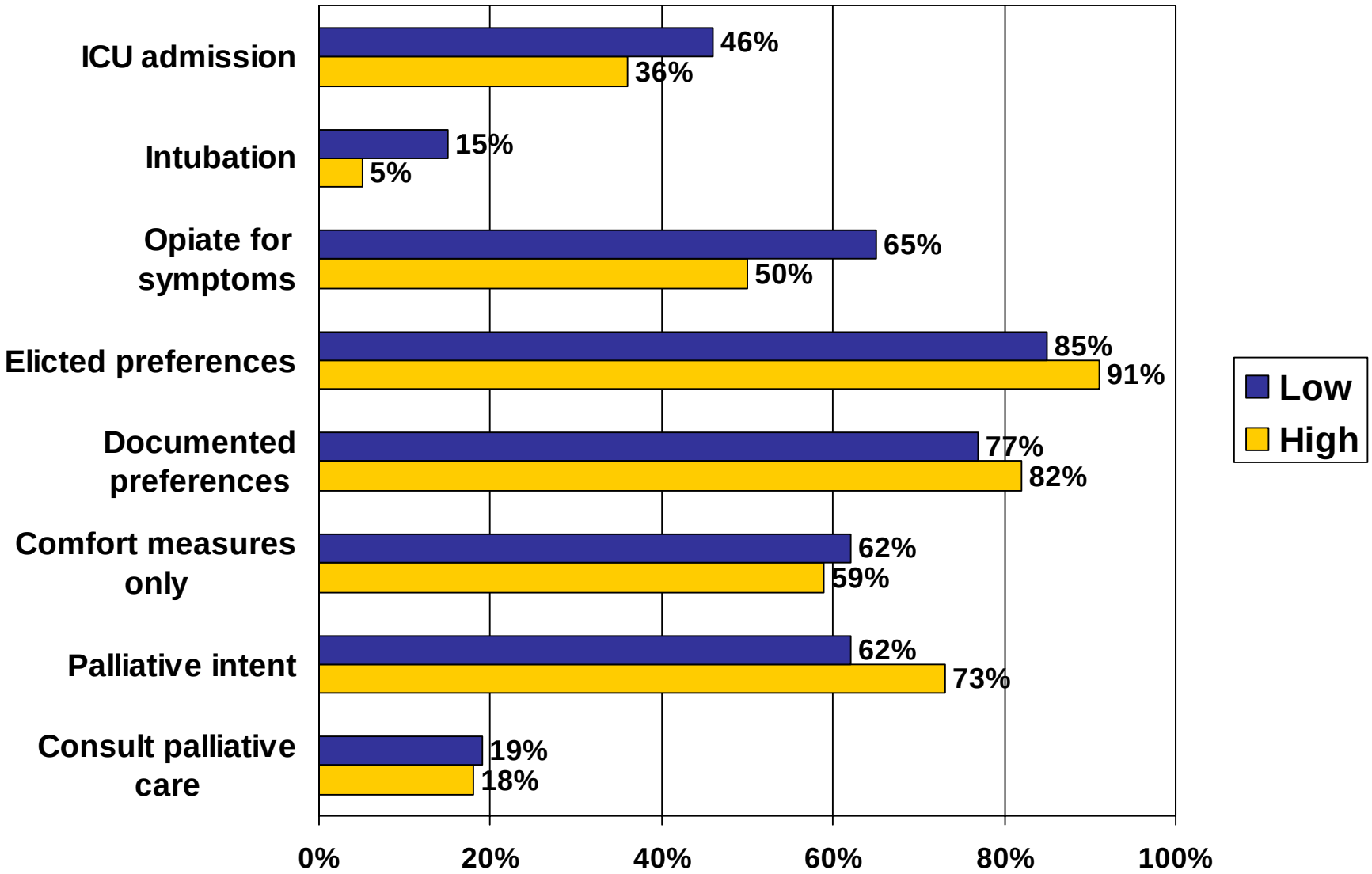
“In *vitro*” simulation - participation

	Lower intensity (N=26)	**Higher intensity (N=22)**
Age, μ (SD), y	37.3 (7.6)	38.8 (9.4)
Male, n/N (%)	15/26 (58%)	16/22 (73%)
Race, n/N (%)		
Non-Hispanic white	18/26 (69%)	10/22 (45%)
Hispanic white	0/26 (0%)	2/22 (9%)
Asian	8/26 (31%)	10/22 (45%)
Role, n/N (%)		
Emergency	4/26 (15%)	5/22 (23%)
Hospitalist	9/26 (35%)	11/22 (50%)
Critical care	13/26 (50%)	6/22 (27%)
Years since graduation, μ (SD)	8.9 (5.9)	11.7 (9.1)
Years at current institution, μ (SD)	6.3 (5.0)	8.9 (7.4)
Months on service annually, μ (SD)	6.3 (3.9)	7.8 (3.1)

“In *vitro*” simulation - results

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NBP Manual
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41

Conclusions

- Variations in the maturity of hospital-based resources and policies, the use of explicit treatment goals, and CCM physician self-efficacy for making LST decisions may contribute to the observed variation in end-of-life treatment intensity observed between these 2 hospitals.
- The decisions of hospital-based providers when faced with an otherwise identical patient are unlikely to contribute to the observed variation in end-of-life ICU use in the 2 hospitals. This suggests that patient, environment, and institutional mechanisms underlie these differences.

Collaborators

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