Primary Care at the End of Life

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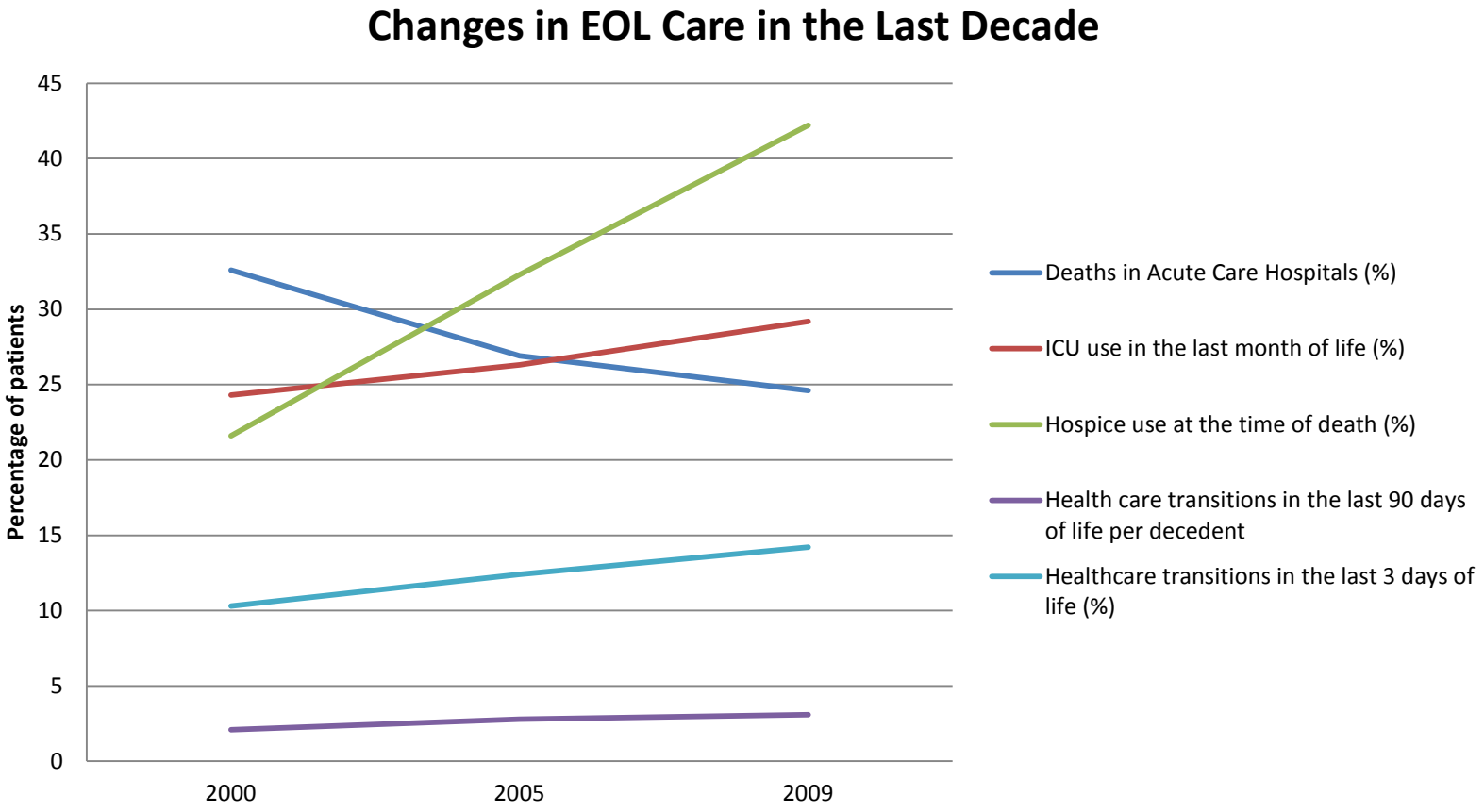
Itinerary

- Trends in EOL care: defining the problem
- Why do we care about primary care involvement?
- What have I learned?
- Proposal for future directions/discussion

What is the problem?

Findings—Care Delivery

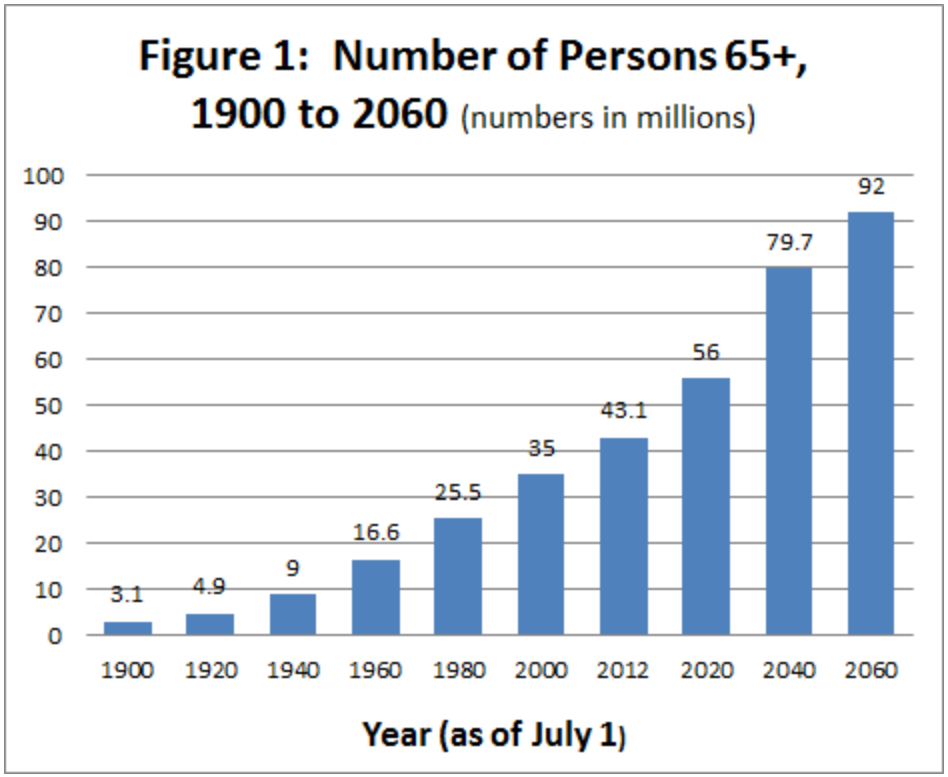
- Multiple transitions between health care settings can fragment delivery of care and create burdens for patients and families
- Demand for family caregiving and the responsibilities of family caregivers are increasing
- Palliative care enhances quality of life, reflects patient choices, and supports families
- Widespread timely referral to palliative care appears slow



Source: Teno et al 2014 JAMA

Why care about primary care's role in palliative care?

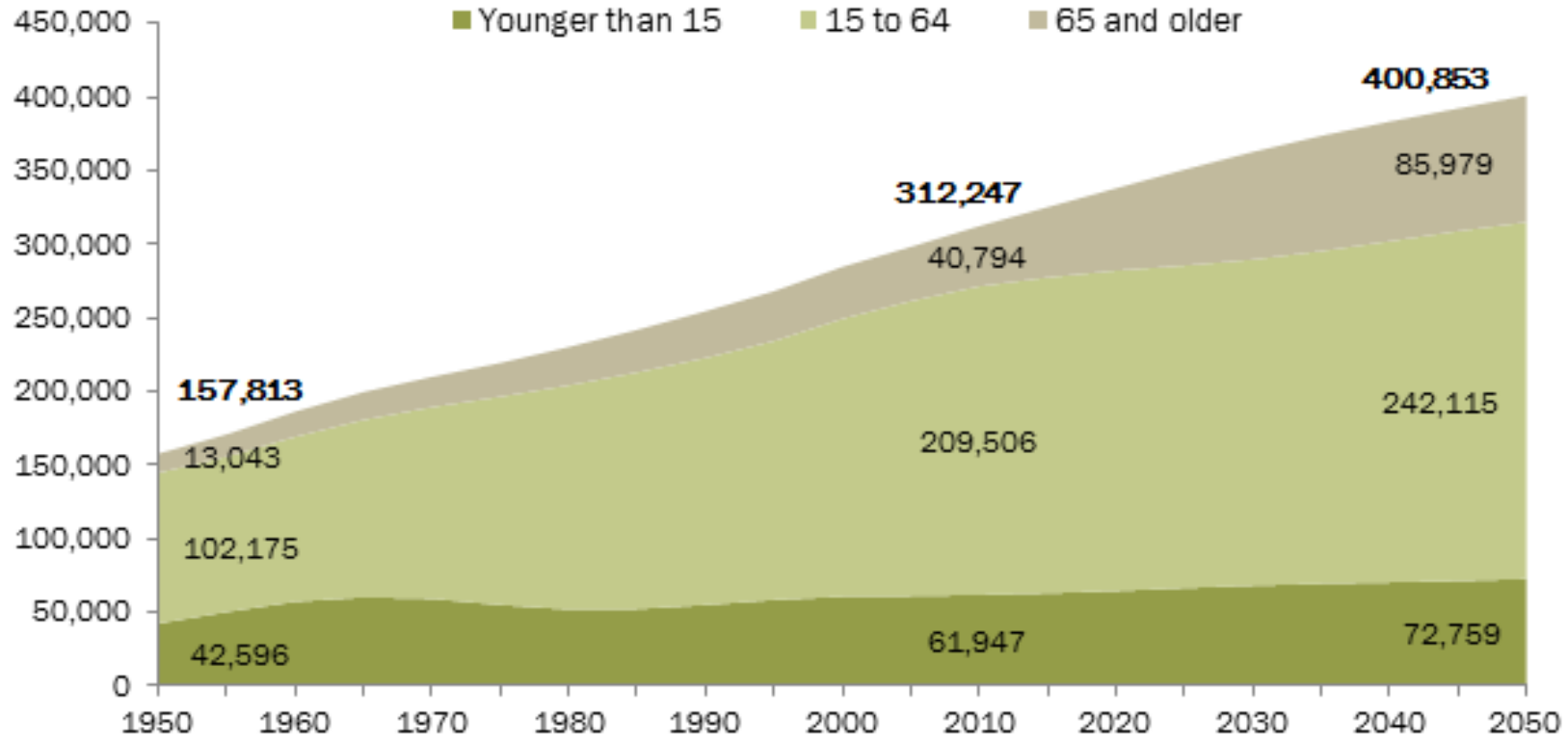
Reason 1: There will never be enough specialists



Source: U.S. Census Bureau, Population Estimates and Projections.

Estimates of the U.S. Population, by Age, 1950 to 2050

Thousands



Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, http://esa.un.org/unpd/wpp/index.htm

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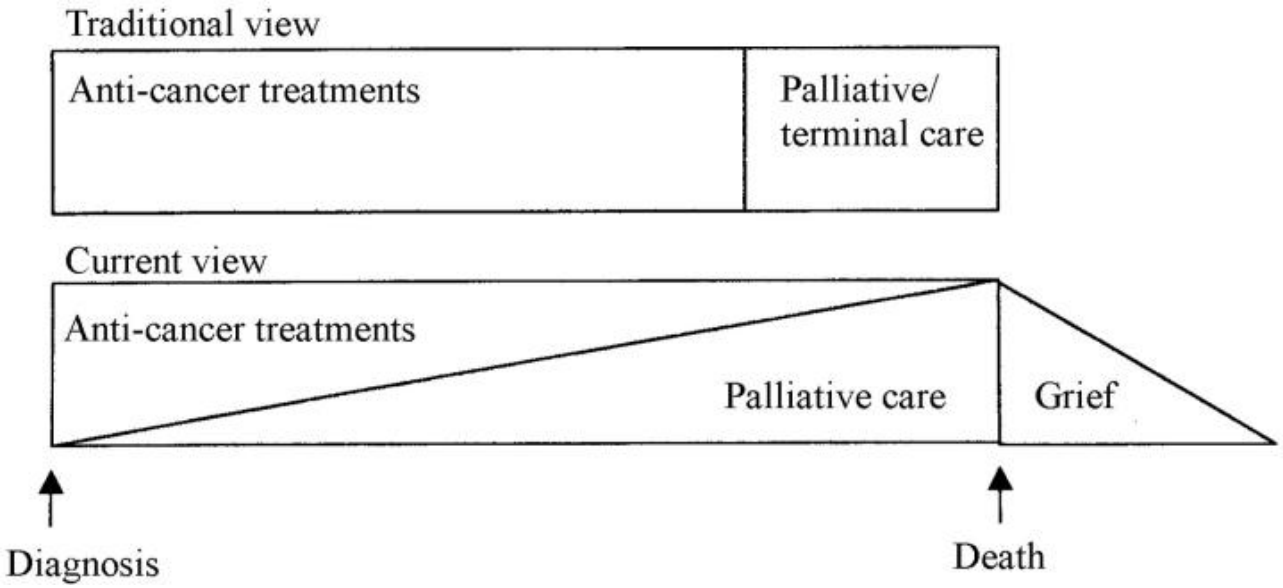
Reason 2: PCPs may do better than specialists

The theory: PCPs assist with coordination, they know you well and can help define goals of care

Primary doctors are positioned to integrate palliative care over the lifecourse



Source: *Journal of the Royal Society of Medicine*, September 2001
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1282181/

The only broad study of this in patients at the EOL

Table 3. Hospital Utilization[§] and ACSC[||] Admissions within Selected Patient Cohorts by Level of Prior Primary Care Use[¶]

Number of Primary Care Visits	Non-SNF Users Hospital Days (95% CI) N=68,170	SNF Users Hospital Days (95% CI) N=10,186	Sickest Quartile Hospital Days (95% CI) N=19,589	CHF Admission Odds Ratio (95% CI) N=24,856	COPD Admission Odds Ratio (95% CI) N=20,161
0	15.4 (15.1,15.6)	14.5 (13.5,15.4)	22.7 (21.6, 23.9)[‡]	Reference	Reference
1–2	16.2 (15.9,16.5)[†]	13.9 (13.0,14.8)	21.9 (20.8, 23.0)[‡]	1.00 (0.93,1.12)	0.96 (0.84,1.10)
3–5	15.7 (15.4,16.1)	13.8 (12.9,14.6)[†]	21.1 (19.8, 22.4)[‡]	0.98 (0.89,1.08)	0.85 (0.74,0.98)*
6–8	14.4 (13.9,14.9)[†]	12.9 (11.9,13.9)[†]	20.5 (19.3, 21.7)[‡]	0.88 (0.79,0.99)*	0.75 (0.63,0.90)*
≥9	13.8 (13.3,14.3)[†]	11.6 (10.8,12.5)[†]	19.5 (18.8, 20.3)[‡]	0.82 (0.74,0.92)*	0.81 (0.68,0.97)*

*$P<0.05$, reference=0 primary-care visits

[†]$P<0.01$, reference=0 primary-care visits, no Skilled Nursing Facility (SNF) services

[‡]$P<0.01$, reference=0 primary-care visits, lowest quartile comorbidity (least sick), after population was first stratified into four quartiles by comorbidity risk score

[§] Utilization measured during final 6 months of life, and adjusted for age, sex, race, Medicaid, nursing home use, comorbidity, geographic variation (hospital service area)

[||]ACSC, ambulatory care sensitive conditions: CHF, congestive heart failure; COPD, chronic obstructive lung disease. Admissions for ACSC measured during final 6 months of life and adjusted for age, sex, race, Medicaid, nursing home use, and comorbidity

[¶]Primary-care visits measured during pre-period, months 18-7 before death

Reason 3: Let's avoid system redundancy

"Palliative care is just family medicine on steroids."

-- Ira Byock MD

IOM Recommendations for Palliative Care

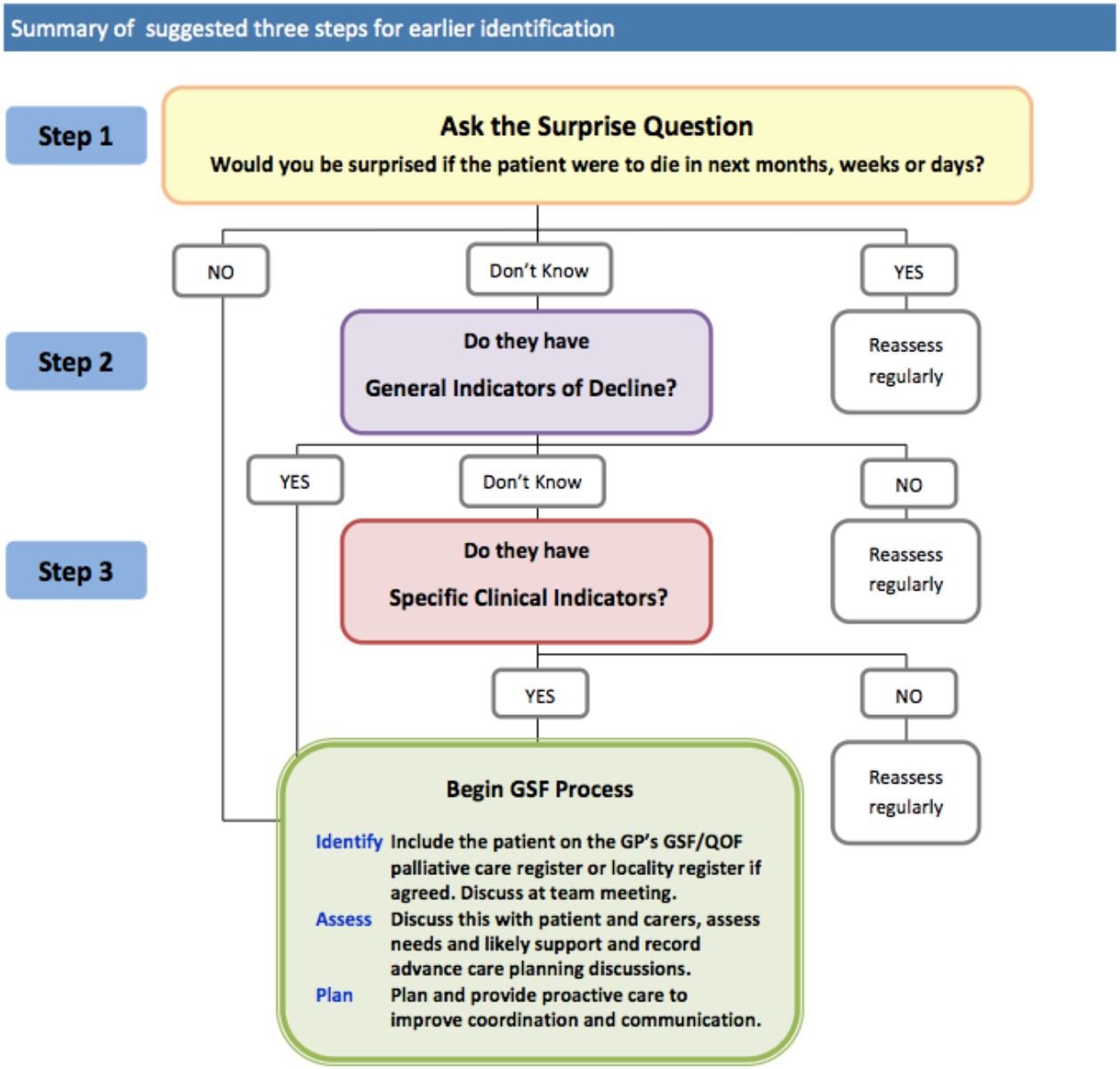
- Care should be seamless, high-quality, patient-centered, family-oriented and consistently available around the clock
- Consider evolving physical, emotional, social, and spiritual needs of individuals as well as families and caregivers
- Include coordinated, efficient and interoperable information transfer across providers and settings
- Be consistent with patient goals, values and preferences
- Be competently delivered by professionals with appropriate expertise and training

Why is this familiar?

Defining the PCMH

1. Comprehensive Care
2. Patient-Centered
3. Coordinated Care
4. Accessible Services
5. Quality and Safety

One vision of primary care based palliative care– the Gold Standard Framework (GSF)



But before we propose stronger primary care models for palliative care

- We have to understand current primary care involvement
- We have to understand the barriers to greater involvement
  - Payment systems
  - Specialist-driven care

What I've learned

Figure 1. The Ratio of Primary Care to Specialist Visits in the Last Two Years of Life

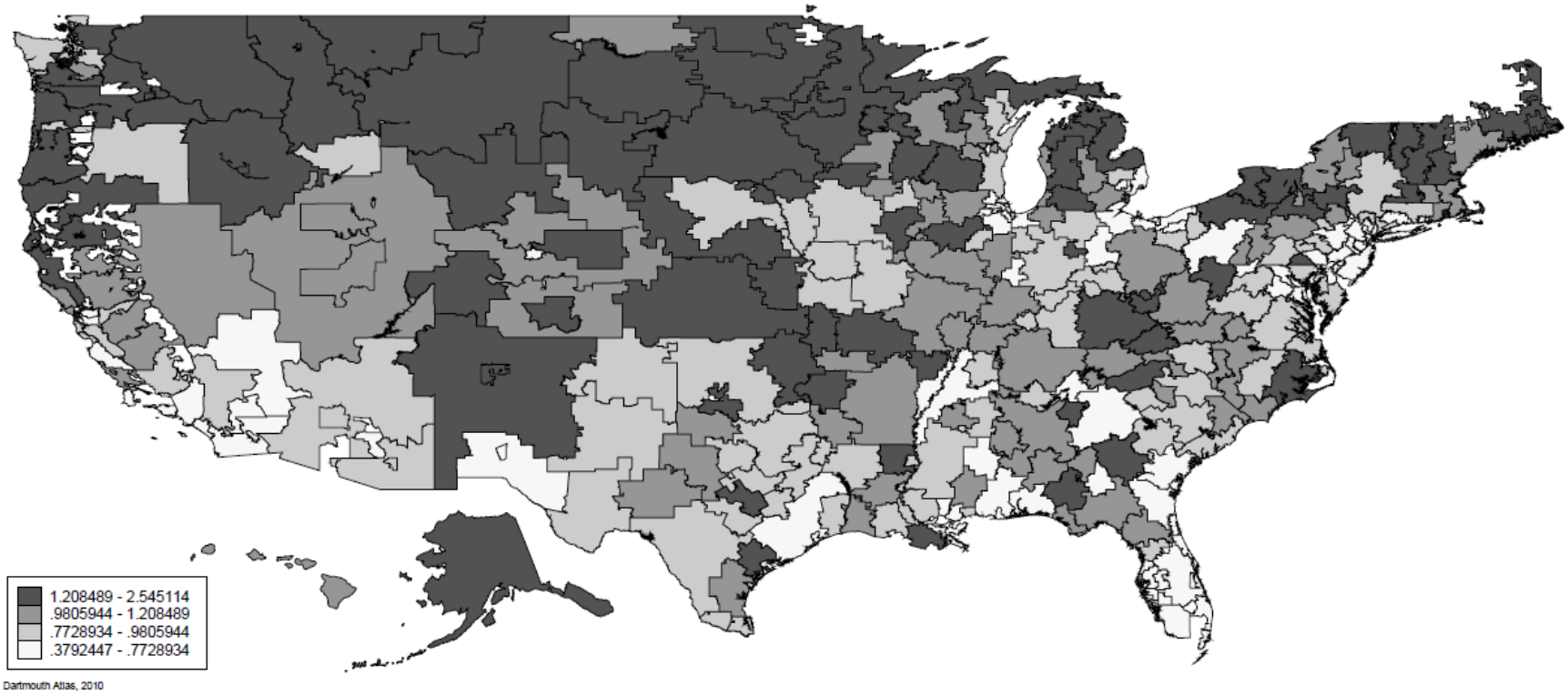
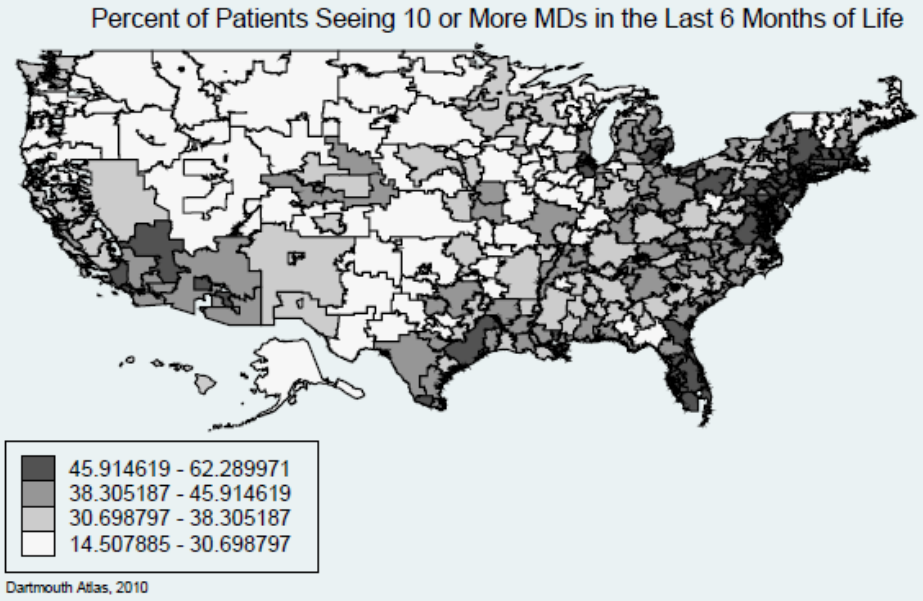
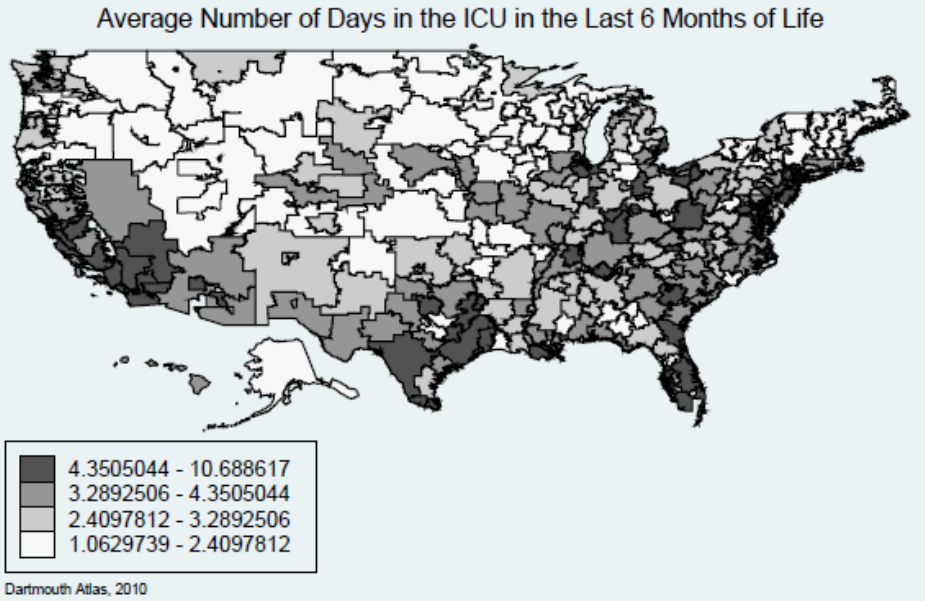
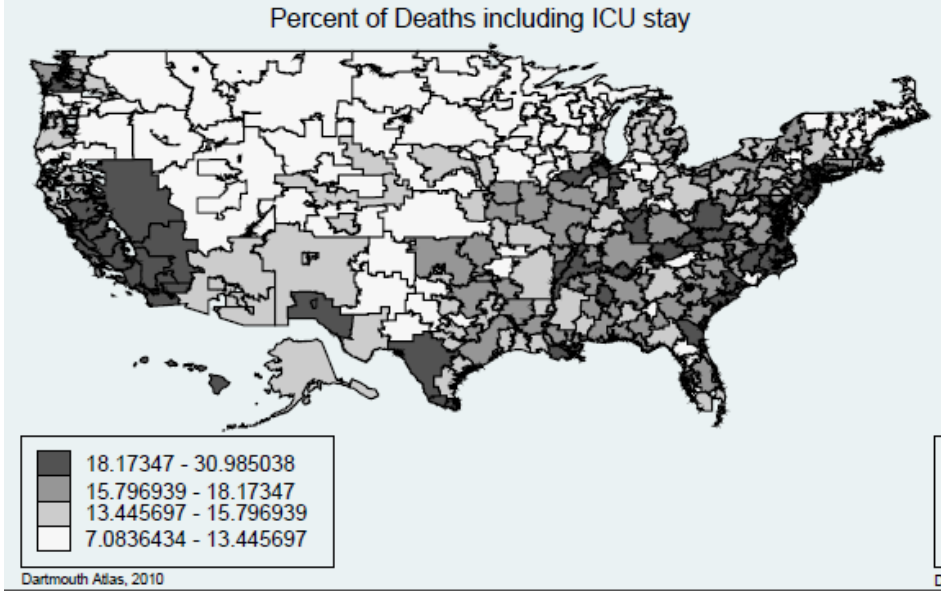


Figure 2. Patterns of End of Life Care Across Hospital Referral Regions







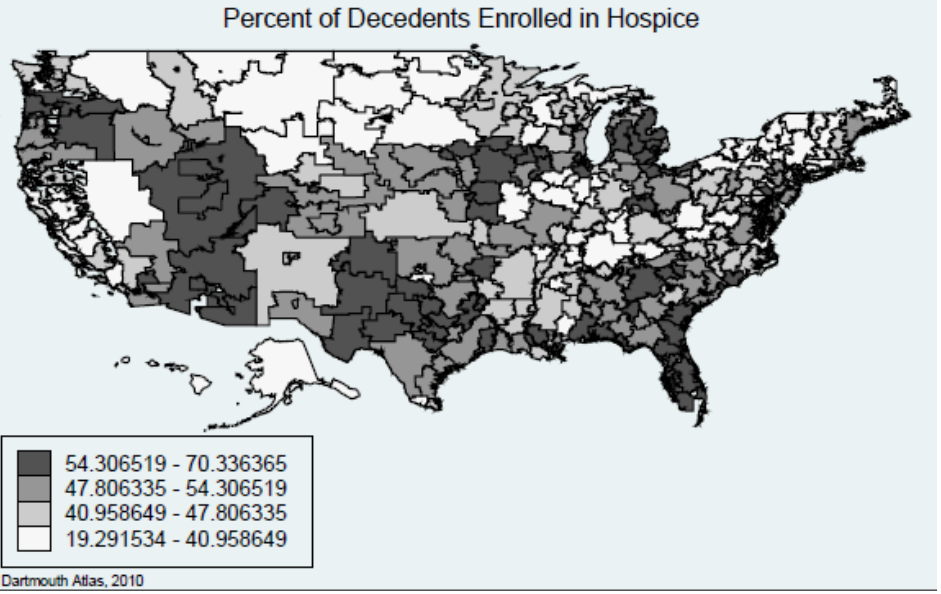


Table 3. Adjusted Rates (95% Confidence Interval) of End of Life Outcomes According to Quartile of Primary Care Involvement in the Last 6 Months of Life[1]

	Quartile of HRRs by Ratio of Primary Care to Specialist Visits in the Last 2 Years of Life					
	Lowest	2nd	3rd	Highest	p for quartiles[2]	p for linear trend[3]
Percent of deaths occurring in hospitals	23.84 (22.51-25.17)	24.00 (22.95-25.05)	24.35 (23.29-25.41)	24.46 (23.20-25.72)	0.57	0.97
Percent of decedents enrolled in hospice	51.54 (48.91-54.17)	48.09 (46.02-50.17)	46.97 (44.89-49.06)	43.71 (41.22-46.20)	0.00	0.00
Percent of patients seeing 10 or more physicians in their last 6 months of life	41.93 (40.33-43.54)	37.96 (36.70-39.22)	36.94 (35.67-38.21)	37.54 (36.02-39.06)	0.00	0.00
Percent of patients receiving ICU care during their final hospital admission	17.29 (16.43-18.16)	15.80 (15.12-16.49)	15.24 (14.55-15.92)	14.82 (14.00-15.64)	0.00	0.00
Hospital days in the last 6 months of life	9.69 (9.30-10.07)	9.06 (8.76-9.36)	9.04 (8.73-9.34)	9.15 (8.79-9.51)	0.08	0.11
ICU days in the last 6 months of life	4.37 (4.07-4.68)	3.61 (3.37-3.84)	2.99 (2.75-3.23)	2.92 (2.63-3.20)	0.00	0.00
Percent of cancer patients receiving life-sustaining therapy in the last month of life	9.55 (9.00-10.10)	8.56 (8.11-9.00)	8.29 (7.82-8.75)	8.73 (8.17-9.28)	0.08	0.41
Total Medicare spending/decedent in last two years of life (in 1,000s of USD)	69.43 (67.56-71.30)	66.80 (65.32-68.27)	63.81 (62.32-65.29)	65.20 (63.43-66.97)	0.01	0.00

Abbreviations: HRR= hospital referral region, ICU= intensive care unit, USD= United States Dollars, 2010.

[1]Adjusted for the HRR percentage of population below the federal poverty level, percentage of Medicare beneficiaries reporting they are African American, average age of Medicare beneficiaries, average hierarchical condition category score of Medicare beneficiaries, percentage of HRR that is urban, obesity rate, and stroke rate of Medicare beneficiaries.

[2] Comparing the 1st and 4th quartile of HRRs

[3] Testing the ratio of primary care to specialist visits as a linear variable

Which FPs participate in non-clinic based palliative care?

- 7% of FPs routinely see patients in hospice
  - They are significantly more likely to be male, in the South vs the Northeast, in more rural regions, and in a PCMH

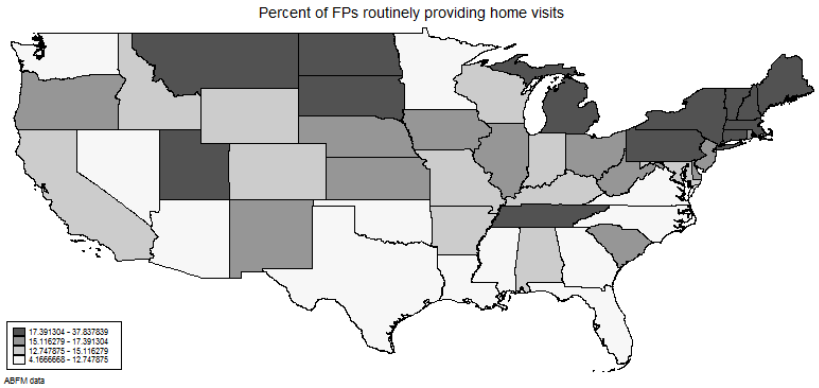
Which FPs participate in non-clinic based palliative care?

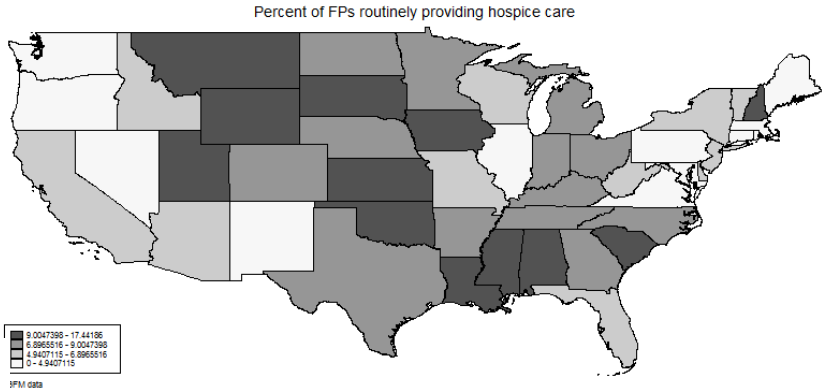
- 23% of FPs routinely see patients in nursing homes
  - They are more likely to be male, white as opposed to AA, non-Hispanic, practicing for longer, in more rural regions and in a PCMH

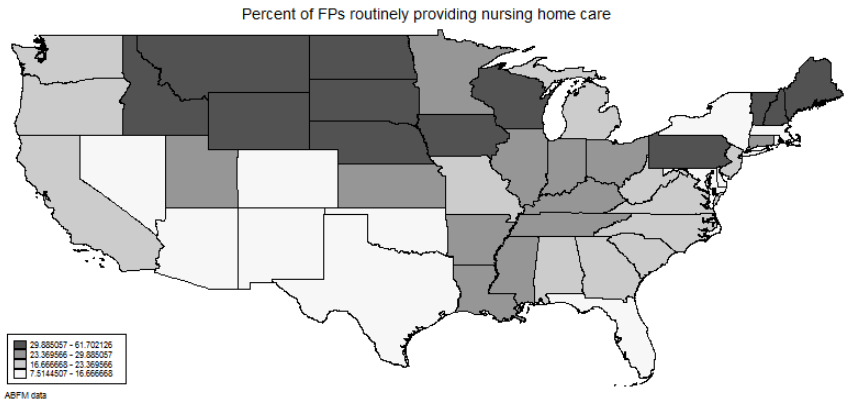
Which FPs participate in non-clinic based palliative care?

- 15% of FPs routinely make home visits
  - They are more likely to be white as opposed to AA or asian, more likely to have been practicing for 11+ years as opposed to 0-10, more likely to live in more rural regions, and more likely to be practicing in a PCMH or a PCMH-applicant clinic

Also: how FPs practice is very regional







Future directions

Specialist vs generalist care

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Ravi B. Parikh, A.B., Rebecca A. Kirch, J.D., Thomas J. Smith, M.D., and Jennifer S. Temel, M.D.

N Engl J Med 2013; 369:2347-2351 | December 12, 2013

Integrating Palliative Care in Severe Chronic Obstructive Lung Disease

2008, Vol. 5, No. 4 , Pages 207-220 (doi:10.1080/15412550802237366)

Kimberly A. Hardin, Frederick Meyers, and Samuel Louie

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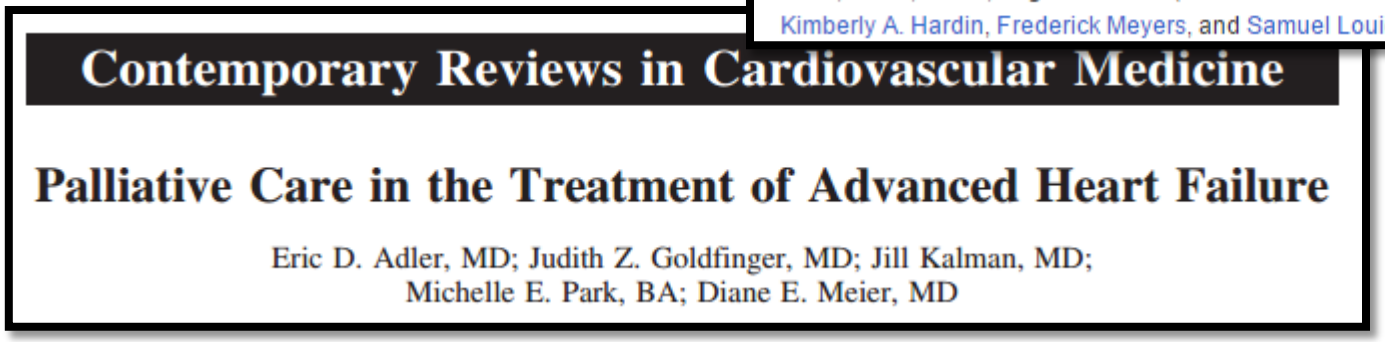


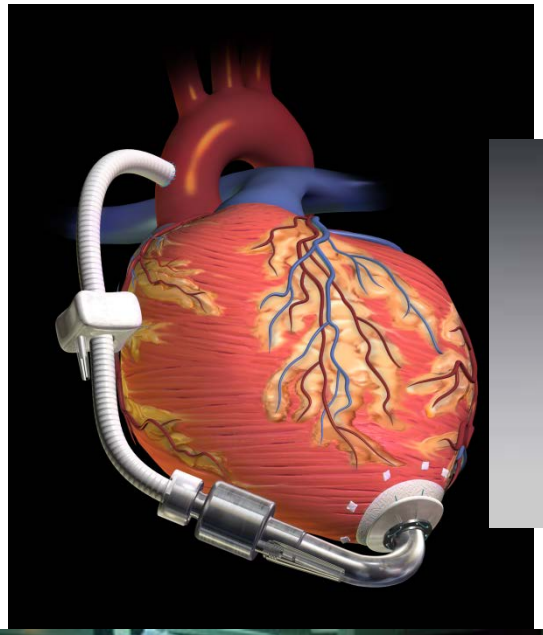
Contemporary Reviews in Cardiovascular Medicine

Palliative Care in the Treatment of Advanced Heart Failure

Eric D. Adler, MD; Judith Z. Goldfinger, MD; Jill Kalman, MD;
Michelle E. Park, BA; Diane E. Meier, MD

Specific Questions

- On the patient level, what are the various outcomes for primary care vs specialist care?
- What exactly is primary care involvement?
  - Symptom management, home visits, goals of care discussions, coordination
- Do practice models in primary care affect EOL care?
  - RCT of clinics with an “advanced PCMH” model targeting chronically ill
- Do state policies that affect primary care affect the EOL trajectories of patients living there?

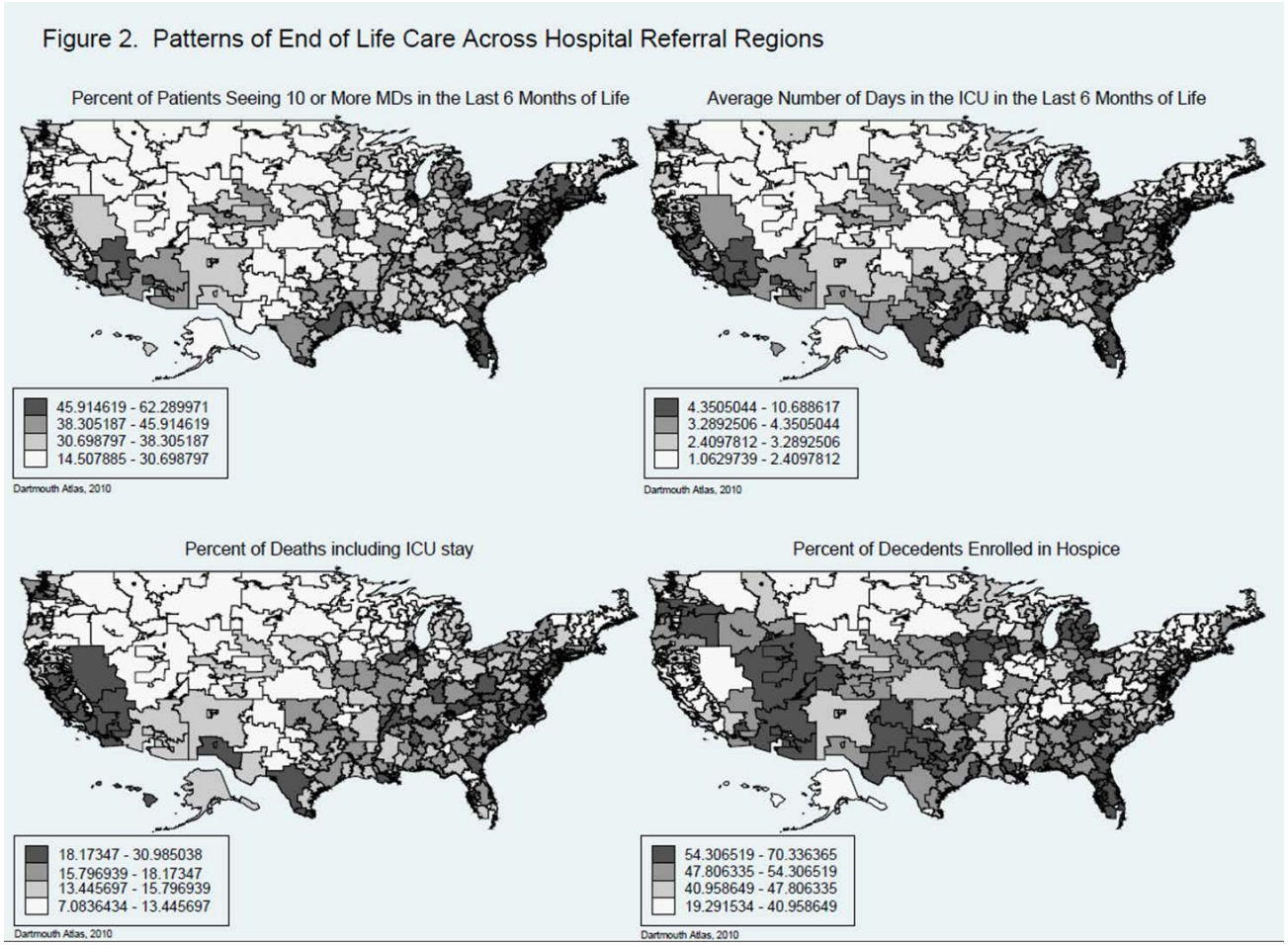



Sovaldi
(sofosbuvir) Tablets
400 mg

Specific research questions

- What would happen to spending and outcomes if we could finance a “social support” package along with medical care packages in the chronically ill elderly?
- How do we foster grassroots, community-based work to care for the dying?

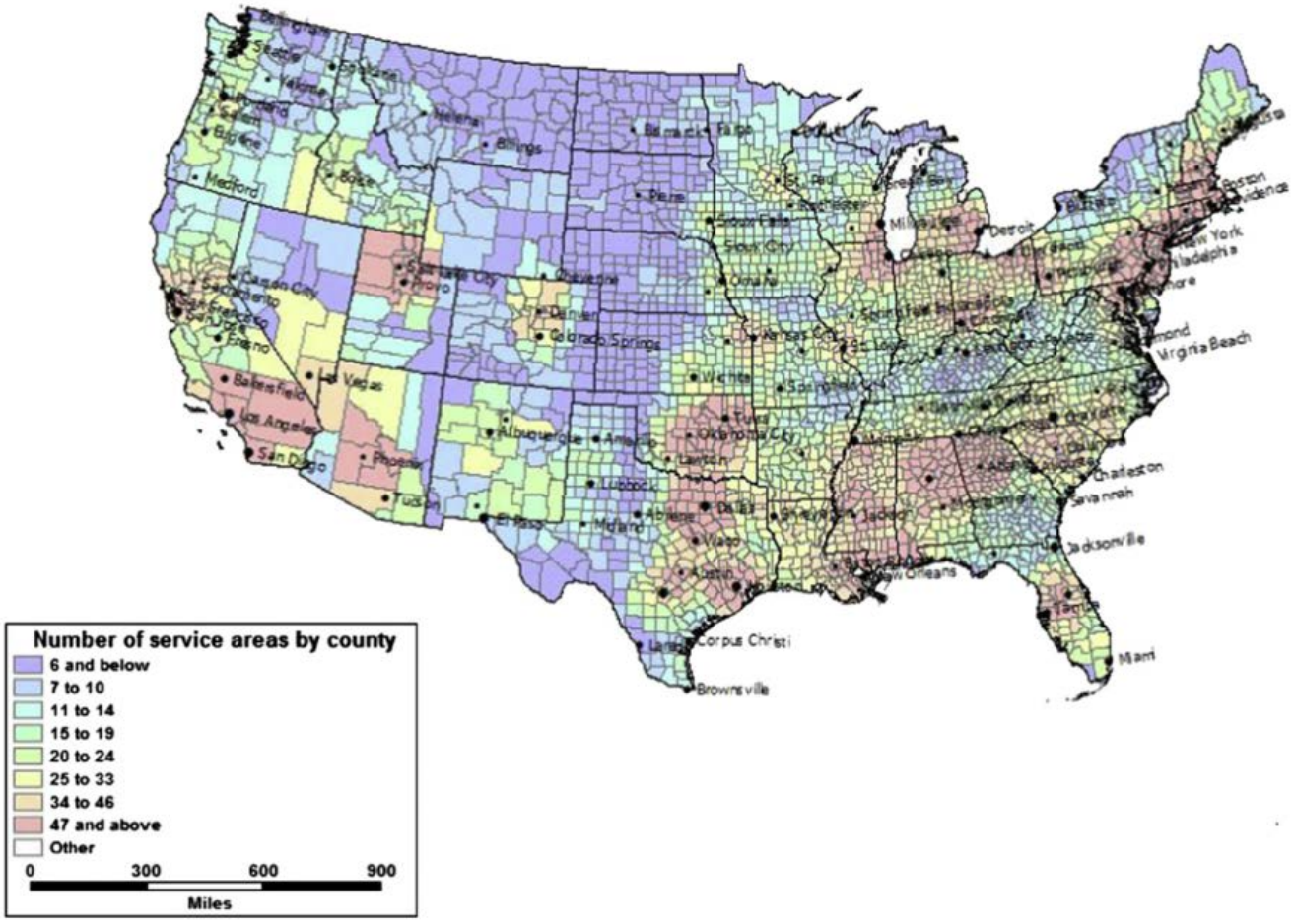
Regional variation



What regions to explore

- Bordering regions with very different pictures of PCP engagement
- High PCP engagement despite high care intensity (lots of specialists and ICU beds)
- Regions with patterns that stand out (hospice in the SE and Texas, PCPs in New England)

Focusing on hospice



Silveira et al. 2011

Little regulation, and regulation matters

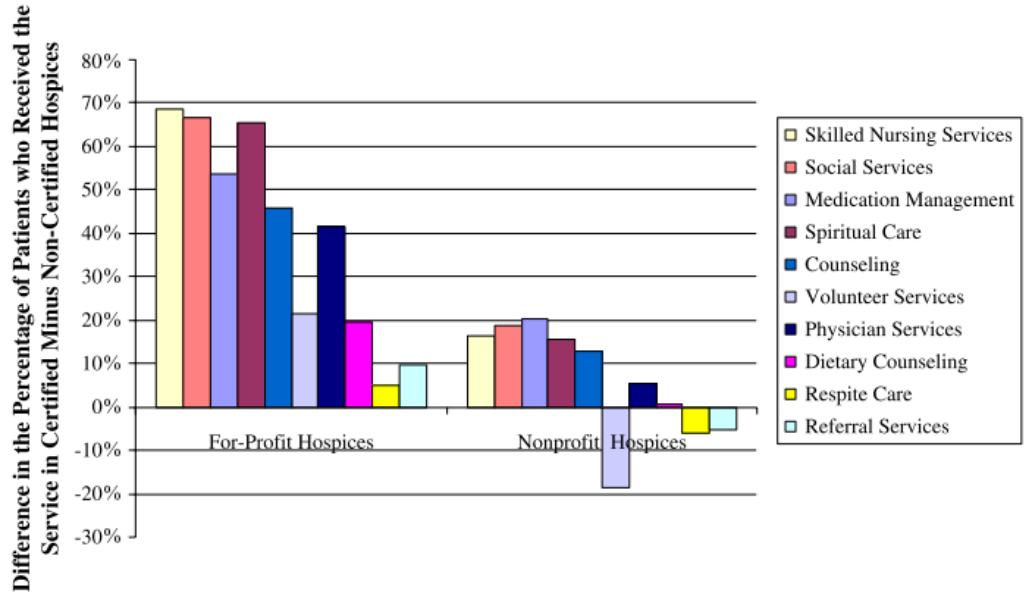


Fig. 1. Differences in the percentage of patients receiving each hospice service in certified and noncertified hospices, by hospice ownership. Note: Only services for which certification differences significantly ($P < 0.05$) differed for patients enrolled with for-profit compared with nonprofit hospices are shown.

Carlson, 2008

Thanks to all!