

Supplementary Online Content

Sirovich BE, Lipner RS, Johnston M, Holmboe ES. The association between residency training and internists' ability to practice conservatively. *JAMA Intern Med*. Published online September 1, 2014. doi:10.1001/jamainternmed.2014.3337.

eTable. Selected median measures of health care utilization in hospital referral regions where internal medicine residency programs are located

eFigure 1. Sensitivity analysis: relationship between residency program practice intensity and appropriately conservative management scores, using different measures of intensity, at the HRR and hospital levels

eFigure 2. Sensitivity analysis: relationship between residency program practice intensity and appropriately aggressive management scores, using different measures of intensity, at the HRR and hospital levels

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable. Selected median measures of health care utilization in hospital referral regions (HRRs) where internal medicine residency programs are located. HRR's are stratified according to the number of visits per capita for Medicare beneficiaries in the last 6 months of life. Each quintile contains an approximately equal number of residency programs (between 67 and 74).

Characteristic	Quintile of intensity (range of EOL-VI [†])				
	(Lowest)				(Highest)
	1	2	3	4	5
	(15.5 – 26.2)	(26.3 – 29.2)	(29.3 – 36.6)	(36.8 – 45.3)	(45.4 – 60.5)
Visits per capita* (EOL-VI [†])	23.0	28.3	31.2	43.6	49.5
Hospital days, per capita*	9.2	11.7	11.3	14.2	19.1
Proportion of patients who see 10 or more physicians*	26%	36%	36%	46%	53%
Medicare spending per capita‡	\$8,324	\$9,590	\$9,682	\$10,048	\$10,196

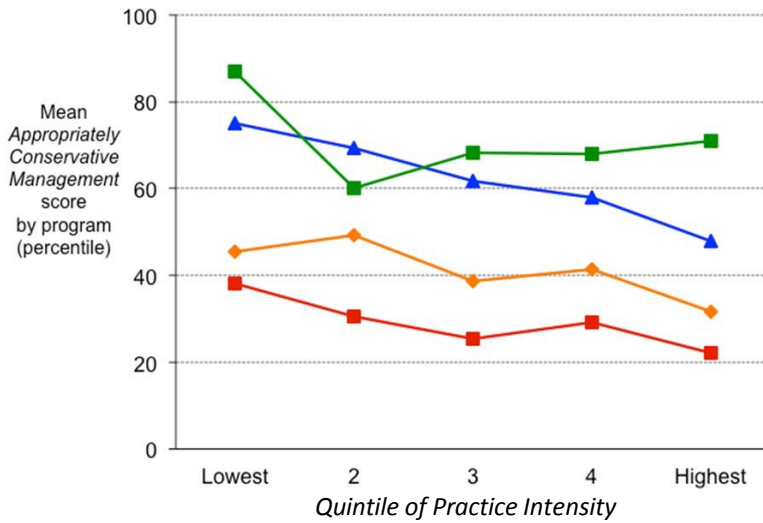
* All measures were calculated for Medicare beneficiaries 65 years or older with chronic illness who were in their last 6 months of life and died between 2003 and 2007 in the residency HRR's within each quintile, and were adjusted for age, sex, race, and chronic condition (see text).

† End-of-Life Visit Index; includes inpatient and outpatient visits.

‡ Per capita 2009 Medicare spending on beneficiaries aged 65 or older in the residency HRR's within each quintile, adjusted for age, sex, race, and price.

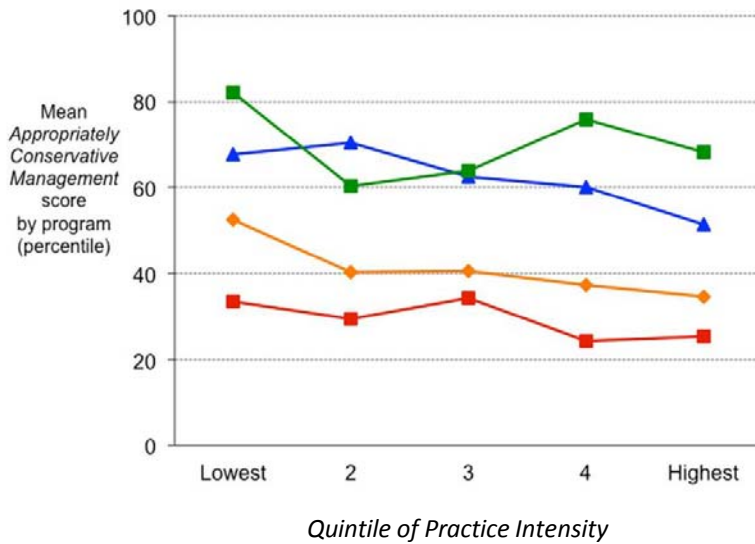
eFigure 1. Sensitivity analysis: Relationship between residency program practice intensity and *Appropriately Conservative Management* scores, using different measures of intensity, at the HRR and hospital levels. (The first HRR-level intensity measure presented is the paper's primary exposure measure.)

HRR-level intensity: Visits per Medicare beneficiary in the last 6 months of life.



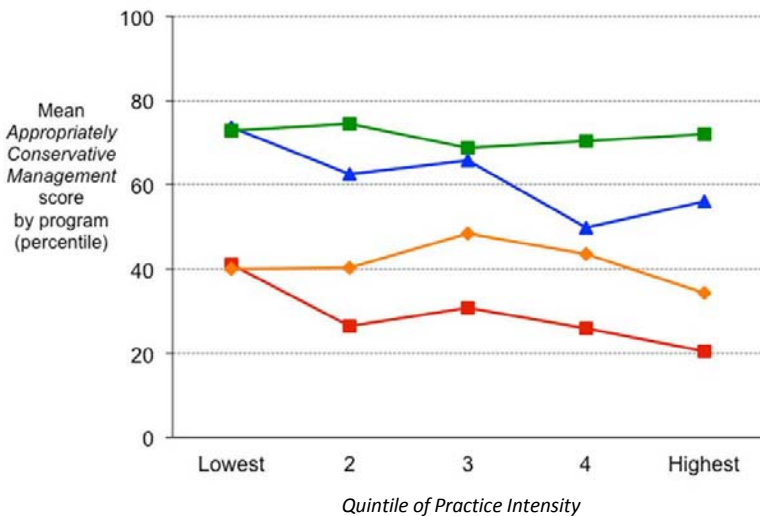
Tier of residency program	regression coefficient*	(p value)
Top tier	-0.24	(p < 0.001)
Upper middle	-0.96	(p < 0.001)
Lower middle	-0.60	(p < 0.001)
Bottom tier	-0.46	(p < 0.001)

HRR-level intensity: Overall Medicare spending per beneficiary.



Top tier	-3.59	(p < 0.001)
Upper middle	-5.58	(p < 0.001)
Lower middle	-6.79	(p < 0.001)
Bottom tier	-3.10	(p < 0.001)

Hospital-level intensity: Visits per Medicare beneficiary in the last 6 months of life.

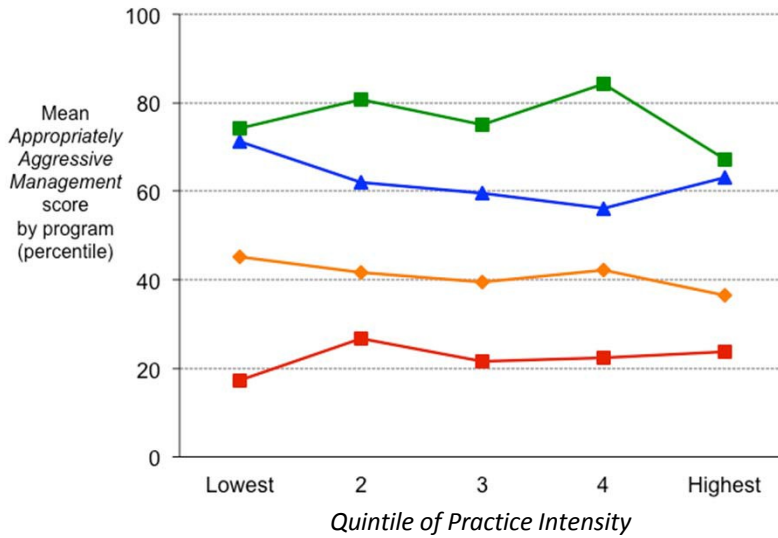


Top tier	+0.07	(p = 0.12)
Upper middle	-0.31	(p < 0.001)
Lower middle	-0.10	(p = 0.021)
Bottom tier	-0.47	(p < 0.001)

* For the linear regression of mean program ACM score percentile (continuous) on intensity.

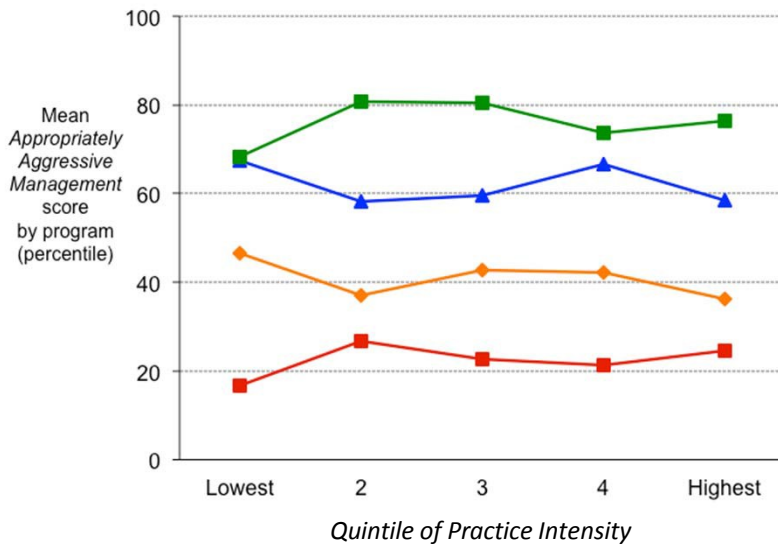
eFigure 2. Sensitivity analysis: Relationship between residency program practice intensity and *Appropriately Aggressive Management* scores, using different measures of intensity, at the HRR- and hospital levels. (*The first HRR-level intensity measure presented is the paper's primary exposure measure.*)

HRR-level intensity: Visits per Medicare beneficiary in the last 6 months of life.



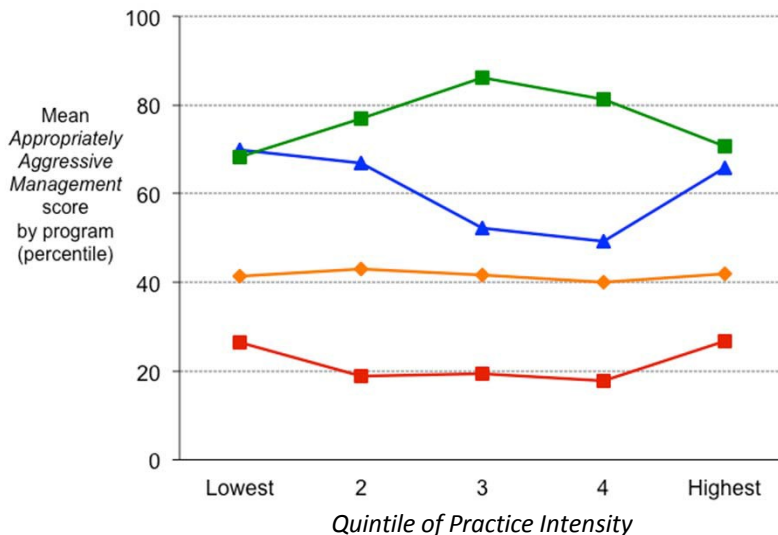
Tier of residency program	regression coefficient*	(p value)
Top tier	-0.23	(p < 0.001)
Upper middle	-0.20	(p < 0.001)
Lower middle	-0.24	(p < 0.001)
Bottom tier	+0.07	(p = 0.15)

HRR-level intensity: Overall Medicare spending per beneficiary.



Top tier	+2.22	(p < 0.001)
Upper middle	+0.53	(p = 0.137)
Lower middle	-1.24	(p = 0.008)
Bottom tier	+1.10	(p = 0.027)

Hospital-level intensity: Visits per Medicare beneficiary in the last 6 months of life.



Top tier	-0.16	(p < 0.001)
Upper middle	-0.14	(p < 0.001)
Lower middle	-0.06	(p = 0.12)
Bottom tier	-0.05	(p = 0.25)

* For the linear regression of mean program AAM score percentile (continuous) on intensity.