

Supplemental materials for:

McGrail MR, Wingrove P, Petterson SM, Bazemore AW. Mobility of US rural primary care physicians during 2000-2014. *Ann Fam Med*. 2017;15(4):322-328.

Table A1: Number of AMA records available for study

Exclusion steps	Count
1. One Record for each physician for each even year 2000-2014	7,549,513
2. After successful geocodes	7,422,639
3. After dropping 2014 because there is no following year	6,299,214
4. After dropping physicians not in primary care	2,100,855
5. After dropping physicians not in direct patient care	1,487,715
6. After dropping physicians with age >65	1,370,519

Description:

Step 1 – Data for observation of biennial mobility

Step 2 – All RUCC geocoding used the full street address for the identified practice location.

Addresses for 2000 – 2006 uses the 2003 RUCC and 2008 – 2014 addresses uses the 2013 RUCC. In order to avoid apparent moves that resulted merely from the county being reclassified, pairs starting in 2006 use the 2003 RUCC for 2008 as well. In contrast, pairs starting in 2008 use the 2013 one however.

Step 3 – 2014 data used only for identifying destination locations for the 2012 – 14 pairs

Step 4 – Primary care = all physicians with a specialty of family physician, general pediatrics, geriatrics and general internal medicine. Specialty was re-checked every two years and secondary specializations were ignored

Step 5 – Direct patient care ('active' status) was re-checked every two years. All active year data were included, even if retiring within the study period.

Step 6 – Physicians >65 were removed from this study, largely due to data quality concerns regarding accurate identification of retirement status in the AMA file

Table A2: Number of movers, locations of moves – Primary care physicians, aged 30-65, 2000-2014

		Destination location – RUCC category											
		1 (M)	2 (M)	3 (M)	4 (R)	5 (R)	6 (R)	7 (R)	8 (R)	9 (R)	Total		
Origin location – RUCC category	1 (M)	760,128 (97.1%)	11,878 (1.5%)	5,029 (0.6%)	2,328 (0.3%)	858 (0.1%)	1,668 (0.2%)	913 (0.1%)	188 (0.0%)	190 (0.0%)	783,180	Leave metropolitan – to go to rural	0.8%
	2 (M)	11,677 (4.0%)	268,812 (93.0%)	3,521 (1.2%)	1,914 (0.7%)	586 (0.2%)	1,542 (0.5%)	779 (0.3%)	188 (0.1%)	166 (0.1%)	289,185		1.8%
	3 (M)	4,980 (3.9%)	3,528 (2.8%)	114,224 (90.5%)	1,067 (0.9%)	387 (0.3%)	1,274 (1.0%)	528 (0.4%)	166 (0.1%)	116 (0.1%)	126,270		2.8%
	4 (R)	2,113 (4.0%)	1,885 (3.6%)	1,092 (2.1%)	46,120 (88.1%)	171 (0.3%)	545 (1.0%)	326 (0.6%)	61 (0.1%)	66 (0.1%)	52,379	Leave rural – to go to metropolitan	9.7%
	5 (R)	844 (3.4%)	633 (2.6%)	446 (1.8%)	170 (0.7%)	22,034 (88.6%)	220 (0.9%)	348 (1.4%)	39 (0.2%)	123 (0.5%)	24,857		7.7%
	6 (R)	1,777 (3.6%)	1,571 (3.2%)	1,481 (3.0%)	615 (1.3%)	216 (0.4%)	42,422 (87.0%)	471 (1.0%)	123 (0.3%)	113 (0.2%)	48,789		9.9%
	7 (R)	980 (3.0%)	864 (2.6%)	653 (2.0%)	354 (1.1%)	406 (1.2%)	467 (1.4%)	29,129 (87.8%)	104 (0.3%)	237 (0.7%)	33,194		7.5%
	8 (R)	210 (4.0%)	200 (3.8%)	188 (3.5%)	79 (1.5%)	42 (0.8%)	148 (2.8%)	103 (1.9%)	4,303 (81.1%)	34 (0.6%)	5,307		11.3%
	9 (R)	231 (3.1%)	187 (2.5%)	175 (2.4%)	73 (1.0%)	159 (2.2%)	143 (1.9%)	299 (4.1%)	44 (0.6%)	6,047 (82.2%)	7,358		8.1%
Total	782,940	289,558	126,809	52,720	24,859	48,429	32,896	5,216	7,092	1,370,519			

(M) Metropolitan; (R) Rural,