

TOO MANY PHYSICIANS, PART DEUX 1998-12

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Needless to say last month's editorial on possible physician oversupply has stirred up a fair amount of comment. In particular, I've gotten a few comments from various specialists asking specifically about their particular specialty. They rightly point out that since the term specialist encompasses everything from allergy to urology and then some how can one write about "specialist" distribution? In an effort to try to alleviate various fears let me try to dredge up some of the more specific and pertinent numbers.

First of all, how does one "calculate" the appropriate number of physicians? Millions of trees have been sacrificed and reams of data have been generated just to answer that question. One representative study (Goodman et al 1996) looked at the overall US rate and compared it to 1.) A large HMO (2.4 million members); 2.) A region dominated by managed care (Minneapolis); and 3.) A region dominated by fee for service (Wichita). This measure gives a ball park figure of specialist distribution. Their data seems reasonably comprehensive so I was going to use it for this article.

However, just this week, UC Davis released their Developing Rural Integrated Systems (DRIS) Report. In this report they also looked at specialty distribution within Humboldt-Del Norte Counties and compared them to the US averages. Their data seems to be more complete and relevant to our discussion. Therefore, when I was compiling the tables, I relied much more heavily on their data.

By studying the data in the accompanying tables, we can see where we are "deficient" in numbers of physicians, and where we are oversupplied. It is interesting to note that the overall distribution of specialty physicians in the United States is significantly higher in most specialties than the three benchmarks chosen by Goodman et al. The DRIS data seems to be more in line with "the real world." Depending upon which model we wish to adhere to we can decide for ourselves whether or not we have too many doctors.

Some of the data in Tables 3 and 5 are somewhat misleading since due to the peculiarities of geography it would be very easy to treat the population from Scotia to Trinidad as one "metro" area. We all have patients that commute that distance quite readily. I have done this calculation for Table 4 showing distribution within Humboldt-Del Norte. By doing this calculation there was a leveling off of the disparity between Eureka and Arcata (which encompasses Arcata, McKinleyville, Blue Lake and Trinidad.)

The data I've written about in the past two months only marginally takes into account the number of mid-level providers in our community. We rely heavily on the use of mid-levels, and while their effect is primarily on the allocation of primary care resources, they do also impact upon the specialist. The numbers I used in Table 2 were supplied by the DRIS report, as was the number of people over the age of 65. All of the other numbers relating to local physicians was tabulated by Penny and me. Unfortunately, we don't know how many of the physicians in our area are only "part time," since some physicians after moving to this area have made lifestyle choices not to practice full time. Although our distribution of 185 per 100,000, is well within the overall US ratio of Physicians of 180 per 100,000, we must note that the ratio for physicians in practice in non-metropolitan areas is only 80 per 100,000.

So, you dear reader, can cogitate the numbers and decide if we need to hire more headhunters. You make the call.

References:

Goodman, David C., Elliott S. Fisher, M.D., MPH; Thomas A. Bubolz, PhD; Jack E. Mohr; James F. Poage, PhD; John E. Wennberg, MD, MPH Benchmarking the US Physician Workforce: An alternative to Needs-Based or Demand-Based Planning JAMA Dec.11, 1996 276:1811-1817

UC Davis Medical Center, Department of Family Practice DRIS Initiative Data Report: Humboldt/Del Norte Section IV, pp 32-37 1998

Table 3: HUMBOLDT-DEL NORTE PROVIDER SUPPLY & RATIO PER100,000

* VARIANCE = Humboldt-Del Norte Ratio minus U.S. Ratio

Table 4: SELECTED HUMBOLDT-DEL NORTE SPECIALTY DISTRIBUTION COMPARED TO U.S.

(Based on GOODMAN et al 1996 and DRIS 1998)

	HUM-DN	HUMBOLDT	DEL NORTE	EUREKA	ARCATA*	FORTUNA+	"Metro Bay"#	U.S.
Primary Care	76.5	76.9	75.2	126.7	91.3	94.4	104.4	65.7
MEDICAL SPECIALTIES								
Allergy/Immun	0.63	0.39	1.71	1.75	0	0	0.6	1.3
Cardiology	3.16	3.88	0	13.99	2.34	0	5.8	5.9
Dermatology	1.27	1.55	0	3.50	0	6.5	2.3	2.9
Endocrinology	0.3	0.4	0	1.7	0	0	0.6	0.8
Infectious Dz	0	0	0	0	0	0	0	0.6
Nephrology	1.3	1.6	0	7.0	0	0	2.3	1.1
Neurology	2.53	3.11	0	13.99	0	0	4.6	3.4
Oncology	1.27	1.55	0	6.99	0	0	2.3	2.4
Physical Med	0.6	0.8	0	3.5	0	0	1.2	?
Psychiatry	3.80	3.88	3.42	13.99	2.34	0	15.0	13.9
Pulmonary	1.90	1.55	3.42	3.50	2.34	0	2.3	2.2
Rheumatology	0.63	0.78	0	3.50	0	0	1.2	1.0
SURGICAL SPECIALTIES								
GI	1.58	1.94	0	8.74	0	0	2.9	2.9
General Surg	6.33	6.21	6.84	15.73	3.51	13.02	9.2	11.0
Neurosurgery	1.90	2.33	0	6.99	2.34	0	3.5	1.6
OB-GYN	7.59	8.54	3.42	17.48	9.37	13.02	12.7	12.7
Ophthalmology	6.01	5.82	6.84	19.5	2.34	6.51	8.6	6.1
Orthopedics	9.49	9.32	10.26	24.48	7.02	13.02	13.8	7.7
Otolaryngology	2.53	2.33	3.42	6.99	2.34	0	3.5	2.9
Plastics	1.27	1.55	0	6.99	0	0	2.3	2.0
Cardiac Surg	0.3	0.4	1.7	0	0	0	0.6	0.7
Urology	2.21	1.94	3.42	8.74	0	0	2.9	3.5
HOSPITAL BASED SPECIALTIES								
Anesthesia	13.29	15.52	3.4	45.45	9.36	19.53	23.1	10.6
Emergency	19.61	19.02	22.22	48.95	15.22	26.04	23.1	6.3
Pathology	3.80	3.88	3.42	13.99	2.34	0	5.8	5.2
Radiology	8.54	8.92	6.84	19.23	4.68	13.02	11.0	9.6
Radiation Onc	1.3	1.6	7.0	0	0	0	2.3	?

Numbers expressed as physicians per 100,000 population. Range is the 3 areas benchmarked in the reference

*ARCATA: Includes Arcata, Mckinleyville, Blue Lake and Trinidad

+ FORTUNA Includes Fortuna, Ferndale, Loleta Rio Dell and Scotia

"METRO" BAY Includes area from Scotia to Trinidad