Table. Compensation and Characteristics of Internal Medicine Subspecialty Fellowships Using and Not Using a Centralized Match

Subspecialty	2001 Starting Wage, $				No. of Programs/ No. With Wage	No. of Program Years	No. of Fellows per Year	Match
	Mean (SD)	Median	Minimum	Maximum				
Pulmonary disease	43 978 (5839)	42 318	36 000	56 000	31/27	2	57	MSMP
Critical care medicine	41 998 (4220)	41 795	30 504	50 000	32/32	1-2	83	No
Geriatric medicine	41 798 (4658)	41 067	28 200	57 107	96/90	1	405	No
Hematology and oncology	41 654 (5009)	40 547	32 000	70 900	113/110	3	350	No
Infectious disease	41 490 (5354)	40 477	30 000	65 000	136/122	2	321	MSMP
Nephrology	41 267 (4495)	40 402	30 000	54 450	126/122	2	369	No
Cardiovascular disease	41 220 (4445)	40 486	26 749	70 000	174/164	3	702	MSMP
Pulmonary disease and critical care medicine	41 163 (5335)	40 537	26 916	70 000	119/112	3	354	MSMP
Oncology	41 150 (5104)	41 706	28 200	52 808	27/27	2	107	No
Gastroenterology	41 145 (5738)	40 691	26 000	75 000	154/146	3	357	No
Hematology	40 797 (6216)	40 300	28 200	52 808	20/19	2	48	No
Endocrinology, diabetes, and metabolism	40 545 (5303)	40 000	24 000	75 000	115/106	2	237	No
Rheumatology	40 183 (5119)	39 500	28 824	65 000	104/99	2	187	No

Abbreviation: MSMP, Medical Specialties Matching Program.

Relationship Between Wages and Presence of a Match in Medical Fellowships

To the Editor: There is ongoing litigation about whether the National Resident Matching Program (NRMP) restrains competition for residents and suppresses wages.[1] Although the legal issues have been discussed in detail,[2,3] the basic economic question is whether a market organized by a match results in lower wages than if there were no match. We compared similar markets for postgraduate medical fellowships that operate with and without a match.

Methods. Some subspecialties of internal medicine use the Medical Specialties Matching Program (MSMP), while others use no centralized match. We purchased from the American Medical Association the *Graduate Medical Education Directory, 2002-2003* data set of fellowship wages by program,[4] and compared all internal medicine subspecialty fellowships in the United States requiring 3 years of prior residency. Of the 1249 directory entries representing 14 subspecialties in 209 hospitals, 1178 include wages. Sports medicine was excluded because there are only 2 internal medicine programs in that subspecialty, bringing the final number of directory entries including wages to 1176.

Results. The mean compensation of the 4 subspecialties that use a centralized match is $41 963 ($41 357 weighted by number of first-year fellows), while it is $41 171 ($41 248, similarly weighted) for the other subspecialties that do not use the MSMP (Mann-Whitney *U* test, $P=.28$) (TABLE). Furthermore, the median, minimum, and maximum wage, and the SD of the distribution of wages of subspecialties that use the MSMP, are all marginally greater than those that do not use this match (Mann-Whitney *U* test, $P>.05$ for each).

To test the hypothesis that, within hospitals, wages for subspecialties that use the match are different than wages for subspecialties that do not, we computed the average wage within each hospital for subspecialties that use and do not use the MSMP. The Wilcoxon matched-pairs signed-ranks test for 169 hospitals was nonsignificant ($P=.96$).

Comment. Internal medicine subspecialties that use the MSMP do not offer different salaries than those that do not. Thus, a match is not the feature of these markets that determines wages.

The market for fellowships is not the same as the market for residencies: there are similarities and differences. Although both the MSMP and the NRMP use the same Roth-Peranson matching algorithm,[5,6] stipends for residents are presently funded largely by Medicare, while fellowships are mostly funded by the National Institutes of Health. In each case, additional funds would need to be found if wages were to be increased. Unlike residency training, fellowships are an optional part of a career path. Thus potential fellows have market alternatives; fellowship programs must compete not only with other programs, but with less-specialized medical positions, because fellows could practice medicine without pursuing a fellowship. Relatively low wages accepted by fellows, viewed in this light, represent their willingness to continue to invest in specialized training.

The fact that wages for fellowships are unrelated to the presence of a match suggests that eliminating the resident match would not necessarily increase residents' wages.

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Practice Locations of Graduates of a Social Pediatrics Residency

To the Editor: There has been an ongoing decline in the number of primary care physicians working in underserved areas.[1,2] To help address this problem, the Albert Einstein College of Medicine and Montefiore Medical Center initiated the Residency Program in Social Pediatrics (RPSP) in 1970. The goal was to train pediatricians who would possess the skills and willingness to practice in underserved communities and would remain in those settings for extended periods.[3,4] We assessed the practice locations of all RPSP graduates who participated in the program between July 1970 and June 2002.

Methods. We conducted a mail survey of all 183 RPSP graduates. Respondents were asked to characterize their practice locations using standard federal government designations for underserved locations (ie, Health Professions Shortage Area, Neighborhood or Community Health Center, Medically Underserved Area, Federally-Funded Health Center, and Indian Reservation).

Results. A total of 147 (80%) graduates responded. Of the respondents, 65% were men, 45% were white, 20% were Hispanic, 16% were black, and 9% were Asian. Overall, 28% of respondents graduated in the 1970s, 15% in the 1980s, 44% in the 1990s, and 13% in the 2000s. On average, graduates' patient panels comprised 70% Medicaid or uninsured patients and 28% self-pay or privately insured patients.

At the time of the survey, 91% of graduates were practicing in urban or rural settings, 70% in a medically underserved area, 54% in a health professions shortage area, 51% at a community health center, 49% in a federally funded health center, and 3% in an Indian reservation. When asked about previous locations of medical practice since graduation, 93% had practiced in a medically underserved area, 81% at a community health center, 72% in a health professions shortage area, 72% in a federally-funded health center, and 9% had practiced in an Indian reservation.

Eighty-three percent of graduates reported that the RPSP had an "extremely high" impact on their choice of medical practice settings, 14% reported a "moderate" impact, whereas only 3% reported "little" impact on their choice of practice setting.

Comment. A majority of RPSP graduates were engaged in medical practice in underserved areas in keeping with the stated mission of the program. It is possible that many graduates were already committed to work in underserved areas, and chose our program because it was concordant with their career plans. On the other hand, it is also possible that the experience in our program supported and strengthened their commitment to working in a health-shortage area. Although the relative contribution of these factors is unclear, we would anticipate that other such programs could have similar success rates in encouraging medical careers in underserved areas.

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CORRECTIONS

Error in Sentence: In the Editorial entitled "Nonsteroidal Anti-inflammatory Drugs and Alzheimer Disease" published in the June 4, 2003, issue of THE JOURNAL (2003;289:2865-2867), on page 2866, "The Rotterdam cohort included incident AD cases with a wide range of symptoms and comorbidity, many of whom were diagnosed with mild AD before they were evaluated in the study" should read "The Rotterdam cohort included incident AD cases with a wide range of symptoms and comorbidity, many of whom were diagnosed with mild AD only when they were evaluated in the study."

Error in Reference Citations: In the Special Communication entitled "Use of Race and Ethnicity in Biomedical Publication" published in the May 28, 2003, issue of THE JOURNAL (2003;289:2709-2716), the references on the following pages were incorrectly cited: page 2710, the original reference citation 77 for Boehmer et al in columns 1 and 2 should be 78; page 2712, the original reference citations 22, 106, 113 in column 1 for the sentence "If racial/ethnic identification was self-reported, authors should specify whether individuals answered an open-ended question or chose from a fixed set of categories." should be 22, 105, 113; and page 2713, the original reference citation 123 for "Krieger and Fee" should be reference citation 120 and the text should read "Krieger et al."