

VIII. TASK FORCE SPECIALTY PRIORITIES

Members of the Task Force represent individual health care systems covering most of Iowa's geographic subregions. Each Task Force member was asked to submit a list of up to 10 medical and surgical specialties regarded as being of greatest need or in greatest demand in the member's region or system. Members were encouraged to consult colleagues in tailoring their specialty choices to their own region or health system. Further, they were asked to rank order the top five selections with one representing the greatest need/demand.

The results of this exercise are presented in Figure VIII.1. The first priority for each list submitted received a value of 5, the second a value of 4, and so forth. The last column in the table displays a specialty's mean rank plus the number of parties ranking the specialty. The top five workforce needs (or unmet demands) as perceived by Task Force members are above the red line and include psychiatry, neurosurgery, general internal medicine, orthopedic surgery and cardiology.

Task Force members were asked specifically to consider supply and demand for family physicians in their regions. The group, representing institutions that are sponsoring eight of Iowa's nine family medicine residencies, concluded that the present supply of family physicians is sufficient to meet current needs with the important caveat that efforts to meet the demand for rural family physicians need to be constant and focused.

An analysis of physician supply was conducted and discussed for each of these top five ranked specialties. The analysis considered data across four different supply perspectives: 10-year supply trend; geographic distribution by county; visiting consultant (outreach) activity; and population-to-physician ratios by county. Trend data were described as increasing, level, or declining based on rules concerning the net increase or decrease over the 10-year period reconciled with the pattern over the last two to three years.

FIGURE VIII.1
TASK FORCE ON IOWA PHYSICIAN WORKFORCE

Ranking* of Specialty Preferences											
Specialty	Mercy MC	Mercy DGR	Genesis	Mercy CH	WIS (Iowa) Wisco	WIS (Iowa) DEM	UI COOJK	Sum of Rank Values	Mean Rank	# Ranking Specialty	Total Score**
Psychiatry	5	5	3		5	4	3	27	3.86	6	9.80
Neurosurgery		3		3	4	5		15	3.43	4	6.43
Gen Internal Medicine		1	1	3	2		4	10	2.42	5	5.42
Orthopedic Surgery	3				3	1	3	10	2.42	4	5.42
Cardiology		4				2	2	8	2.14	3	4.14
Neurology	2	2					1	5	1.71	3	3.71
ObGyn					1	3		4	1.57	2	2.57
Phys Med/Rehab			3					3	1.71	1	1.71
General Surgery	4							4	1.57	1	1.57
Endocrinology				4				4	1.57	1	1.57
Vascular Surgery			4					4	1.57	1	1.57
Peds/Critical Care				3				3	1.42	1	1.42
Emergency Medicine	1		2					3	1.42	1	1.42

*Ranking: Each participant ranked his top 5 specialties based on the need/demand in his respective system. The first priority received a value of 5. The second priority received a value of 4, the third priority a value of 3, fourth priority a value of 2, and the fifth priority a value of 1.

**Total Score: The total score represents the specialty's mean rank plus the number of parties ranking the specialty.

Psychiatry

Figure VIII.2 shows that the 10-year supply of psychiatrists in Iowa had marginally contracted by the close of 2005. Particularly noteworthy is the recording of net losses for three of the last five years, especially in the context of a modest increase in the Iowa population during that time. Thus, by definition, the supply trend line in psychiatry is one of decline.

The geographic distribution of psychiatrists by county is displayed in Figure VIII.3. Just 32 of Iowa's 99 counties are home to at least one psychiatrist, although additional sites receive direct services from some of Iowa's psychiatrists who conduct outreach clinics as visiting consultants (Figure VIII.4).

Computations of county, state and U.S. population per psychiatrist are presented on the map in Figure VIII.5. Iowa has twice the population per psychiatrist compared to the nation (13,241 vs. 6,657). Therefore, Iowa has half the number of psychiatrists per 100,000 population (7.6) compared to the national figure (15.8). On the positive side, as noted on the map, 79% of Iowans reside within 20 miles of a psychiatrist, but given the unfavorable population to psychiatrist ratio, proximity does not equate well to access.

FIGURE VIII.2
IOWA PHYSICIAN SUPPLY
ANNUAL NET GAIN (LOSS) BY SPECIALTY
1996-2005

Psychiatry / All Subspecialties	Entered	Left	Net Gain (Loss)	Total
1995				224
1996	15	24	(9)	
1997	19	13	6	
1998	18	12	6	
1999	14	15	(1)	
2000	20	14	6	
2001	15	10	5	
2002	15	20	(5)	
2003	19	14	5	
2004	16	20	(4)	
2005	11	23	(12)	
Total	162	165	(3)	221
Annual Average	16	17	0	
1996 - 2005 Percent Change			-1.3%	
Current Trend			Declining	

IX. PHYSICIAN DEMAND

The current market demand for a specific specialty is precisely quantifiable for a given point in time. The demand analysis, conducted by the UI Carver College of Medicine's Office Statewide Clinical Education Programs (OSCEP) administrative staff, ascertained the precise number of job opportunities available in each of the selected specialties at the time of the study. The number of practice and new opportunities was determined by contacting every possible employer or practice entity for a given specialty, thus ensuring a 100% response rate. This technique, used by workforce analysts, accounts for all job openings at the time of the survey. The result of this process is a specific count of the number of jobs available in a specific specialty, i.e., a measure of what the market will actually support rather than an estimate based on an externally determined benchmark. Physician demand studies have been conducted on an annual basis by staff in OSCEP since 1977 for various medical and surgical specialties.

Psychiatry

At the time of the demand study there were 77 full- and part-time practice opportunities for psychiatrists, 61 in adult psychiatry and 16 in child psychiatry. Due to the nature of psychiatric clinical practice, including agency contracts for significant part-time commitments, it was essential that part-time positions be counted along with full-time positions. The study group counted part-time positions of .5 FTE or greater. The 2006 demand for psychiatrists in Iowa is shown in Figure IX.1; part-time positions are identified separately.

FIGURE IX.1
CURRENT PHYSICIAN DEMAND
PSYCHIATRY (77)



Critical Demand Index (CDI)

The Task Force discussed the results of the above demand studies by individual specialty and then comparatively across specialties. An important outcome of the group's deliberations was the development of a method to quantify the intensity of demand across medical specialties. Two data sets must be available for this purpose: (1) the current demand in a given specialty expressed as a finite number of job opportunities and (2) the current supply in the same specialty.

The Task Force reasoned that when comparing two specialties which have a similar number of job openings but substantially different supplies, the one with the smaller supply base would likely experience a more *intense* demand. Using this logic, an index of demand intensity (the critical demand index) was computed by dividing the current demand by the current supply for each specialty in this analysis (Figure IX.13). The greater the fraction, the greater the intensity (or seriousness) of demand for the specialty. In the comparative analysis, two additional specialties — family medicine and general pediatrics

— were included because current demand data were readily available for them from another analysis.

The Task Force also reasoned that including the average number of physicians entering Iowa practices annually in each specialty would give the demand analysis a temporal dimension. Using the functionality of the Iowa Physician Information System, this annual average was computed for the selected specialties for the most recent 10-year period ending 2005 (Figure IX.13).

The conclusions from these computations include:

- The intensity of demand in neurology and psychiatry is twice that of the other non-primary care specialties and more than four-fold greater than family medicine and pediatrics, for which the current number of openings compared to the current supply is substantially more favorable.
- It takes, on average, two to three years longer to fill the typical neurology or psychiatry position than a position in any of the other specialties in the analysis.

FIGURE IX.13

CRITICAL DEMAND INDEX FOR SELECTED MEDICAL SPECIALTIES

	Current Year's Demand	Current Year's Supply	Annual Average CDI***	No. Entering	Average Years to Fill Position****
• Neurology	26	82	.32	5	5.2
• Psychiatry	64 (77*)	220	.29 (.35*)	16	4.0 (4.8*)
• Gen Internal Medicine	56 (79**)	407	.14 (.19**)	34	1.6 (2.3**)
• Ob/Gyn	28	215	.13	14	2.0
• General Surgery	24	198	.12	13	1.8
• Cardiology	20	168	.12	12	1.7
• Family Medicine	94	1271	.07	78	1.2
• General Pediatrics	10	229	.04	16	0.6

* If part-time positions are counted

** If hospitalists are counted

*** Critical Demand Indicator = current demand ÷ current supply

**** Average years to fill: Current demand ÷ the annual average number of these specialists entering Iowa during the prior 10 years yields an estimate of recruitment difficulty.