

# A Survey of Early-Career Child and Adolescent Psychiatrists: Professional Activities and Perceptions

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## ABSTRACT

**Objective:** To assess the career paths and work perceptions of early-career child and adolescent psychiatrists in the United States. **Method:** Analysis of survey data of 392/797 (49.2%) of all U.S. child and adolescent psychiatrists graduating from training in 1996–1998 and on the mailing list of the American Academy of Child and Adolescent Psychiatry. **Results:** Slightly more than half of those surveyed were women, and most were in their late thirties, white, married, and living in the geographic area in which they trained, with a median income for full-time workers between \$121,000 and \$150,000. Those with educational debt owed an average of \$69,741. The sample was generally very satisfied with their work. They identified clinical work, variety, autonomy, and making a difference as the best aspects, and managed care, paperwork, and overwork as the least desirable aspects. The bulk of hours worked were in solo private practice, public sector, and group practice, with children and adolescents making up 73% of patients treated. The most common treatment modality was medication management. **Conclusions:** The present study uses a database approach to defining current practice and workforce issues among early-career child and adolescent psychiatrists. These data may facilitate objective discussion about public policies concerning workforce priorities, barriers, and facilitators to recruitment in this understaffed field. *J. Am. Acad. Child Adolesc. Psychiatry*, 2002, 41(2):123–130. **Key Words:** child and adolescent psychiatrist, career, workforce, practice.

Child and adolescent psychiatry is a shortage specialty that has been enormously affected by the vicissitudes of national and regional children's physical and mental health policy and reimbursement for care (Beresin, 1997; Council on Graduate Medical Education, 1990; Graduate Medical Education National Advisory Committee, 1980; Philips et al., 1983; U.S. Department of Health and Human Services, 1999). As with all medical specialties, rapidly changing scientific discoveries and socioeconomic influences have profoundly altered the skills required and the

practice patterns of child and adolescent psychiatrists. Burgeoning research on neurodevelopment and developmental psychopathology, psychopharmacology, systems of care, and psychotherapeutic interventions have been added to the previous knowledge base (Leckman et al., 1989). Medical economic forces change annually, as the country as a whole, and some regions in particular, struggle to contain costs while continuing to provide adequate mental health care (Stout, 1998; U.S. Department of Health and Human Services, 1999).

Early-career child and adolescent psychiatrists are in tremendous demand and face increasing expectations to assume high-level administrative and leadership positions in children's mental health settings (Gabel, 1998). It has been recently estimated that 6 to 9 million children and adolescents in the United States (9%–13%) suffer from serious emotional disturbances (Friedman et al., 1998; Lavigne et al., 1996), many of whom are not receiving the critical mental health services they require (Burns et al., 1995; Leaf et al., 1996). The child and adolescent psychiatrist is a crucial member of the mental health teams involved in prevention, identification, assessment, and treatment of the enormous number of children and fam-

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ilies in need. Because of this shortage, time and expertise among child and adolescent psychiatrists is in limited supply. Managed care has added to the nonclinical duties of physicians. Burdensome reviews, paperwork, and tedious billing procedures may lead to dissatisfaction and negatively affect the clinical time available to care for the large numbers of children who require services (Domino et al., 1998; Schowalter, 1998; Stuart, 2000; Ware et al., 2000). In this climate, the early-career child and adolescent psychiatrist has both a tremendous opportunity to make a critical difference in the care of ill children and adolescents and the mental health systems that serve them, as well as the potential for disillusionment and frustration by the financial disincentives and bureaucratic hassles.

There is a dearth of literature about the child and adolescent psychiatry workforce and the effects of the current fiscal and mental health care environment on the practice and on job satisfaction. We are unaware of any similar systematic surveys that examine the nature of practice patterns and highlight the subjective experiences of early-career child and adolescent psychiatrists. This paper focuses on a characterization of the population of early-career child and adolescent psychiatrists, the nature of their practice, priorities in choosing their positions, the impact of educational debt, and the physicians' reports on their satisfactions and dissatisfactions with their work. Objective assessment of the actual experiences and perceptions of practitioners will allow for a more informed discussion about national policy affecting the role of the child and adolescent psychiatrist. It will also assist in identifying the facilitators and barriers to recruitment of physicians into the field of child and adolescent psychiatry.

## METHOD

### Study Sample

We developed a survey instrument to assess a number of issues relevant to present professional activities and training experiences. The survey questionnaire had three sections: (1) demographic information, (2) work environment, and (3) training experiences in child and adolescent psychiatry residency. The findings from the relevant first two sections of the survey are presented here.

The survey questionnaires were mailed to all U.S. child and adolescent psychiatrists who graduated from training programs in 1996, 1997, and 1998, were living in the United States, and were listed on the American Academy of Child and Adolescent Psychiatry (AACAP) membership mailing list. A total of 897 surveys were sent. A cover letter on AACAP letterhead explained the purpose of the survey, and a prestamped envelope was provided. A first mailing was done in January of 1999, and a second mailing was completed in August of 1999. To a random 75% of surveys in the second mailing, we attached a hand-

written note encouraging the recipient to complete the survey and return it.

Several factors complicated the sample response rate calculations: (1) The mailing list contained a number of invalid addresses. Although some of these surveys were returned by the post office, other improperly addressed surveys may not have been returned. (2) Some surveys were returned with a note that the respondent was a medical student, a resident, or was not a child and adolescent psychiatrist, making them ineligible. Other ineligible recipients, however, may not have returned the survey. (3) Thirty-one surveys were ineligible because the respondent did not graduate from child and adolescent psychiatry training during the years 1996 through 1998. Of the 897 surveys mailed, 100 came back as wrong addresses or ineligible (e.g., medical students, residents, nonphysicians, or graduated outside the target training years). Of the remaining 797 surveys, the first mailing generated 225 responses. The second mailing generated another 167 responses. The total responses numbered 392, producing a response rate of 49.2%. Nonresponders were not significantly different from responders with regard to the geographic area of their mailing address ( $t = 1.8, p = .2$ ).

### Measures and Procedures

The survey questionnaire was four pages (2 two-sided pages). Survey data included both forced choice and numeric data. The survey also contained three open-ended questions about job satisfaction: (1) If you have changed jobs, why did you leave your last position(s)? (2) What do you like best about your present work? (3) What do you like least about your present work?

The survey sought demographic data about location, ethnicity, age, gender, and family constellation. Work environment questions tapped information about the number of hours worked weekly, type of practice, age of patients treated, considerations of job choice, income, and job satisfaction ratings. The survey also queried respondents regarding amount of educational debt.

All numeric and forced choice data were entered into Excel. Descriptive statistical analyses were performed, including means and percentages, for all appropriate data. A correlation analysis was run between amount of educational debt and current income.

We surveyed all open-ended narrative comments (0–4 answers per survey question). An initial reading of half of the survey comments revealed natural clustering of answer categories. In a second reading of all surveys, we assigned the responses to one of the defined categories. We rated as "other" any comments that did not naturally fit into one of the defined categories.

## RESULTS

### Demographics of Early-Career Child and Adolescent Psychiatrists

The mean age of the sample was 37.1 years (range = 30–65 years). Fifty-three percent ( $n = 209$ ) of the respondents were female; 47% ( $n = 183$ ) were male. The sample's ethnicity distribution was 73% white, 13% Asian, 6% African American, 5% Hispanic, and 3% other. The location of the training institution and present home location (as determined by mailing address) are shown in Table 1. The Northeast had the largest percentage of trainees, as well as the largest percentage of respondents

**TABLE 1**  
Geographic Location: Present vs. Location of Training

Area of Country	Present (%)	Training (%)
Northeast	33	36
Southeast	18	20
South	9	5
Midwest	15	17
Southwest	18	16
Northwest	7	6

Note: N = 391 (99.7%) of respondents.

currently in residence. Most respondents remained in the general geographic location of their training. The largest change in location between training and present location was 4%; 5% of the respondents trained in the South and 9% currently reside there.

A high percentage (79.0%) of the sample was married, with a mean number of children of 1.2. The mean age of the youngest child was 4.4 years (range = one month to 36 years).

**Educational Debt**

Fifty-seven percent of survey respondents reported educational debt, with an average overall debt amount for all respondents of \$39,800. For those with debt, the range was between \$5,000 and \$200,000 owed. The average amount owed for those with educational debt was \$69,741. This corresponds very closely to the reported average amount of \$69,059 owed by graduating medical students with educational debt in 1995 (Kassebaum et al., 1996).

**Characterization of Practice Patterns**

The average weekly work hours reported was 43.5. Seventy-nine percent of the sample reported working

full-time, with that population averaging a work week of 49 hours. Twenty percent of the sample reported working part-time, with part-time workers averaging 25 hours weekly. One percent of the population was not working outside the home.

The median income for all child and adolescent psychiatry respondents was between \$91,000 and \$120,000. As shown in Figure 1, the median income for part-time workers was \$51,000 to \$90,000, whereas the median for full-time workers was \$121,000 to \$150,000. The majority of full-time workers (79%) earned between \$51,000 and \$150,000. Only 1% earned more than \$250,000. Current pay level correlated with educational debt ( $r = 0.256$ , 95% confidence interval = 0.16–0.35,  $df = 391$ ), suggesting that those with the most cumbersome debt level sought higher paying positions.

Table 2 lists the reasons that early-career child and adolescent psychiatry respondents have changed jobs since graduation. Thirty-six percent ( $n = 136$ ) of all respondents reported one or more job changes. Of those who changed jobs, the largest percentage (40%) reported changing positions because they were unhappy in the work environment (e.g., unpleasant job politics, type of work, expectations of the position that were viewed as unrealistic or inappropriate, too much work, managed care influences). Other reasons for job changes included advancement, family-related issues, pay, military obligation, location and clinic closings.

Figure 2 depicts the types of practice settings in which the early-career child and adolescent psychiatrists were working. This figure reports the percentage of workforce hours in each practice setting, as compared with the percentage of practitioners who were involved in any manner in the settings specified. Settings in which physicians'

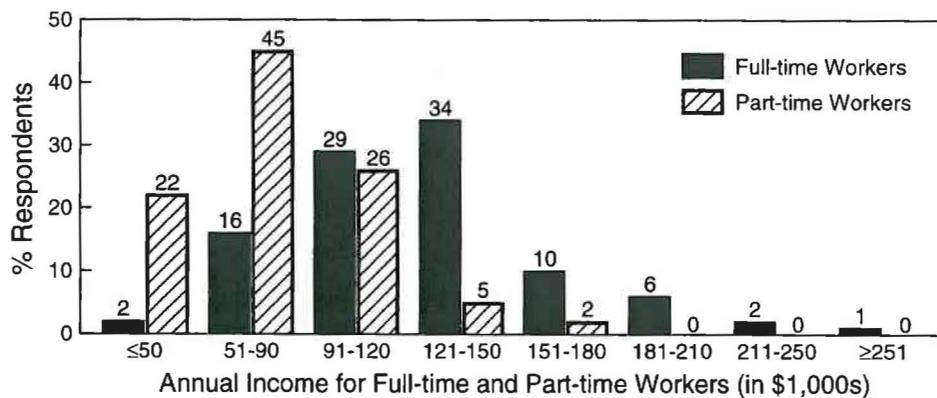


Fig. 1 Percentage of full-time versus part-time physician respondents in each annual income bracket.

**TABLE 2**  
Reason for Job Change

Reason	No.	%
Unhappy in work environment	55	40
Advancement	23	17
Family-related	21	16
Pay	16	12
Military obligation	11	8
Location	6	4
Closing of clinic	4	3

Note: N = 136 (36%) of all respondents reported a job change.

combined workforce hours were the highest included single-practitioner private practice (16% of all workforce hours), public sector (15% of all workforce hours), group practice (13% of all workforce hours), and hospital inpatient (13% of all workforce hours). Single-practitioner private practice, academics (including voluntary clinical faculty), public sector work, consultation, and hospital inpatient practice each had over 25% of respondents reporting some work in these settings. Administrative roles were part of the duties of 23% of respondents but accounted for only 4% of workforce hours.

Figure 3 depicts the ages of the respondents' patients. The majority of patients were children or adolescents (73%), with most of those patients (60%) being between the ages of 7 and 17. Over one fourth (27%) of patients were adults. As shown in Figure 4, an average of 61% of patients (although not of workforce hours spent) received psychopharmacology assessment and treatment. Thirty percent of all patients were treated with both psychotherapy and medication, and 9% of patients received psy-

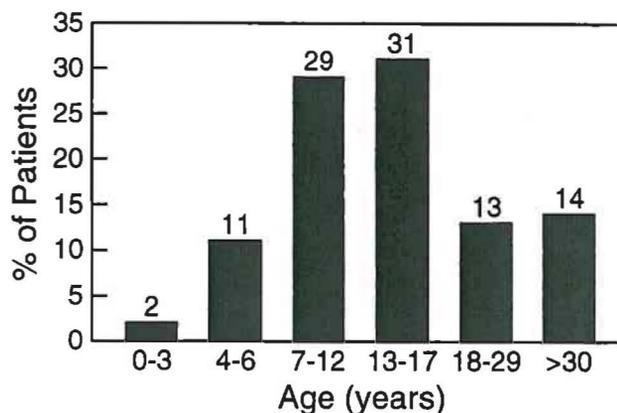


Fig. 3 Percentage of patients treated in each age category.

chotherapeutic services without concomitant medication treatment. Ten percent of all patients treated had a developmental delay or handicap.

Ratings of Job Satisfaction and Job Choice Factors

Figure 5 shows the ratings of job satisfaction on a 6-point Likert scale, with a ranking of one representing being "very dissatisfied" and a ranking of 6 representing being "extremely satisfied." Overall, the respondents seemed quite satisfied in their work, with a rating of 5 being endorsed the most frequently (42%), and ratings of 4, 5, or 6 accounting for 84% of all responses. Primary considerations in taking the present position were rank ordered by respondents in the order of importance. The reason most often cited as the number one reason for choosing the position, was "other" (mean ranking of 1.6), which included military assignment or loan repayment/

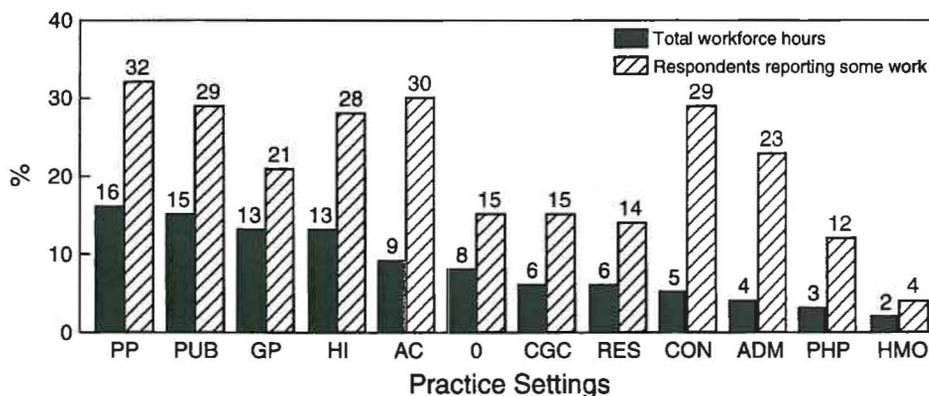
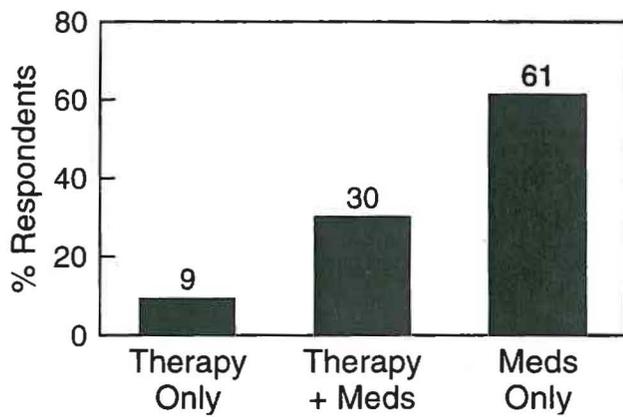


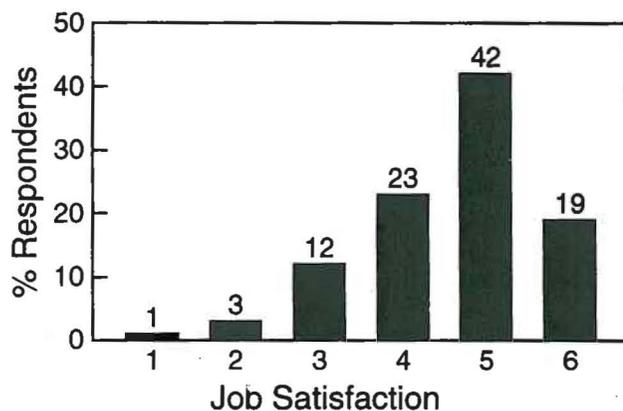
Fig. 2 Percentage of total workforce hours spent in each practice setting versus percentage of physician respondents reporting some work in each work setting. PP = solo practitioner private practice; PUB = public sector; GP = group practice; HI = hospital inpatient; AC = academics; O = other; CGC = child guidance clinic; RES = research; CON = consultations; ADM = administrative; PHP = partial hospital program; HMO = health maintenance organization.



**Fig. 4** Modality of therapy of patients treated. Therapy Only = psychotherapy only; Therapy + Meds = psychotherapy with medication; Meds Only = medication evaluation and treatment only.

forgiveness, presence of a psychoanalytic institute, and various family issues. Respondents ranked "hours and lifestyle" and "job satisfaction" as the next most important factors in choosing the present position (mean rank of 2.0 each). Respondents cited location (mean ranking of 2.6) and economic considerations (mean ranking of 3.0) least often as primary factors in choosing the present work position. However, it is of interest that most respondents remained in the same region of the country as their training location and that those with greatest educational debt tended to assume higher paying positions, despite the fact that, for the sample overall, these factors were ranked as contributing least often to job choice.

Table 3 summarizes the answers to the open-ended question, "What do you like best about your present work?" Three hundred seventy-seven (96.2%) of respondents answered the question, with an average of 2.0 answers per



**Fig. 5** Job satisfaction of physician respondents. Likert scale of 1 = very dissatisfied to 6 = extremely satisfied.

**TABLE 3**  
Best Aspects of Current Job

Category	No.	%
Self-determination	169	45
Variety**	79	21
Autonomy***	68	18
Flexibility/lifestyle	49	13
Work environment	141	37
Colleagues/staff	41	11
Working as team	38	10
Hours	30	8
Pay/benefits	26	7
No managed care	26	7
Minimal call	15	4
Supportive atmosphere	8	2
Patient characteristics	120	32
Clinical work*	113	30
Working with children	(60)	(16)
Psychotherapy	(34)	(9)
Working with families	(19)	(5)
Good patient mix	23	6
Job setting	83	22
Teaching	34	9
Academic	22	6
Community	16	4
Research	15	4
Administration	11	3
Consultation	8	2
Other	4	1
Satisfying aspects of the job	102	27
Making a difference****	60	16
Challenging	26	7
Intellectual stimulation	23	6
Provide quality care	11	3
Respect	8	2

Note: N = 377 (96.2%) of respondents answered the question. There was an average of 2.0 answers per survey for this question. Asterisks highlight the first four most endorsed items.

questionnaire. Our categories of answers included "self-determination," "work environment," "patient characteristics," "job setting," and "satisfying aspects of the job." Responses were counted with respect to category (number and percentage of respondents who reported one or more responses in each category) as well as the more specific nature of the response within each category. Almost half (n = 169, 45%) of respondents reported one or more aspects of self-determination as the best aspect of their work, followed by responses regarding one or more aspects of the work environment (n = 141, 37%) and patient characteristics (n = 120, 32%). The four most commonly cited best specific aspects of the job were clinical work (working with children and families and providing psychotherapy;

$n = 113$ , 30%), variety in job functions ( $n = 79$ , 21%), autonomy ( $n = 68$ , 18%), and making a difference in the lives of patients ( $n = 60$ , 16%). Flexibility and lifestyle factors, colleagues and staff, working in a multidisciplinary team setting, and teaching were the next most commonly cited aspects of the current job that contributed to job satisfaction.

Table 4 summarizes the answers to the open-ended question, "What do you like least about your present work?" Three hundred seventy-six (95.9%) of respondents answered the question, with an average of 1.5 answers per questionnaire. Our answer categories included "environmental challenges," "type of work," and "patient characteristics." "Environmental challenges" were defined as those aspects of a job that are related to the work environment, rather than the job functions related to physician duties per se. Ninety-four percent of all respondents reported one or more environmental challenges as being the least satisfying aspect of their present position. Respondents most commonly cited managed care and insurance-related tasks ( $n = 133$ , 35%) as the aspect of their jobs they liked least. One respondent went so far as to write, "Managed care dealings are the one reason I might quit someday." Paperwork and billing ( $n = 63$ , 17%), too much

need for services and too much work ( $n = 52$ , 14%), lack of resources for children and to appropriately perform the job assigned ( $n = 45$ , 12%), and frustrating bureaucracy and office politics ( $n = 39$ , 10%) were the other most frequently endorsed areas of dissatisfaction. Frustrations due to an inability to provide psychotherapy for patients because of payment or bureaucratic obstacles ( $n = 38$ , 10%) and poor pay for services ( $n = 35$ , 9%) were cited next most commonly.

## DISCUSSION

Child and adolescent psychiatrists graduating from training programs within the past several years are faced with a myriad of challenges and opportunities. The present survey of early-career child and adolescent psychiatrists highlights some important aspects of their work and provides important data for public policy discussions regarding how best to provide the workforce to care for the burgeoning population of seriously emotionally ill children and adolescents.

The early-career child and adolescent psychiatrists surveyed perform a wide variety of services in multiple treatment settings. The bulk of their work time is in solo private practice, group practice, and public sector work. Psychiatric services to institutional settings (inpatient, residential treatment, and partial hospitalization) were the next largest proportion of physician time. These institutional positions are relatively common ones for practitioners to assume as they complete training, and early-career child and adolescent psychiatrists likely have a larger percentage of work-force hours in these positions than their more senior colleagues. Respondents treated most of their patients with only medication evaluation and medication therapy; only a very small proportion of patients received psychotherapy as the only modality of treatment.

Academic endeavors accounted for 9% of all work-force hours. Full-time academicians frequently reported that clinical and teaching demands absorbed an inordinate amount of their work time, leaving little time for research into neuropsychiatric disorders. The need for a more thorough understanding of the etiology and course of neuropsychiatric disorders in children, as well as effective, evidenced-based treatments, is adversely affected by the shortage of researchers and the multiple functions and demands placed on new investigators (Eyberg et al., 1998; Jensen et al., 1999; Leckman et al., 1989; Shapiro et al., 1991).

Despite the low priority given to location as a reason for choosing their current position, child and adolescent

**TABLE 4**  
Least Desirable Aspects of Current Job

Category	No.	%
Environmental challenges	353	94
Managed care/insurance*	133	35
Paperwork/billing**	63	17
Too much need/work***	52	14
Lack of resources****	45	12
Bureaucracy/politics	39	10
Poor pay	35	9
Long hours/stress	26	7
Isolation	26	7
Commute	19	5
On-call	15	4
Other	11	3
Type of work	68	18
Lack of psychotherapy	38	10
No academic affiliation	11	3
Administration	11	3
Clinical teaching demands	11	3
Patient characteristics	25	7
Lack of progress	11	3
Lack of variety in population	11	3
Not enough children	7	2

Note:  $N = 376$  (95.9%) of respondents answered the question. There was an average of 1.5 answers per survey for this question. Asterisks highlight the first four most endorsed items.

psychiatrists in practice tend to remain in the region of the country in which they train. The northeast sector of the United States has the bulk of the larger training programs, and the largest portion (about one third) of respondents continued to live there after completing training. The extreme shortage of child and adolescent psychiatrists in rural areas (U.S. Department of Health and Human Services, 1999) suggests that increased incentives are required to motivate graduates to move from the location of their training programs to areas with extreme need. This also speaks to the importance of maintaining the viability of training programs in child and adolescent psychiatry in rural and underserved areas.

The median income of all early-career child and adolescent psychiatrists in the study was between \$91,000 and \$120,000, and the median income of full-time workers was between \$121,000 and \$150,000. This range is considerably lower than the \$164,000 median income of all physicians in 1997, but it compares very favorably with the median starting income of \$80,000 for all physicians in 1997 (Medical Group Management Association, 1998). A number of physicians in the survey commented that they felt poorly compensated for their work, in light of their long and extensive training and high educational debt. A correlation between debt level and income after graduation suggests that physicians with a higher level of educational debt seek out higher paying positions.

Overall, the child and adolescent psychiatrists were very happy in their careers. Despite concerns about the negative aspects of the present medical climate, the child and adolescent psychiatrists surveyed were generally quite satisfied and optimistic about their careers. In contrast, a recent survey of job satisfaction of Massachusetts primary care physicians reported that fewer than two thirds were satisfied with most areas of practice in 1997 (Murray et al., 2001). The early-career child and adolescent psychiatrists in the study cited clinical work with children and families and making a positive difference in their lives; the ability to provide the full range of therapeutic services (psychotherapy and psychopharmacology) as appropriate for each patient; variety; autonomy; flexibility; and a lifestyle that accommodated career, family, and other interests as the most satisfying aspects of their work. The non-patient care aspects of their jobs were most frustrating. Many physicians complained that dealings with managed care, insurance companies, and paperwork consumed an inordinate proportion of their work time, leaving less time to care for the many children in

need of services. Respondents reported the desire to use the full range of therapeutic skills for psychotherapy and psychopharmacology as indicated. The vast need and lack of resources for children and families were other frequently mentioned sources of frustration in the work.

#### Clinical Implications

Recruitment of child and adolescent psychiatrists to meet the needs of seriously emotionally impaired youth has become a national priority, highlighted in the 1999 Surgeon General's report on the state of mental health services (U.S. Department of Health and Human Services, 1999). Enhancing recruitment into the field entails adding incentives to training programs to fill or increase their numbers (Beresin and Enzer, 1990), loan payback, and other incentives to enter the field and move to highly underserved areas. Policymakers and providers alike must also devise a plan to help to ensure that child and adolescent psychiatrists are able to spend the bulk of their work time providing critically needed mental health care services for ill children and their families.

#### Limitations

Limitations of the study include issues regarding the representativeness of the sample of physicians returning the survey, as just under half of all surveys were returned. The results from surveys returned from the first mailing and those returned from the second mailing were not significantly different in demographics, implying that there may not have been bias. However, there may be some biases specific to those physicians that returned surveys. Those who were happy (or particularly unhappy) with their careers and training, for example, may have been more likely to memorialize their feelings on a survey. Graduates who had moved to other countries were excluded, thus potentially decreasing the percentage of foreign medical graduates who were eligible for the survey.

The time spent filling out the survey and completeness of the surveys were variable, and thus there may be some bias associated with individuals who provided a higher number of answers on the open-ended questions. As all answers were counted without prejudice as to the number of responses per survey, individuals who provided a higher number of answers to a given question influenced ratings more than individuals who gave only one answer per question. Issues of the accuracy of the mailing list may also have affected the results.

Despite the limitations, however, the large number of completed and returned surveys (392) was somewhat

unexpected and suggests a high level of interest by early-career child and adolescent psychiatrists in issues of training and their experiences of their new career. The paucity of literature about child and adolescent psychiatry practice and perceptions in general, and early-career child and adolescent psychiatry practice, perceptions, and financial status (debt and earnings) in particular, suggests that even incomplete data are worthwhile in understanding the present state of child and adolescent psychiatric practice. The data should also be useful in helping to formulate solutions to the child and adolescent psychiatric short-age issues.

### Conclusions

This study is the first to focus explicitly on the demographic features, types of practice, financial status, and subjective experience and perceptions of their jobs of early-career child and adolescent psychiatrists. At a time with a profound shortage of professionals in the field, this information may be crucial in determining incentives and barriers to recruitment and practice in child and adolescent psychiatry. In particular, freeing the physicians to spend more of their time treating patients, as well as consulting and collaborating with other treaters and systems of care, as opposed to paperwork and managed care tasks, would likely improve morale and work satisfaction and increase the effective services provided to children and families. Public policy about mental health services for children and adolescents should be guided by a database of need, resources, and barriers and facilitators associated with meeting the need. The data in this report may help steer a productive discussion about the appropriate role of the child and adolescent psychiatrist, as well as new and innovative models of service delivery that utilize and optimize the unique expertise and skills of the child and adolescent psychiatrist. The information obtained about work-force practices suggests that policymakers and providers must create the means to ensure that child and adolescent psychiatrists are able to spend the majority of their work time doing what is needed most urgently and what they love most—caring for emotionally ill children and their families.

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