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Beyond ADHD: How Well Are We Doing?

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Abstract

Background and Objectives—There has been increasing emphasis on the role of the pediatrician with respect to behavioral, learning and mental health (MH) issues, and developmental behavioral rotations are now required in pediatric residency programs. We sought to examine whether this newer emphasis on MH is reflected in pediatricians' reports of their current practices.

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Contributors' Statement:

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Amy Storfer-Isser, Ph.D.: Dr. Storfer-Isser conducted the analyses, drafted sections of the manuscript, critically reviewed all drafts and is accountable for all aspects of the work.

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Methods—Data from two Periodic Surveys (PS) conducted in 2004 and 2013 by the American Academy of Pediatrics (AAP) were examined to see whether there were differences in self-reported behaviors of usually inquiring/screening, treating/managing/co-managing, or referring patients for ADHD, anxiety, depression, behavioral problems or learning problems. We examined patterns for all practicing members and for those who practiced general pediatrics exclusively.

Results—There were few changes over the decade in the percentage who inquired or screened among all clinicians; among those exclusively practicing general pediatrics, the percentage who inquired or screened increased about 10% for ADHD and depression. ADHD remained the only condition for which the majority of respondents treated/managed/co-managed (57%). While there was some increase in the percentages who treated other conditions, the other conditions were usually treated by < 30% of respondents. A similar pattern of results was observed in analyses adjusted for physician, practice, and patient characteristics.

Conclusions—Despite the changing nature of pediatric practice and increased efforts to emphasize the importance of behavior, learning and MH, the pediatric community appears to be making little progress toward providing for the long-term behavioral, learning and MH needs of children and adolescents in its care.

Keywords

Mental Health; Developmental Behavioral Pediatrics; Screening; ADHD; Depression; Anxiety; Learning Problems; Behavior Problems

INTRODUCTION

For several decades, senior pediatric leaders have expressed concern that pediatricians were getting inadequate training in the care of common behavioral, learning and mental health (MH) issues that are frequently seen in pediatric practice.[1,2,3] In the face of waning acute infectious diseases and increasing numbers of children with chronic physical health conditions, MH, behavioral and learning issues have become central concerns for children and adolescents, both among those cared for by general pediatricians and among those with chronic conditions followed predominantly in subspecialty settings.

Recent epidemiologic studies suggest that behavioral, learning and MH issues are now among the most common conditions that concern parents who present to primary care pediatricians' offices[4]; they also are the most frequent causes of disability, accounting for three of the five most frequent disabling conditions, ahead of even asthma.[5] It is also well documented that MH conditions are even more prevalent among the growing numbers of children and adolescents with chronic conditions affecting other body systems.[6,7,8] In the face of these epidemiologic and practice changes, it is important to understand the attitudes and actions of pediatricians towards the care of behavioral, learning and MH issues over time.

Findings from the American Academy of Pediatrics (AAP) 59th Periodic Survey (PS) conducted in 2004 showed that fewer than 50% of pediatricians who practiced general pediatrics were providing MH and behavioral care to their child and adolescent patients with anxiety, depression, behavioral problems and learning problems.[9] The only exception to this

pattern was Attention Deficit Hyperactivity Disorder (ADHD), which the majority of pediatricians addressed in their practice and which had been heavily promoted by the AAP beginning with guidelines in 2001.[10] These findings were further supported by a subsequent AAP survey of graduating residents, which also found similarly low rates of reported care for MH issues among those most recently trained.[11]

Since 2004 there has been considerable emphasis on the need for pediatricians to address these issues. There is growing awareness of the familial nature and life-long health implications of many MH and learning problems.[12] It is also increasingly clear that these conditions have long-term academic, employment and functional implications for children, their families and society.[13,14,15] A GuideLine for management of Adolescent Depression in Primary Care, (GLAD-PC) that was widely endorsed by pediatric and MH organizations, including the AAP, was made available on the internet.[16, 17] Subsequently, the United States Preventive Services Task Force recommended universal screening of adolescents for depression in 2009 if adequate supports for diagnosis and treatment are available to care for identified problems.[18] Several states have also implemented payment incentives and/or requirements for some forms of mental health screening, and the Mental Health Task force of the AAP,[19] as well as the widely disseminated *Bright Futures*,[20,21] have promoted far wider responsibilities for pediatricians. Additionally, since February 1997 the Residency Review Committee of the American Council for Graduate Medical Education has required all pediatrics residents to complete a Developmental and Behavioral Pediatrics (DBP) one-month rotation. However, there are no data on what impact these changes in practice demands, policy recommendations and training have had on actual pediatric practice.

The AAP's 85th PS conducted in 2013, repeated many of the questions that originally appeared in the 2004 PS 59, and provided an opportunity to assess how pediatricians' practice behaviors have changed, and whether there have been improvements in the percentage of pediatricians who reported identifying, treating or co-managing behavioral MH. Previous data suggest that it may take as long as one to two decades for recommended changes to be adopted[22,23,24] and enough time has elapsed that we hoped to see some changes in pediatricians" self-reported behavior. Our objective was to assess whether the increasing emphasis on the role of the pediatrician with respect to the care of patients with behavioral, learning, and mental health issues is reflected in changes in the reported practices of pediatricians. We sought to examine their current practices with respect to usually identifying, treating/managing and referring patients and to compare the responses across the two surveys.

METHODS

Data come from the 2004 and 2013 AAP 59th and 85th PSs, each sent to a random sample of approximately 1600 of the >50,000 pediatricians who are non-retired U.S. members of the Academy. The details of the surveys have been previously described.[25,26] In brief, beginning in March 2004, the PS 59 questionnaire was sent to 1600 members, with the final mailing in August 2004; 832 (52.0%) members responded. Between July and December of 2013, PS 85 questionnaire was sent to 1617 members, of which 594 (36.7%) responded. Sample weights were created for each survey to ensure that the respondents were representative of the AAP

membership and to minimize potential bias due to differential non-response. As previously described,[27] logistic regression was used to estimate the probability of responding to the survey, and auxiliary information available for both responders and non-responders were included as predictors (age, sex, region). The sample weights were rescaled such that the mean was unity and the sum was equal to the analytic sample size for each survey. The analyses in this report were restricted to pediatricians who provide patient care, completed their residency training, and answered questions about inquiring, treating, and referring for 5 prevalent child/adolescent conditions (665 in 2004 and 478 in 2013).

AAP Periodic Surveys (PS)

The 2004 and 2013 PS included sociodemographic questions, practice characteristics (e.g., practice type, location), and experience with MH problems in their practices. Questions on self-reported behaviors were ascertained by asking clinicians how often (never, sometimes or usually) they inquire, screen (i.e., systematically uses a formal instrument), treat/manage, and refer each of 5 conditions: ADHD, anxiety, depression, behavioral problems, and learning problems. In the 2013 sample, we combined the responses on screening and inquiring, because screening was not asked in 2004. We assumed that most of those who were screening would have indicated that they were usually inquiring, if they had not had the option of indicating that they were screening. The data supported our assumption: in 2013 almost everyone who was screening was inquiring (between 78%–88%), but not all who inquired reported they were screening (36%–52%). We also combined the separate responses on child and adolescent depression in the 2013 sample, as they were not asked separately in the 2004 survey. Those 2013 respondents who reported “usually” for either the child or adolescent question were coded as “usually inquiring” about depression. Additionally ‘co-manage’ was added to the question on how often respondents treat or manage each condition in the 2013 survey. In the analyses, we compared those who reported usually treating/managing in 2004 to those who usually treat/manage/co-manage in 2013.

Analyses

Weighted means and standard errors were used to summarize continuous measures and weighted percentages to describe categorical measures. For each of the five MH conditions, the weighted percentages of pediatricians reporting usually (vs. sometimes or never) inquiring/screening, treating/managing, and referring in 2004 were compared to the weighted percentages in 2013 using the Rao-Scott chi-square test and weighted logistic regression analyses. We further examined these associations after adjusting for potential confounders (physician age, physician sex, physician race/ethnicity, region, practice location, type of practice, ambulatory visits per week, patient race/ethnicity, and patient insurance) using weighted multivariable logistic regression. The results are summarized using odds ratios (OR) and 95% confidence intervals, and statistical significance was set at $p<.05$. Analyses were performed using procedures appropriate for survey data in SAS version 9.3 (SAS Institute, Inc., Cary, NC).

The primary analysis compared the responses of all practicing pediatricians in 2004 vs. 2013, regardless of subspecialty. The decision to analyze the whole sample was based on two factors: the changes in subspecialty options over time with the introduction of board

certification of DBP as a separate subspecialty in 2002, which shifted pediatricians who trained for < 3 years from the category of subspecialists to generalist, and the growing data supporting the increased prevalence of MH and learning problems among children with chronic physical health conditions. Children with severe chronic physical health conditions are increasingly being followed in subspecialty settings, which may serve as their medical homes and thus would be required to provide or coordinate their comprehensive care and all their health care needs. Moreover, even when they do not serve as medical homes, subspecialists may actually have contact with patients far more often than the general pediatrician does. In secondary analyses, we also compared the responses in 2004 and 2013 among those practicing only general pediatrics.

RESULTS

Compared to those in 2004, a smaller percentage of pediatricians in 2013 were male, in 1–2 person practices and practicing general pediatrics (Table 1). A higher percentage saw <100 patients per week and reported that <80% of their patients had private insurance in 2013 compared to 2004. About 60% of pediatricians in 2004 and 2013 reported that they provided MH services to children and adolescents and almost 90% had referred at least one patient in the previous year.

Among all respondents, the percentage usually inquiring in 2004 versus usually inquiring or screening in 2013 significantly *decreased* for both behavioral problems and learning disabilities, but did not significantly differ for the other 3 conditions in both unadjusted and adjusted analyses (Table 2). The percentage of pediatricians who reported usually treating, managing, or co-managing ADHD remained stable over time at 57%. For the other 4 conditions, although the percentage treating, managing or co-managing significantly increased between 2004 and 2013, the percentages who treated/managed or co-managed continued to be low, ranging from 18–24%. The percentage of pediatricians who usually refer ranged between 21% for ADHD to 65% for depression in 2013, and *decreased* significantly between 2004 and 2013 for ADHD, anxiety disorders, and learning disabilities in unadjusted analyses and after adjusting for potential confounders. For anxiety disorders and learning disabilities, the percentage decrease in referral was twice as large as the rise in treatment. In 2013, the percentage reporting usually treating *or* referring for each condition ranged from 63% (anxiety) to 75% (depression) (data not shown).

The results of secondary analyses comparing self-reported behaviors among pediatricians exclusively practicing general pediatrics are shown in Table 3. The percentage usually inquiring/screening was significantly higher in 2013 than 2004 for ADHD and depression, but not for the other three conditions. Consistent with the primary results, a greater percentage of physicians exclusively practicing general pediatrics in 2013 compared to 2004 reported usually treating/managing depression, anxiety, behavioral problems, and learning disabilities. Additionally, in this subsample, the percentage treating/managing ADHD was also significantly higher in 2013 compared to 2004. Also similar to the primary results, <30% of those exclusively practicing general pediatrics in 2013 reported usually treating, managing, or co-managing any other developmental or behavioral condition besides ADHD.

In 2013, 25% of all clinicians reported *never* treating/managing ADHD, and more than one-third reported *never* treating/managing/co-managing each of the other conditions (Table 4). In the subsample of those exclusively practicing general pediatrics, 8% reported *never* treating/managing/co-managing ADHD, and 26%–39% reported *never* treating/managing/co-managing each of the other conditions (Table 4).

DISCUSSION

These data show that pediatricians do not commonly inquire about, treat or refer five common behavioral, learning and MH conditions, except for ADHD, which the majority treats. It is worrisome that there has been a *decrease overall* in inquiring about MH, which was unexpected in the face of new standards for screening of children and adolescents on a routine basis and the considerable emphasis on the importance of primary care specialties becoming involved in behavioral health. While the percentage of pediatricians treating several mental health conditions significantly increased between 2004 and 2013, the absolute percentages remain low. Taken together, these results suggest that progress toward the goal of providing mental health care within the pediatric setting is slow and far from complete despite the changes in residency education and recommendations by the AAP and in Bright Futures.

We examined these patterns two ways: once for all the practicing respondents and then for the subset of clinicians who practice general pediatrics exclusively. We believe these issues are relevant regardless of clinical specialty because of the high incidence of MH, behavioral and learning problems among children with chronic physical conditions, many of whom consider their subspecialists to be their primary clinician or who might be seeing a variety of specialists. Many prior studies document the associations of individual chronic physical conditions with increased emotional morbidity, especially depression and anxiety[7,8,28] and disturbances of many body systems have both dramatic and subtle effects on cognitive functioning and learning problems. Therefore, some subspecialties recommend assessment of these domains as a routine component of subspecialty care for certain types of patients under their care (cf. American Heart Association[29]) and others require mental health and support staff on their teams of tertiary care specialists (c.f. cancer centers, spina bifida centers). Providers need to identify and treat or co-manage these issues, regardless of subspecialty. Additionally, emotional well-being and cognitive functioning also have major influences on adherence to treatment protocols and hence to the outcome of many chronic physical conditions.[30,31]

While general pediatricians are doing more inquiring and screening for some conditions, the overall patterns are similar regardless of which sample is examined with 27% or fewer of general pediatricians and <25% of all pediatricians usually treating, managing or co-managing any condition other than ADHD. Even more disconcerting is the high percentage of pediatricians who report that they never treat, manage or co-manage these conditions. We expected that the addition of co-management to the question on treatment and management in 2013 might have increased the percentages attending to behavioral, learning and MH issues for two reasons. First, a co-location model that involves other professionals with MH expertise has been advocated as one method of addressing these needs in primary care.[32]

Second, co-management would be expected from pediatricians providing a medical home even for those whose behavioral, learning and MH services are not co-located. Given the well-documented shortages of MH professionals in most communities, and the current policy emphasis on integrating physical and MH care, one cannot help but be concerned about whether and where these children are receiving needed services.

To rule out the possibility that these findings were a reflection of changing workforce or practice characteristics we adjusted the results for physician, practice, and patient characteristics. The results of the analyses adjusted for these potential confounders were similar to the unadjusted results, suggesting that the findings are not due to differences in the workforce or sample characteristics between 2004 and 2013.

Several limitations to this study are noted. These are cross-sectional studies and cannot assess causality. Additionally, although each survey was sent to a random sample of AAP members, it is possible that despite the adjustments in the multiple linear regressions, respondents differed in other unmeasured ways, a possibility increased by the sub-optimal response rates in the surveys. However, these response rates are not unusual for surveys of physicians.[33,34] Analysis of AAP surveys shows[35] little response bias and weighting for non-response would be expected to reduce potential bias. Further, since response rates tend to be highest among those most comfortable with a subject, these findings may overestimate pediatricians' level of involvement in inquiring/screening, treating, and referring common behavioral, learning and MH conditions.[36] We would not expect that bias to be different across the two surveys. Further, these data are entirely based on self-reports which are known to exaggerate behavior in the direction of giving socially desirable results. We would also note that no definitions of the terms (inquire, screen, treat, manage or co-manage, or refer) were supplied in the survey, nor were there any definitions of the terms usually or sometimes. However these deficiencies were true for both surveys. There were also small differences in the wording of a few questions, which we have noted in the methods. Perhaps the most significant difference was the addition of co-manage to the treatment category. We could not determine how much of the increase in treatment was due to the addition of co-management in the 2013 sample, nor can we calculate the percentage who were treating without the inclusion of co-management. Nevertheless the percentages of those who treated, managed, or co-managed were quite disappointing.

Despite these limitations, we are able to draw some important conclusions. The overall findings in this report suggest that, despite the changing nature of pediatric practice and the increased efforts to emphasize the importance of behavior, learning and MH in primary care and specialty care of children with chronic conditions, the pediatric community as a whole does not appear to be making much progress toward providing for the long-term behavioral, learning and MH needs of children and adolescents in its care. These findings differ significantly from a recent report by Olfson et al[37] that suggests that a higher percentage children and adolescents are receiving mental health services over time, and would indicate that the increase in receipt of mental health services is from other MH providers but not from their pediatricians. This suggests the need for rethinking ways to involve pediatricians in meeting these still vastly underserved MH needs of the child and adolescent population.

There was nothing in the data set to inform us about solutions to the persistence of these disappointing practice patterns. It may be that improvements will take more time. However, it is our opinion that a single month of exposure is not sufficient even to provide basic skills across the spectrum of DBP and that these issues, which are relevant to patients across contexts, need to be infused throughout residency, as recommended originally by Dr. Julius Richmond[38] and more recently by one of us.[39] We would argue that major changes will also require paradigm shifts in the fundamental model of pediatrics and the incorporation of new paradigms, such as those outlined recently by Garner et al.[40] into all aspects of pediatric education. These paradigms emphasize the contextual nature of development and behavior and how they are incorporated into the individual's biology and become of central importance to long-term health and well-being. The implications of these changes for training are that mental health issues are not an afterthought or discretionary add-on, but a fundamental part of the responsibilities of the medical home, whether in primary care or in subspecialties. Furthermore, addressing these issues and decreasing their lifelong morbidities are critical ways for pediatrics to remain relevant in an era that increasingly focuses on prevention and value-added services. In the absence of this type of fundamental transformation and paradigm shift, we remain skeptical about whether a band-aid approach will work.

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Abbreviations

AAP	American Academy of Pediatrics
ADHD	Attention Deficit Hyperactivity Disorder
DBP	Developmental Behavioral Pediatrics
GLAD-PC	GuideLine for management of Adolescent Depression in Primary Care
MH	Mental Health
PS	Periodic Survey

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What is Known

In a 2004 survey, pediatricians indicated they should be responsible for identifying mental health (MH) issues, but reported they did little to treat patients with these conditions except for ADHD.

What This Study Adds

Almost a decade later, there are few changes. Despite a 1½ to 2 times increase in the percent who report treating, managing, or co-managing MH conditions, still fewer than 30% treat any MH problems except ADHD.

Table 1

Physician and Practice Characteristics, and Mental Health Experiences By Survey Year (Weighted Percentages)

	2004 (N=655)	2013 (N=478)	p-val
Physician characteristics			
Sex			
Female	52.7%	62.1%	**.0016**
Male	47.3%	37.9%	
Age (yrs)	45.2 (0.4)	45.9 (0.5)	.2729
Race/Ethnicity			
Caucasian	71.6%	72.3%	.8771
Asian	14.6%	13.5%	
Other/Unknown	13.8%	14.2%	
Years in Practice			
1–4	27.4%	22.0%	.2196
5–9	17.1%	17.2%	
10–19	26.5%	28.6%	
≥20	29.0%	32.2%	
Year completed residency training			
<1998	61.1%	42.5%	**<.0001**
≥1998	38.9%	57.5%	
Practice characteristics			
Area			
Urban	43.2%	51.3%	**.0097**
Suburban	43.1%	39.6%	
Rural	13.7%	9.1%	
Type of Practice			
1 or 2 physicians	15.8%	8.1%	**.0002**
Pediatric group practice	37.2%	35.8%	
Multi-specialty	11.0%	15.8%	
Other	36.0%	40.3%	
Time in general pediatrics			
None (0%)	16.2%	25.4%	**.0001**
Some (1%–99%)	14.7%	9.2%	
Exclusively (100%)	69.1%	65.3%	
<100 ambulatory visits per week			
No	48.2%	26.0%	**<.0001**
Yes	51.8%	74.0%	
≥75% of patients are Caucasian			
No	68.9%	81.4%	**<.0001**
Yes	31.1%	18.6%	
Patient insurance			

	2004 (N=655)	2013 (N=478)	p-val
<80% have private insurance	53.3%	63.3%	**<.0001**
≥80% have private insurance	29.8%	18.6%	
Unknown	26.9%	18.1%	
Mental Health Experiences			
Physician provides MH treatment to children			
No	36.7%	39.1%	.4091
Yes	63.3%	60.9%	
Referred ≥1 child for MH treatment in past year			
No	8.0%	11.8%	**.0324**
Yes	92.0%	88.2%	

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Table 2

Unadjusted Weighted Percentages, Unadjusted and Adjusted Odds Ratios for Inquiring, Treating, and Referring for Child Mental Health Problems: Physicians in 2013 vs. 2004 for All Clinicians (n=655 in 2004; n=478 in 2013)*

	Unadjusted Weighted %		Unadjusted Odds Ratio, 95% CI			Adjusted‡ Odds Ratio, 95% CI		
	2004	2013	OR	95 CI	p-val	OR	95 CI	p-val
ADHD								
Inquire or Screen	63.5%	61.3%	0.91	0.70, 1.17	.4604	0.98	0.74, 1.31	.9128
Treat/Manage/Co-manage	57.6%	57.3%	1.02	0.79, 1.31	.9033	1.22	0.91, 1.63	.1841
Refer	30.9%	21.1%	0.59	0.44, 0.79	**.0004**	0.51	0.39, 0.75	**.0002**
Child/Adolescent Depression†								
Inquire or Screen	55.1%	60.0%	1.28	0.99, 1.64	.0582	1.31	0.99, 1.73	.0565
Treat/Manage/Co-manage	17.5%	24.3%	1.63	1.20, 2.21	**.0017**	1.96	1.39, 2.77	**.0001**
Refer	68.6%	64.5%	0.80	0.61, 1.04	.0940	0.77	0.58, 1.03	.0809
Anxiety Disorders								
Inquire or Screen	46.7%	41.5%	0.82	0.64, 1.05	.1136	0.86	0.66, 1.13	.2773
Treat/Manage/Co-manage	15.2%	20.4%	1.53	1.10, 2.11	**.0106**	1.74	1.21, 2.48	**.0025**
Refer	62.8%	49.2%	0.56	0.43, 0.72	**<.0001**	0.59	0.45, 0.78	**.0001**
Behavior Management Problems								
Inquire or Screen	58.6%	49.2%	0.72	0.56, 0.92	**.0083**	0.75	0.57, 0.98	**.0369**
Treat/Manage/Co-manage	13.6%	20.0%	1.64	1.18, 2.29	**.0035**	2.00	1.39, 2.88	**.0002**
Refer	64.6%	58.2%	0.75	0.58, 0.97	**.0305**	0.78	0.59, 1.03	.0747
Learning Disabilities								
Inquire or Screen	62.4%	51.4%	0.64	0.50, 0.82	**.0004**	0.64	0.49, 0.84	**.0014**
Treat/Manage/Co-manage	7.9%	18.3%	2.76	1.86, 4.09	**<.0001**	2.83	1.85, 4.33	**<.0001**
Refer	78.7%	57.8%	0.35	0.27, 0.47	**<.0001**	0.38	0.28, 0.52	**<.0001**

Odds ratio: 2013 vs. 2004

*Inquire asked in both years, and screening was added in 2013. Treat/Manage asked in both years, and co-manage was added in 2013.

†Child/adolescent depression asked in one question in 2004 and in two separate questions in 2013

‡Models adjusted for physician age, sex, race/ethnicity, region, practice location, type of practice, ambulatory visits per week, patient race/ethnicity and patient insurance.

Table 3

Unadjusted Weighted Percentages, Unadjusted and Adjusted Odds Ratios for Inquiring, Treating, and Referring for Child Mental Health Problems: Physicians in 2013 vs. 2004 for Physicians Exclusively Practicing General Pediatrics (n=452 in 2004; n=311 in 2013) *

	Unadjusted Weighted %		Unadjusted Odds Ratio, 95% CI			Adjusted‡ Odds Ratio, 95% CI		
	2004	2013	OR	95% CI	p-val	OR	95% CI	p-val
ADHD								
Inquire or Screen	67.4%	76.2%	1.47	1.05, 2.06	**.0253**	1.39	0.96, 2.02	.0851
Treat/Manage/Co-manage	65.1%	75.0%	1.59	1.14, 2.21	**.0059**	1.77	1.23, 2.55	**.0023**
Refer	28.6%	18.7%	0.58	0.40, 0.83	**.0033**	0.58	0.39, 0.89	**.0113**
Child/Adolescent Depression †								
Inquire or Screen	55.5%	67.7%	1.69	1.24, 2.31	**.0010**	1.67	1.17, 2.36	**.0042**
Treat/Manage/Co-manage	14.0%	27.2%	2.47	1.70, 3.60	**<.0001**	3.11	2.02, 4.79	**<.0001**
Refer	72.8%	72.8%	0.98	0.69, 1.37	.8882	0.86	0.59, 1.26	.4478
Anxiety Disorders								
Inquire or Screen	47.5%	47.8%	0.99	0.73, 1.33	.9242	0.96	0.69, 1.33	.8020
Treat/Manage/Co-manage	13.3%	21.5%	1.98	1.33, 2.94	**.0008**	2.26	1.44, 3.56	**.0004**
Refer	66.8%	58.1%	0.68	0.50, 0.93	**.0170**	0.70	0.50, 0.98	**.0362**
Behavior Management Problems								
Inquire or Screen	61.0%	58.0%	0.90	0.66, 1.21	.4771	0.89	0.63, 1.24	.4803
Treat/Manage/Co-manage	11.8%	21.1%	2.09	1.38, 3.15	**.0004**	2.73	1.72, 4.33	**<.0001**
Refer	67.8%	68.4%	1.02	0.74, 1.41	.9042	0.99	0.69, 1.41	.9459
Learning Disabilities								
Inquire or Screen	65.4%	61.3%	0.81	0.60, 1.11	.1931	0.75	0.53, 1.05	.0971
Treat/Manage/Co-manage **	4.9%	20.4%	5.79	3.35, 10.02	**<.0001**	6.38	3.57, 11.42	**<.0001**
Refer	85.2%	67.7%	0.37	0.26, 0.53	**<.0001**	0.36	0.24, 0.54	**<.0001**

Odds ratio: 2013 vs. 2004

* Inquire asked in both years, and screening was added in 2013. Treat/Manage asked in both years, and co-manage was added in 2013.

† Child/adolescent depression asked in one question in 2004 and in two separate questions in 2013

‡ Models adjusted for physician age, sex, race/ethnicity, region, practice location, type of practice, ambulatory visits per week, patient race/ethnicity and patient insurance.

** Due to small event size, the learning disabilities treat/manage outcome was adjusted for fewer physician/patient characteristics (physician age, race/ethnicity, type of practice; and patient race/ethnicity).

Table 4

Weighted Percentage of All Clinicians in 2013 and Those Exclusively Practicing General Pediatrics in 2013 Who Report Never Treating, Managing or Co-managing Child/Adolescent Mental Health Problems

	Unadjusted Weighted %	
Never treat, manage or co-manage	**2013 All Clinicians (N=478)**	**2013 Clinicians Exclusively Practicing General Pediatrics (n=311)**
ADHD	24.8%	8.2%
Child/Adolescent Depression	34.8%	25.9%
Anxiety Disorders	35.0%	25.9%
Behavioral Management Problems	42.4%	33.4%
Learning Disabilities	48.1%	39.1%