

2. RELATED SERVICES AND SUPPORTS RECEIVED BY YOUTH WITH DISABILITIES

As noted in Chapter 1, students with disabilities can receive a variety of related services or supports when they are deemed necessary for students to benefit from their special education programs. These services and supports differ in the benefits intended for students. For example, some students participate in therapies to enhance functioning (e.g., occupational or physical therapy or speech-language pathology services), whereas others receive one-on-one study skills instruction to support their academic attainment, and still others, such as students with some sensory, health, or orthopedic impairments, may receive assistive technology or sensory augmentation (for example, interpreters or large-print monitors). It is important to keep in mind that the regulations governing related services and supports allow for flexibility so that services are individualized; some students may need many services to benefit from their education, and others may need none.

Although IDEA '97 does not describe every possible related service, it does set forth clear definitions and guidelines regarding certain related services and supports. The following definitions are provided by the National Dissemination Center for Children with Disabilities (NICHCY, 2001, pp. 5-11)¹ from the IDEA '97 final regulations (U. S. Department of Education, 1999):

- “An **assistive technology device** means ‘any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability’ (Section 300.5). Assistive technology devices may be used for personal care, sensory processing of information, communication, mobility, or leisure.”
- “An **assistive technology service** means ‘...any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device’ (Section 300.6). School districts are responsible for helping individuals with disabilities select and acquire appropriate assistive technology devices and for training them in their use, if doing so is necessary for them to receive FAPE (Section 300.308).”
- “**Counseling services** are services provided by qualified social workers, psychologists, guidance counselors, or other qualified personnel [Section 300.24(b)(2)]. A school counselor is a certified professional who meets the State's certification standards. In some schools, the counselor may also perform some functions similar to those of the school psychologist.”

“Counselors may also help students with future planning related to setting and reaching academic goals, developing a positive attitude toward learning, and recognizing and utilizing academic strengths. Other counseling services may include parent counseling and training and rehabilitation counseling (that is, counseling specific to career development and employment preparation) (Maag & Katsiyannis, 1996).”

¹ IDEA definitions are provided just for those services that may require more clarity for data interpretation. For more details regarding IDEA definitions and explanations of related services, see NICHCY (2001).

- **“Rehabilitation counseling services** are ‘services provided by qualified personnel in individual or group sessions that focus specifically on career development, employment preparation, achieving independence, and integration in the workplace and community.... The term also includes vocational rehabilitation services provided to a student with disabilities by vocational rehabilitation programs funded under the Rehabilitation Act of 1973, as amended’ [Section 300.24(b)(11)].”
- **“Medical services** are considered a related service only under specific conditions. By definition, the term ‘means services provided by a licensed physician to determine a child's medically related disability that results in the child’s need for special education and related services’ [Section 300.24(b)(4)]. Thus, medical services are provided (a) by a licensed physician, and (b) for diagnostic or evaluation purposes only.”
- **“School health services**...means ‘services provided by a qualified school nurse or other qualified person’ [Section 300.24(b)(12)]. These services may be necessary because some children and youth with disabilities would otherwise be unable to attend a day of school without supportive health care. School health services may include interpretation, interventions, administration of health procedures, the use of an assistive health device to compensate for the reduction or loss of a body function (Rapport, 1996), and case management.”
- **Orientation and mobility (O&M) services** “are defined as ‘services provided to blind or visually impaired students by qualified personnel to enable those students to attain systematic orientation to and safe movement within their environments in school, home, and community’ [Section 300.24(b)(6)(i)].”
- “[T]he term **psychological services** includes ‘administering psychological and educational tests and other assessment procedures; interpreting assessment results; obtaining, integrating, and interpreting information about a student's behavior and conditions relating to learning; consulting with other staff members in planning school programs to meet the special needs of children as indicated by psychological tests, interviews, and behavioral evaluations; planning and managing a program of psychological services, including psychological counseling for students and parents; and assisting in developing positive behavioral intervention strategies’ [Section 300.24(b)(9)].”
- **“Social work services** in schools includes ‘preparing a social or developmental history on a child with a disability; group and individual counseling with the child and family; working in partnership with parents and others on those problems in a child's living situation (home, school, and community) that affect the child's adjustment in school; mobilizing school and community resources to enable the child to learn as effectively as possible in his or her educational program; and assisting in developing positive behavioral intervention strategies’ [Section 300.24(b)(13)].”

As mentioned in Chapter 1, IDEA '97 also requires that the IEP team, “in the case of a child whose behavior impedes his or her learning or that of others, consider, if appropriate, strategies including positive behavioral interventions, strategies, and supports to address that behavior” [Section 300.346(a)(2)(i)].

This chapter describes parents’ reports of several aspects of these and other services and supports received by secondary school students with disabilities, including:

- Receipt of related services and supports in the previous year from all sources and from or through a student’s school.
- The process of acquiring services, including the source of information regarding services, the effort required to obtain services, and barriers encountered in the process.
- Unmet needs for services, including parents’ reports of the sufficiency of their children’s services and services for which youth are on a waiting list.

Findings are presented for students with disabilities as a whole and for students who differ in their primary disability category and selected demographic characteristics, where significant.

Related Services and Supports Received by Youth with Disabilities

Parents are an important source of information about the full range of services youth with disabilities receive because they are aware of services arranged for privately and those that may be provided by family members themselves (e.g., respite care). Parents were asked whether their adolescent child with a disability had received any of 15 specific services in the preceding 12 months and, if so, whether that service had been provided from or through their child’s school or district.² The services were read to parents and responded to one by one. Because providing a definition for each service would have been too burdensome in the context of a telephone interview, parents may have differed in their interpretations or definitions of a service. It also is possible that parents may have had different understandings of what it meant to receive a service “from or through the school or district” (e.g., whether they mentioned only direct services provided on the school grounds or included services the school arranged that were provided outside of school).

The following is a list of the services and supports investigated in NLTS2 as they were read to parents during the telephone interview, clustered according to their primary function or benefit:

Personal counseling

- Psychological or mental health services or counseling
- Social work services

Therapeutic services

- Speech or language therapy or communication services
- Physical therapy
- Occupational therapy or life skills therapy or training

Health-related services

- Medical services for diagnosis or evaluation related to a disability
- Nursing care

Vocational services

- Career counseling, help in finding a job, training in job skills, or vocational education

² See Appendix C for the wording of questions in the parent interview.

Academic enhancements

- Tutoring

Services to increase access and mobility

- Transportation because of a disability
- Assistive technology services or devices, such as help getting or using any kind of equipment that helps people with a disability, such as a tape recorder or reading machine
- Audiology services for hearing problems
- Orientation and mobility services

Personal assistance

- Reader or interpreter, including sign language
- Respite care

Other

- Because students with disabilities could receive an array of services too numerous to list, parents were asked whether their son or daughter received any other service not on the list.

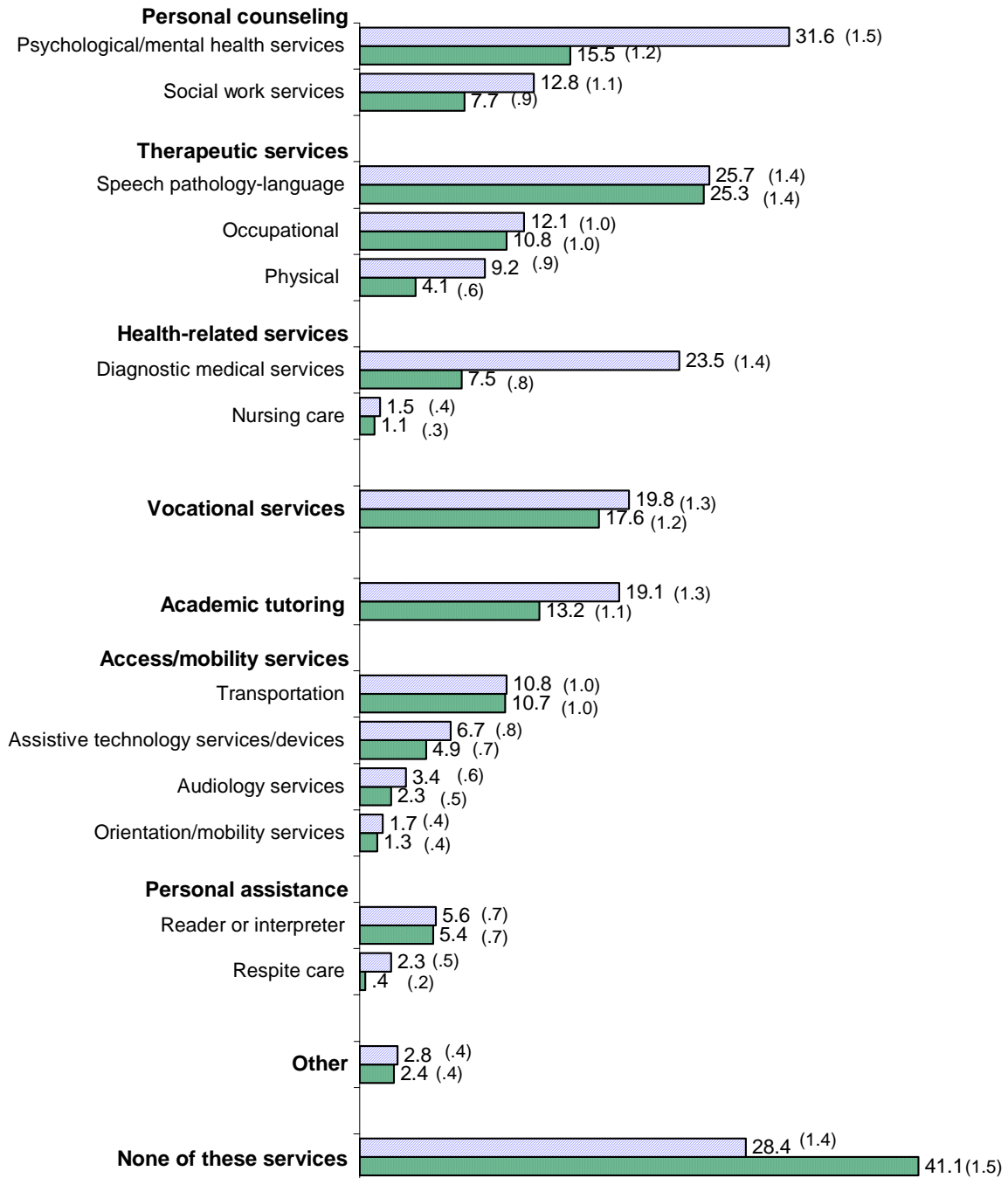
The most common type of service received by youth involves psychological or mental health counseling or services (Exhibit 2-1); approximately one in three students receive such services, and 13% receive social work services in a given year. Therapeutic services is the next most common cluster of services received, with speech-language pathology services being the most frequently accessed service; approximately one in four youth receive it. In addition, occupational and physical therapy each are received by about 1 in 10 youth with disabilities. Approximately one in four youth receive services from a health professional, mainly diagnostic or medical services; only about 2% receive nursing care.

Vocational services and academic tutoring also are commonly provided services; approximately one in five youth receive each of them. In contrast, no more than about 1 in 10 youth receive any one of the services to increase access and mobility.³ With the exception of transportation services, which 11% of youth receive, each service in this category is received by fewer than 7% of youth. The services of a personal assistant also are fairly rare; 6% receive the services of a reader or interpreter, and the families of 2% receive respite care.

Many services are provided almost entirely by schools, including speech-language pathology services and occupational therapy, nursing and vocational services, and all access and mobility services. In contrast, most youth who receive psychological or mental health counseling, social work services, physical therapy, diagnostic medical services, or respite care are reported by parents to receive these services from sources other than their school or district.

³ Note that orientation and mobility (O&M) services are available only to students with visual impairments.

**Exhibit 2-1
RELATED SERVICES RECEIVED BY YOUTH WITH DISABILITIES
FROM ANY SOURCE AND FROM OR THROUGH THEIR SCHOOL**



Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.

Percentage reported to receive
services in the past 12 months

□ From any source
■ From/through the school

Although the types of services youth with disabilities could receive address a wide range of needs and functional limitations, 28% of youth with disabilities have parents who report they had received none of the services addressed in NLTS2 in the preceding year, and 41% received none of them from or through their school. About one-fourth (26%) reportedly had received one service, virtually all of those from the school; 45% had received two or more services from any source, including 32% who had received two or more services from their school.

The related services and supports provided to students with disabilities are meant to be coordinated and integrated into a student’s overall educational program. To ensure this coordination and integration of services, a case manager is assigned to some students by their schools. A case manager “...coordinates and oversees services on behalf of the student. In some schools, this person might be the child’s special education teacher. In other schools, supervisory school district personnel may assume this responsibility” (NICHCY, 2001, p. 14). For the 72% of youth with disabilities who receive services, particularly those who receive multiple services, case management can be an important support through which services are coordinated so they are most effective and least burdensome for youth and families, and so that problems of duplication or gaps in service are avoided.

Exhibit 2-2 CASE MANAGEMENT SUPPORT FOR YOUTH WITH DISABILITIES WHO RECEIVE RELATED SERVICES		
	Percentage	Standard Error
Percentage of youth receiving services:		
Who have a case manager	53.0	1.8
Whose case manager is:		
Someone at school	44.0	1.8
A professional outside of school	10.3	1.1
A family member	6.7	.9
Source: NLTS2 Wave 1 parent interviews.		

Parents were asked if their adolescent children have “a case manager or someone who coordinates the services he or she receives; that can include a family member or friend.” Among youth with disabilities who receive any of the related services addressed thus far, 53% are reported to have a case manager to coordinate services (Exhibit 2-2). When a youth with disabilities has a case manager, he or she is highly likely to be someone at the youth’s school; 44% of youth have a case manager at school (83% of those with a case manager). Professionals other than school

staff and family members are case managers for 10% and 7% of youth with disabilities who receive related services, respectively. Eight percent of youth are reported to have case management from more than one of these sources.

Acquiring Related Services and Supports

The wide array of services students with disabilities could potentially access can involve multiple service systems, including education, health, child welfare, and vocational rehabilitation, for example. Parents and youth may not be aware of the services provided through all of these systems. Further, these multiple systems can have different, even incompatible, eligibility criteria and sometimes complex processes for establishing qualifications for services. Other barriers to service also may be encountered in attempting to obtain services, including cost, accessibility, and availability. These complexities and barriers can challenge parents, youth, and even schools in acquiring the services they believe are needed for youth with disabilities to function most effectively.

To learn about aspects of the process parents engage in to acquire services for their adolescent children with disabilities, parents were asked to identify where they generally learn about services. Their open-ended responses were coded into eight broad categories.⁴ Parents also were asked “how much effort did it take for you or your family to get the services for [name of child] during the last 12 months?”; responses read to parents from which they chose included “almost no effort,” “a little effort,” “some effort,” or “a great deal of effort.” Finally, they were asked whether they or their sons or daughters with disabilities experienced any of 10 barriers to “getting or dealing with services” for their disability.

Sources of Information about Services

Given the important role of schools as a source of many services and much of the case management received by youth with disabilities, it is not surprising that most youth with disabilities (81%) have parents who report that they receive information about related services

Exhibit 2-3 PARENTS' REPORTS OF SOURCES OF INFORMATION ABOUT RELATED SERVICES FOR YOUTH WITH DISABILITIES		
	Percentage	Standard Error
Percentage whose family reports learning about services through:		
School	81.0	1.3
Internet, newsletters, magazines	11.6	1.0
Other parents or parent groups	11.4	1.0
Physician	10.3	1.0
Professional consultant	10.1	1.0
Family members	6.8	.8
Training, workshops, conferences	3.1	.6
Other sources	5.5	.7

Source: NLTS2 Wave 1 parent interviews.

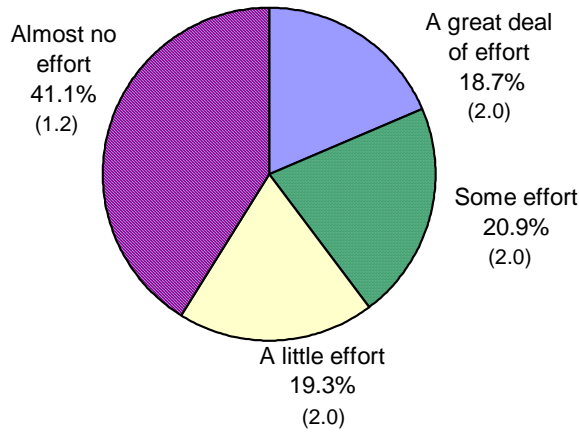
through their child’s school (Exhibit 2-3). About 10% have parents who cite the Internet or print materials, such as newsletters or magazines, as a source of information, and a similar percentage have parents who cite personal contacts other than family members, including other parents, parent groups, physicians, or professional consultants. About 7% of youth with disabilities have parents who report learning about related services through family members and 3% through trainings, workshops, or conferences.

Effort to Obtain Services

Obtaining services for their children is not particularly difficult for some parents; parents of 41% of students report they were able to obtain services with “almost no effort” (Exhibit 2-4), and parents of another one in five students indicate that obtaining services took only “a little effort.” However, parents of one in five students report having to expend “some effort,” and parents of a similar share indicate that they had to expend “a great deal of effort” to obtain services. Not surprisingly, those who report expending a great deal of effort to obtain services for youth are more likely to be parents of youth who receive multiple services. For example, 39% of youth whose parents report expending “a great deal of effort” to obtain services had received four or more services in the preceding 12 months, compared with fewer than half that many youth whose parents report they expended “almost no effort” (p<.001).

⁴ More than one response could be provided.

Exhibit 2-4
PARENT REPORTS OF EFFORT TO OBTAIN SERVICES FOR YOUTH WITH DISABILITIES

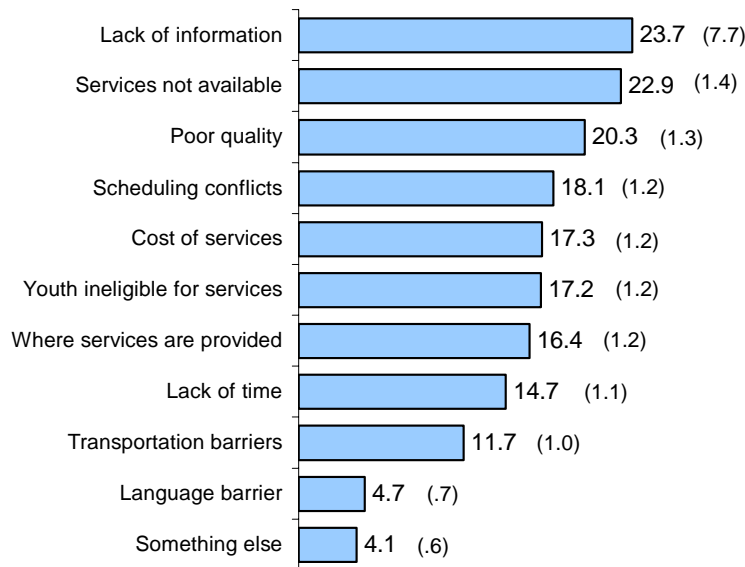


Source: NLTS2 Wave 1 parent interviews.
 Standard errors are in parentheses.

Barriers to Services

Parents report encountering a variety of barriers in their efforts to obtain services for their adolescent children with disabilities. The barriers to receipt of services most commonly cited by parents are lack of information and unavailability of services (Exhibit 2-5). Almost one-fourth of parents report facing each of these barriers. Poor service quality is cited as a problem by parents of 20% of students, and more than 10% of students have parents who cite problems related to scheduling, cost,⁵ eligibility requirements, location, lack of time, and transportation.

Exhibit 2-5
PARENTS' REPORTS OF BARRIERS TO OBTAINING SERVICES FOR YOUTH WITH DISABILITIES



Source: NLTS2 Wave 1 parent interviews. Percentage
 Standard errors are in parentheses.

Lack of transportation and lack of specialized medical services, therapeutic interventions, or mental health services have been shown to pose serious barriers for youth with disabilities living in rural communities (Levine, Richardson, Lishner, & Porter, 2001). However, NLTS2 explored the relationship between barriers to service and the communities in which students live and found no significant differences between youth with disabilities living in urban, suburban, and rural areas in the prevalence of any of the reported barriers to obtaining services investigated in NLTS2.

⁵ Under IDEA '97, students with disabilities are entitled to a free appropriate public education, including special education and related services, and are entitled to receive these services at no cost to themselves or their families (NICHCY, 2001). Parents who report cost barriers may be unaware of this provision in special education law and regulations or they may be referring to services they sought for their children apart from those indicated on their IEP.

Reported Unmet Needs for Services

Despite the fact that 72% of youth with disabilities are reported to have received at least one related service in the preceding year, some apparently are not receiving all the services their parents believe are needed. Overall, parents of 72% of youth with disabilities who had received one or more related services in the preceding year report that their sons or daughters receive enough services, leaving about 16% of all youth with disabilities reported to have unmet service needs. In addition, parents report that 4% of youth with disabilities (including both those receiving and those not receiving related services) are on a waiting list for one or more services.

Parents' perceptions of whether their adolescent children with disabilities are getting enough services is strongly related to the effort they report expending to obtain those services. Those who expended the greatest effort to obtain the services their children receive also are the most likely to express unmet needs for additional services. Fewer than half of students with disabilities (45%) whose parents report that it took "a great deal of effort" to obtain services for them report that those services are enough to meet students' needs. In contrast, almost twice as many students (87%) whose parents report expending "almost no effort" to obtain services indicate that those services are sufficient for their children ($p < .001$).

Disability Differences in Experiences with Related Services and Supports

Given the great diversity in the abilities and limitations of students with disabilities, it is not surprising that many aspects of their experiences with related services and supports differ markedly for students with different primary disability classifications, as outlined below.

Receipt of Related Services and Supports

As expected, youth with disabilities tend to receive services and supports relevant to the functional limitations and academic challenges associated with the impairments that define their disability category (Exhibit 2-6). For example, psychological or mental health services are most commonly received by youth with emotional disturbances (69%, $p < .001$ for comparisons with all other disabilities), whereas physical therapy is significantly more common for students with orthopedic impairments (57%) or multiple disabilities (47%) than for youth with other disabilities ($p < .05$). Predictably, students with hearing impairments or deaf-blindness are the most likely to receive services from an audiologist (76% and 70%, respectively) or an interpreter (40% and 31%, respectively), whereas students with visual impairments or deaf-blindness are the most likely to receive orientation and mobility training (47% each) or assistive technology services or devices (57% and 51%, respectively). Respite care is used by families of one in five youth with multiple disabilities or autism ($p < .001$), and nursing care is used in higher proportions by youth with deaf-blindness, multiple disabilities, or orthopedic impairments (10% to 18%, $p < .01$ compared with other categories).

Exhibit 2-6
RELATED SERVICES RECEIVED BY YOUTH FROM ANY SOURCE
AND FROM THEIR SCHOOLS, BY DISABILITY CATEGORY

	Learning Disability	Speech/Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities	Deaf-Blindness
Percentage reported to have received service in the past 12 months:												
Personal counseling												
Psychological/mental health services												
From any source	25.2 (2.1)	21.0 (2.0)	27.4 (2.3)	68.9 (2.4)	27.0 (2.6)	22.7 (3.0)	22.7 (2.4)	44.8 (2.4)	46.2 (2.7)	39.1 (4.4)	37.5 (2.6)	29.7 (4.8)
From the school	11.5 (1.6)	11.0 (1.6)	15.4 (1.9)	36.3 (2.5)	17.9 (2.2)	10.4 (2.2)	8.6 (1.6)	17.9 (1.8)	22.6 (2.3)	21.5 (3.7)	24.1 (2.3)	19.8 (4.2)
Social work services												
From any source	7.8 (1.3)	10.2 (1.5)	16.0 (1.9)	32.9 (2.4)	12.0 (1.9)	17.3 (2.7)	19.5 (2.2)	11.9 (1.6)	27.7 (2.4)	18.0 (3.5)	32.3 (2.5)	23.9 (4.6)
From the school	4.9 (1.1)	6.0 (1.2)	9.7 (1.5)	19.6 (2.1)	7.7 (1.6)	12.2 (2.3)	9.6 (1.7)	6.3 (1.2)	16.6 (2.0)	11.8 (3.0)	17.6 (2.1)	15.0 (3.8)
Therapeutic services												
Speech-language pathology services												
From any source	19.0 (2.0)	71.3 (2.3)	44.1 (2.6)	15.0 (1.9)	62.7 (2.8)	20.5 (2.9)	32.7 (2.6)	18.1 (1.9)	74.6 (2.4)	33.9 (4.2)	72.1 (2.4)	61.8 (5.1)
From the school	18.8 (1.9)	71.0 (2.3)	43.3 (2.6)	14.0 (1.8)	61.3 (2.8)	20.0 (2.8)	31.7 (2.6)	17.2 (1.8)	73.1 (2.4)	31.9 (4.2)	71.2 (2.5)	60.4 (5.2)
Occupational therapy												
From any source	6.9 (1.3)	5.5 (1.1)	25.1 (2.2)	13.6 (1.8)	14.5 (2.1)	28.0 (3.2)	41.7 (2.8)	13.3 (1.6)	49.0 (2.7)	32.3 (4.3)	60.4 (2.7)	52.8 (5.3)
From the school	5.8 (1.2)	5.1 (1.1)	23.9 (2.2)	11.8 (1.7)	13.5 (2.0)	25.6 (3.1)	37.3 (2.7)	10.6 (1.5)	46.4 (2.7)	26 (4.0)	58.2 (2.7)	49.1 (5.3)
Physical therapy												
From any source	7.1 (1.3)	5.6 (1.2)	12.5 (1.7)	6.0 (1.2)	8.2 (1.6)	19.2 (2.8)	56.6 (2.8)	8.5 (1.3)	17.3 (2.0)	23.2 (3.9)	46.9 (2.7)	33.7 (5.0)
From the school	1.4 (.6)	2.2 (.7)	9.3 (1.5)	2.2 (.8)	4.9 (1.3)	15.7 (2.6)	43.6 (2.8)	3.3 (.9)	13.7 (1.9)	13.2 (3.1)	42.9 (2.7)	30.3 (4.9)
Health-related services												
Diagnostic medical services												
From any source	15.8 (1.8)	16.8 (1.9)	28.2 (2.3)	40.1 (2.5)	39.2 (2.8)	53.4 (3.5)	58.6 (2.8)	44.7 (2.4)	46.9 (2.7)	41.4 (4.4)	51.9 (2.7)	59.0 (5.2)
From the school	4.6 (1.0)	5.0 (1.1)	11.5 (1.6)	15.3 (1.9)	15.1 (2.1)	21.2 (2.9)	13 (1.9)	10.5 (1.5)	15.3 (1.9)	9.9 (2.7)	13.5 (1.9)	26.1 (4.7)
Nursing care												
From any source	.6 (.4)	.7 (.4)	2.4 (.8)	1.4 (.6)	4.3 (1.2)	5.7 (1.6)	10.5 (1.7)	3.3 (.9)	4.8 (1.2)	5.1 (2.0)	13.0 (1.8)	17.8 (4.0)
From the school	.6 (.4)	.6 (.4)	1.8 (.7)	.9 (.5)	3.7 (1.1)	3.6 (1.3)	4.7 (1.2)	2.2 (.7)	3.4 (1.0)	2.1 (1.3)	7.6 (1.4)	10.1 (3.2)
Vocational services												
From any source	17.6 (1.9)	11.1 (1.6)	24.7 (2.2)	26.2 (2.3)	21.1 (2.4)	27.6 (3.2)	19.4 (2.2)	20.2 (1.9)	26.0 (2.4)	25.4 (4.0)	28.6 (2.5)	35.4 (5.1)
From the school	15.6 (1.8)	10.4 (1.5)	23.1 (2.2)	22.6 (2.2)	19.8 (2.3)	24.1 (3.0)	18.3 (2.2)	18.1 (1.8)	24.3 (2.3)	24.5 (3.9)	26.2 (2.4)	32.6 (5.0)

Exhibit 2-6
RELATED SERVICES RECEIVED BY YOUTH FROM ANY SOURCE
AND FROM THEIR SCHOOLS, BY DISABILITY CATEGORY (Concluded)

	Learning Dis-ability	Speech/ Language Impair-ment	Mental Retar-dation	Emo-tional Distur-bance	Hearing Impair-ment	Visual Impair-ment	Ortho-pedic Impair-ment	Other Health Impair-ment	Autism	Trau-matic Brain Injury	Multiple Disabili-ties	Deaf-Blind-ness
Percentage reported to have received service in the past 12 months:												
Academic tutoring												
From any source	20.8 (2.0)	19.3 (2.0)	13.1 (1.7)	15.7 (1.9)	21.0 (2.4)	17.1 (2.7)	17.1 (2.1)	22.2 (2.0)	14.3 (1.9)	24.2 (3.9)	15.7 (2.0)	16.5 (3.9)
From the school	13.9 (1.7)	12.9 (1.7)	10.4 (1.6)	12.7 (1.7)	16.4 (2.2)	13.3 (2.4)	11.7 (1.8)	12.5 (1.6)	8.7 (1.5)	20.5 (3.7)	11.8 (1.8)	12.5 (3.5)
Mobility and access services												
Transportation												
From any source	2.6 (.8)	6.2 (1.2)	24.8 (2.2)	21.7 (2.1)	28.7 (2.6)	39.1 (3.4)	51.7 (2.8)	12.5 (1.6)	54.6 (2.7)	22.3 (3.8)	54.5 (2.7)	58.5 (5.2)
From the school	2.5 (.8)	6.0 (1.2)	24.2 (2.2)	19.4 (2.1)	27.6 (2.6)	36.1 (3.4)	48.2 (2.8)	11.2 (1.6)	52.6 (2.7)	20.5 (3.8)	52.2 (2.7)	54.6 (5.2)
Assistive technology services/devices												
From any source	5.7 (1.2)	5.5 (1.1)	5.6 (1.2)	3.4 (.9)	25.1 (2.5)	56.6 (3.5)	23.4 (2.4)	8.6 (1.3)	15.7 (2.0)	13.7 (3.1)	21.4 (2.2)	51.1 (5.3)
From the school	4.0 (1.0)	4.2 (1.0)	4.3 (1.0)	2.4 (.8)	19.7 (2.3)	48.9 (3.6)	17.8 (2.2)	5.9 (1.1)	13.6 (1.9)	10.6 (2.8)	18.3 (2.1)	45.4 (5.3)
Audiology services												
From any source	1.7 (.6)	3.7 (.9)	5.1 (1.1)	1.5 (.6)	76.5 (2.5)	2.2 (1.0)	3.5 (1.0)	2.5 (.7)	2.5 (.8)	2.6 (1.4)	8.2 (1.5)	70.4 (4.8)
From the school	1.3 (.6)	1.5 (.6)	3.4 (.9)	0.5 (.4)	52.6 (2.9)	1.8 (.9)	1.9 (.8)	1.4 (.6)	1.7 (.7)	2.2 (1.3)	5.4 (1.2)	46.6 (5.2)
Orientation/mobility services												
From any source	.2 (.2)	.9 (.5)	3.4 (.9)	1.5 (.6)	.9 (.5)	47.4 (3.5)	14.6 (2.0)	2.5 (.8)	4.8 (1.2)	9.9 (2.7)	15.5 (2.0)	46.9 (5.4)
From the school	.1 (.2)	.8 (.4)	2.8 (.8)	1.3 (.6)	.9 (.5)	43.5 (3.5)	11.3 (1.8)	1.5 (.6)	3.9 (1.0)	6.8 (2.3)	13.8 (1.9)	45.3 (5.4)
Personal assistance												
Reader or interpreter												
From any source	5.7 (1.1)	3.9 (1.0)	5.1 (1.1)	2.2 (.8)	40.1 (2.8)	16.9 (2.7)	5.1 (1.2)	3.0 (.8)	6.1 (1.3)	9.2 (2.6)	8.4 (1.5)	31.0 (4.9)
From the school	5.5 (1.1)	3.7 (.9)	4.7 (1.1)	2.2 (.8)	38.0 (2.8)	15.4 (2.6)	5.0 (1.2)	2.6 (.8)	5.6 (1.2)	8.0 (2.4)	8.3 (1.5)	29.5 (4.8)
Respite care												
From any source	.5 (.3)	1.1 (.5)	5.3 (1.1)	4.0 (1.0)	1.6 (.7)	3.1 (1.2)	13.2 (1.9)	2.1 (.7)	19.6 (2.1)	5.4 (2.0)	21.1 (2.2)	14.9 (3.8)
From the school	.0 (.4)	.6 (.4)	2 (.7)	.6 (.4)	.6 (.4)	.7 (.6)	1.5 (.7)	.0 (.7)	3.3 (1.0)	1.3 (1.0)	2.9 (.9)	2.8 (1.7)
None of these												
From any source	33.7 (2.3)	22.6 (2.0)	24.7 (2.1)	18.6 (1.9)	9.1 (1.6)	14.3 (2.4)	10.0 (1.6)	20.2 (1.9)	6.5 (1.3)	16.8 (3.4)	7.1 (1.4)	15.9 (3.6)
From the school	47.7 (2.4)	26.7 (2.1)	30.2 (2.3)	35.3 (2.4)	13.3 (2.9)	20.3 (2.8)	18.4 (2.1)	40.3 (2.3)	10.2 (1.6)	28.2 (4.1)	10.0 (1.6)	19.4 (3.9)

Source: NLTS2 Wave 1 parent interviews.

Standard errors are in parentheses.

In contrast, some services are more broadly applicable to a variety of disabilities. For example, a large majority (71%) of students with speech impairments receive speech-language pathology services, but students with autism or multiple disabilities are just as likely to receive these services (75% and 72%, respectively); 63% of students with hearing impairments and 44% of students with mental retardation also receive them. Similarly, specialized transportation services are fairly common for youth with many kinds of disabilities; more than half of youth with orthopedic impairments, autism, multiple disabilities, or deaf-blindness use such services. About one-quarter of students in many categories are reported by their parents to receive vocational services, and diagnostic medical services are received by 28% to 59% of youth in all categories except learning disabilities or speech impairments. The likelihood that youth in the different disability categories receive each service from their schools generally follows the same patterns as the percentages of youth receiving the service at all.

Although students with learning disabilities comprise the largest proportion of students receiving special education services, comparatively few of them are reported to receive related services or supports. About one-third of youth with learning disabilities (34%) are reported to have received no related services in the preceding year, and almost half (48%) had received none from or through their school. Only personal counseling and tutoring are provided to 20% or more of youth with learning disabilities. Youth with speech impairments or mental retardation also are among the least likely to have received services from any source, and youth with emotional disturbances or other health impairments join students with learning disabilities as among the least likely to have received services from or through their schools.

Mirroring their relatively low level of receipt of services in general, youth with speech impairments or mental retardation who do receive services are the least likely of all youth (about 45%) to have case managers (Exhibit 2-7). In contrast, more than 60% of youth with visual impairments, autism, multiple disabilities, or deaf-blindness who receive services have case managers to help coordinate their services ($p < .01$ or $p < .001$ for all comparisons). Although

Exhibit 2-7
CASE MANAGEMENT SUPPORT FOR YOUTH WHO RECEIVE SERVICES,
BY DISABILITY CATEGORY

	Learning Disability	Speech/Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities	Deaf-Blindness
Percentage of those receiving services who have a case manager	53.1 (2.9)	44.4 (2.7)	46.9 (2.8)	56.0 (2.8)	55.1 (3.0)	66.6 (3.5)	59.9 (2.9)	56.1 (2.6)	63.6 (2.6)	58.3 (4.7)	60.8 (2.7)	65.1 (5.1)
Percentage with a case manager whose case manager is:												
Someone at school	49.3 (2.9)	41.3 (2.7)	30.2 (2.6)	36.9 (2.7)	43.1 (3.0)	48.5 (3.7)	36.3 (2.8)	46.5 (2.6)	35.8 (2.6)	46.7 (4.8)	32.0 (2.6)	38.8 (5.2)
Nonschool professional	5.4 (1.3)	3.9 (1.1)	17.4 (2.2)	20.3 (2.2)	12.5 (2.0)	24.3 (3.2)	24.9 (2.5)	10.1 (1.6)	30.3 (2.5)	10.5 (3.0)	30.3 (2.6)	24.3 (4.6)
A family member	6.6 (1.5)	3.7 (1.0)	4.7 (1.2)	8.2 (1.5)	7.6 (1.6)	10.1 (2.2)	10.3 (1.8)	7.3 (1.4)	8.1 (1.5)	10.5 (3.0)	10.8 (1.7)	17.6 (4.1)

Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.

youth with learning disabilities are the least likely to receive services overall, those who do receive services are as likely as many other groups of youth to have a case manager (53%).

Regardless of a youth’s disability category, if he or she has a case manager, the person is most likely to be someone at school. The percentages of youth whose services are coordinated by school staff range from 30% of youth with mental retardation to almost 50% of youth with learning disabilities or visual impairments ($p < .001$). Nonschool professionals are case managers for fewer than 15% of youth with learning disabilities; speech, hearing, or other health impairments; or traumatic brain injuries, but for approximately 25% of youth with visual or orthopedic impairments or deaf-blindness and 30% of youth with autism or multiple disabilities. Family members act as case managers for about 10% or fewer of youth with most types of disabilities; the exception is youth with deaf-blindness, almost 20% of whom have family members as their case managers.

Acquiring Services

Sources of information. As presented earlier for youth with disabilities as a whole (Exhibit 2-3), the school tends to be the primary source of information for families of the majority of youth in each disability category (Exhibit 2-8). It is a particularly frequent source of information for youth with learning disabilities (86%) or speech impairments (83%). In addition, about three-fourths of students with mental retardation or hearing or visual impairments have parents who report obtaining information from their children’s schools. Parents of youth with most types of disabilities are about equally likely to learn about services from professionals as from family members, other parents, or groups; however, parents of youth with emotional disturbances or orthopedic or other health impairments are more likely to learn about services from professionals (31% to 40%) than from nonprofessionals (19% to 29%, $p < .05$). In fact, parents of youth with orthopedic impairments are the most likely to learn about services from professional consultants or physicians (40%), whereas parents of youth with

Exhibit 2-8
SOURCES OF INFORMATION ABOUT SERVICES, BY DISABILITY CATEGORY

	Learning Disability	Speech/Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities	Deaf-Blindness
Percentage with parents reporting learning about services from:												
School	85.7 (1.7)	83.2 (1.9)	78.1 (2.2)	69.0 (2.4)	76.3 (2.5)	73.6 (3.1)	62.4 (2.7)	69.8 (2.2)	64.6 (2.6)	67.0 (4.3)	68.4 (2.5)	71.6 (4.8)
Professional consultant or physician	14.3 (1.8)	13.9 (1.8)	20.4 (2.1)	31.2 (2.4)	23.2 (2.5)	27.7 (3.2)	40.5 (2.8)	30.8 (2.2)	31.1 (2.5)	30.7 (4.2)	31.5 (2.5)	33.9 (5.0)
Family, other parents, or parent groups	15.0 (1.8)	15.3 (1.8)	16.1 (1.9)	18.9 (2.0)	23.6 (2.5)	20.1 (2.9)	29.0 (2.6)	23.4 (2.1)	35.4 (2.6)	22.7 (3.8)	32.9 (2.6)	29.9 (4.9)
Web, newsletters, print	10.4 (1.5)	9.7 (1.5)	11.2 (1.7)	13.1 (1.8)	16.7 (2.2)	15.4 (2.6)	17.8 (2.2)	18.1 (1.9)	25.4 (2.4)	10.6 (2.8)	17.3 (2.1)	18.8 (4.1)

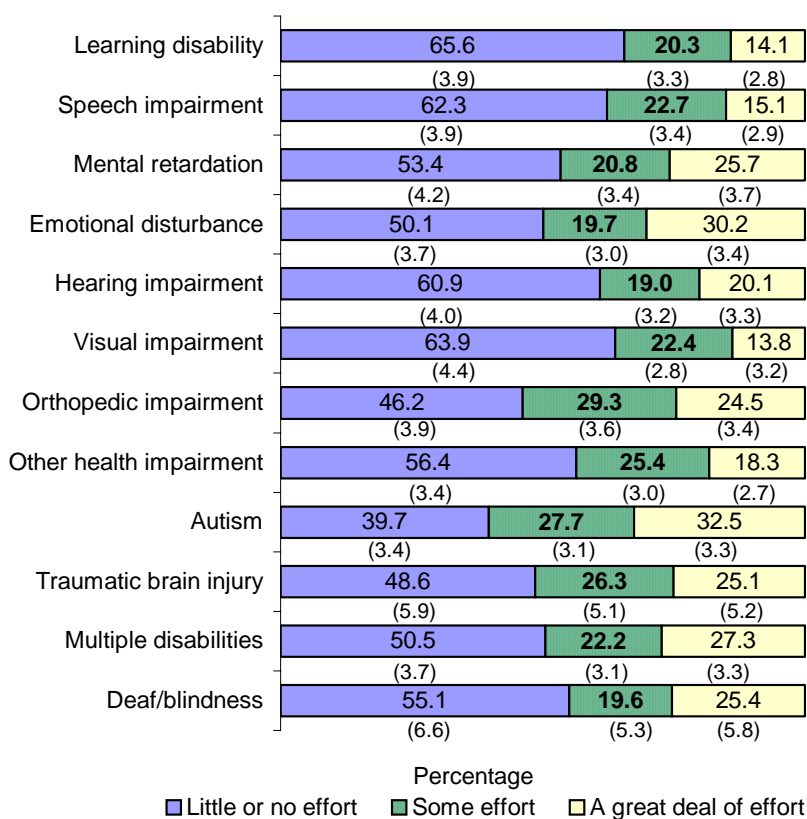
Source: NLTS2 Wave 1 parent interviews.

Standard errors are in parentheses.

autism are the most likely to learn about services through family, other parents, groups (35%), or the media (25%). Parents of youth with learning disabilities or speech impairments are the least likely to learn about services through sources other than schools.

Effort required. Parents of between 40% and 66% of youth with disabilities report having to expend “little or no effort” to receive services for their sons or daughters (Exhibit 2-9), and parents of between 19% and 29% of youth report that it took “some effort” to secure services. However, parents of some youth in each disability category report expending “a great deal of effort” to obtain services, with a wide range in the frequency of this report across categories. Whereas only

Exhibit 2-9
PARENTS' REPORTS OF EFFORT TO OBTAIN SERVICES FOR YOUTH, BY DISABILITY CATEGORY



Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.

However, parents’ experiences with the various barriers to obtaining services vary across disability categories (Exhibit 2-10). In general, parents of youth with autism or deaf-blindness are the most likely to report problems with each barrier, followed by youth with emotional disturbances, orthopedic impairments, or multiple disabilities. For example, parents of between 34% and 43% of youth with emotional disturbances, orthopedic impairments, autism, multiple disabilities, or deaf-blindness lack information about needed services. Similarly, between 34% and 49% of youth in these same categories have parents who report that needed services are not

about 15% of youth with learning disabilities or speech or visual impairments have parents who report expending “a great deal of effort” to obtain services for them, the parents of about twice as many youth with emotional disturbances or autism report expending that level of effort. In addition, about one-fourth or more of youth with mental retardation, orthopedic impairments, traumatic brain injuries, multiple disabilities, or deaf-blindness have parents who report expending “a great deal of effort” to obtain services for their sons or daughters with these disabilities.

Barriers encountered.

As shown earlier in this chapter (Exhibit 2-5), service information, availability, and quality are the three most commonly cited obstacles to obtaining services reported by parents of students with disabilities as a whole.

Exhibit 2-10
PARENTS' REPORTS OF BARRIERS TO OBTAINING SERVICES FOR YOUTH,
BY DISABILITY CATEGORY

	Learning Dis- ability	Speech/ Language Impair- ment	Mental Retar- dation	Emo- tional Distur- bance	Hearing Impair- ment	Visual Impair- ment	Ortho- pedic Impair- ment	Other Health Impair- ment	Autism	Trau- matic Brain Injury	Multiple Disabili- ties	Deaf- Blind- ness
Percentage with parents reporting barriers to acquiring services:												
Lack of information	21.0 (2.0)	20.0 (2.0)	23.4 (2.2)	34.1 (2.5)	22.7 (2.4)	24.0 (3.0)	36.2 (2.7)	27.8 (2.2)	40.4 (2.7)	31.1 (4.2)	34.3 (2.6)	42.8 (5.2)
Services not available	18.8 (1.9)	18.1 (1.9)	25.6 (2.2)	33.5 (2.4)	29.0 (2.6)	30.0 (3.2)	39.8 (2.8)	29.3 (2.2)	49.3 (2.7)	29.4 (4.1)	40.1 (2.7)	42.5 (5.2)
Poor quality	17.1 (1.9)	19.9 (2.0)	20.6 (2.1)	30.2 (2.4)	22.8 (2.4)	22.7 (3.0)	28.6 (2.6)	28.0 (2.2)	34.6 (2.6)	26.2 (4.0)	29.6 (2.5)	32.7 (4.9)
Scheduling conflicts or lack of time	21.2 (2.0)	22.7 (2.1)	22.3 (2.1)	35.4 (2.5)	31.1 (2.7)	28.2 (3.2)	36.2 (2.7)	30.5 (2.2)	38.1 (2.6)	30.1 (4.2)	33.0 (2.6)	41.6 (5.2)
Cost of services	14.8 (1.8)	14.5 (1.8)	17.4 (1.9)	25.4 (2.2)	22.6 (2.4)	21.3 (2.9)	28.9 (2.6)	20.9 (1.9)	33.9 (2.6)	26.3 (4.0)	26.8 (2.4)	37.3 (5.1)
Youth ineligible for services	14.5 (1.8)	16.9 (1.9)	18.4 (2.0)	24.2 (2.2)	18.9 (2.3)	16.8 (2.6)	29.3 (2.6)	23.0 (2.0)	33.2 (2.6)	26.6 (4.1)	25.2 (2.4)	29.9 (4.9)
Transportation barriers or location of services	18.8 (1.9)	13.0 (1.7)	23.6 (2.2)	33.6 (2.4)	28.3 (2.6)	28.7 (3.2)	36.3 (2.7)	24.6 (2.1)	38.2 (2.6)	29.4 (4.2)	38.5 (2.6)	49.7 (5.3)
Language/communication barrier	3.9 (1.0)	8.1 (1.4)	7.4 (1.3)	3.4 (.9)	14.8 (2.1)	2.2 (1.0)	5.5 (1.3)	3.3 (.9)	14.3 (1.9)	5.4 (2.1)	9.5 (1.6)	17.7 (4.0)

Source: NLTS2 Wave 1 parent interviews.

Standard errors are in parentheses.

available. Most of these categories also are among the most likely to have youth whose parents report expending a great deal of effort to obtain services.

The higher percentages of youth in particular disability categories who experience these barriers do not mean that they are not problems for youth with other types of disabilities. In fact, each of these barriers is reported as a problem by between approximately 20% and 30% of youth with other types of disabilities. Particularly noteworthy is that parents of approximately 25% of youth with mental retardation and approximately 30% of youth with hearing, visual, or other health impairments or traumatic brain injuries report that needed services are unavailable for their sons or daughters. Both cost and eligibility are issues for youth with traumatic brain injuries (parents of about 26% report each of these types of problems), and language is a barrier for significantly higher proportion of students with hearing impairments than of other types of disabilities except autism or deaf-blindness (15%, $p < .05$).

Reported Unmet Needs for Services

Although the majority of youth with disabilities as a whole have parents who report that the services youth receive are sufficient, this aspect of services, too, varies widely across disability categories (Exhibit 2-11). As was true regarding the effort to acquire services and barriers encountered, parents of students with autism stand out from those of youth with disabilities in

Exhibit 2-11
REPORTED UNMET NEEDS FOR SERVICES, BY DISABILITY CATEGORY

	Learning Disability	Speech/Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities	Deaf-Blindness
Percentage who receive related services with parents who report they are sufficient to meet youth's needs	74.8 (3.6)	81.6 (3.1)	68.7 (3.9)	64.6 (3.6)	80.0 (3.3)	78.5 (3.8)	64.1 (3.8)	68.3 (3.2)	57.4 (3.5)	69.0 (5.5)	69.2 (3.4)	76.4 (5.7)
Percentage on a waiting list for one or more services	2.9 (.8)	1.8 (.7)	5.6 (1.2)	5.4 (1.2)	4.5 (1.2)	8.4 (2.0)	13.4 (1.9)	3.4 (.9)	17.4 (2.0)	6.3 (2.2)	16.3 (2.0)	11.6 (3.4)

Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.

most other categories in that they are the least likely to report that their sons or daughters are receiving sufficient services (57%). These parents' reports differ significantly from those of the parents of three-quarters or more of students with learning disabilities; speech, hearing, or visual impairments; or deaf-blindness who report that their sons or daughters are receiving enough services ($p < .001$). Youth with autism, along with those with multiple disabilities, are the most likely to be on a waiting list for one or more additional services (17% and 16%), a situation that is quite rare for youth with learning disabilities or speech or other health impairments, for example (2% or 3%, $p < .01$).

Demographic Differences in Experiences with Related Services and Supports

Many of the aspects of related services described thus far do not vary among youth with different demographic characteristics. For example, there are no significant differences between boys and girls with disabilities in any of these experiences with related services. Similarly, only with regard to receipt of speech-language pathology services and vocational services are there differences among younger and older teens with disabilities. Specifically, 13- and 14-year-old students with disabilities are more likely than 17-year-olds to receive speech-language pathology services (32% vs. 21%, $p < .05$), whereas the reverse is true regarding vocational services (8% of younger students receive them, compared with 32% of 17-year-olds, $p < .001$). However, variations among youth with disabilities who differ in the level of their household income and in their racial/ethnic background are more numerous, as noted below.

**Exhibit 2-12
RELATED SERVICES RECEIVED BY YOUTH
FROM ANY SOURCE AND FROM THEIR SCHOOL,
BY HOUSEHOLD INCOME**

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000
Percentage reported to have received service in the past 12 months:			
Tutor			
From any source	15.2 (1.9)	18.8 (2.4)	23.9 (2.6)
From the school	13.2 (1.8)	13.0 (2.0)	13.9 (2.1)
Assistive technology services and devices			
From any source	4.1 (1.0)	6.8 (1.5)	9.9 (1.8)
From the school	3.4 (1.0)	4.0 (1.2)	7.6 (1.6)
Psychological/mental health services			
From any source	36.0 (2.5)	30.9 (2.8)	28.9 (2.7)
From the school	19.5 (2.1)	16.3 (2.2)	11.1 (1.9)
Diagnostic or medical services			
From any source	25.0 (2.3)	21.6 (2.5)	23.1 (2.5)
From the school	10.6 (1.6)	5.4 (1.4)	5.7 (1.4)
Percentage of those receiving services who have a case manager	40.8 (2.9)	53.0 (3.6)	64.3 (3.2)
Percentage with a case manager whose case manager is someone at school	29.8 (2.7)	43.9 (3.3)	57.2 (3.3)
Source: NLTS2 Wave 1 parent interviews. Standard errors are in parentheses. Note: The exhibit includes only the services that differ across demographic groups.			

Students' Household Income

Receipt of services. Household income appears unrelated to the likelihood that students with disabilities receive most types of services, although there are a few exceptions that indicate greater service receipt for youth from wealthier households (Exhibit 2-12). According to parents, youth living in households with incomes of more than \$50,000 are more likely than those in the lowest income category to receive help from tutors (24% vs. 15%, $p < .01$), with the difference between groups being entirely in tutoring acquired from sources other than the school. Students with disabilities from higher-income households also are more likely than their lower-income peers to use assistive technology services or devices (10% vs. 4%, $p < .01$) and to receive them from schools (8% vs. 3%, $p < .05$).

In addition, although parents across all income levels report that about one-third of youth receive psychological or mental health services from any source, students in the lowest income category are more likely than their peers living in the most affluent households to receive such services from their schools (20% vs. 11%, $p < .01$). Similarly, although about one-fourth of students at all income levels are reported to receive diagnostic medical services from all sources, students from

lower-income households are the most likely to receive them from their schools (11%, compared with 5% and 6% of middle- and upper-income households respectively, $p < .05$). These differences may be related to NLTS2 findings regarding disparate health insurance coverage between household income levels, which may enable more youth from higher-income families to receive these services from nonschool sources (Marder, Levine, Wagner, & Cardoso, 2003).

According to parents, students with disabilities who receive services are more likely to have a case manager the more affluent their families are; almost two-thirds of students whose household income exceeds \$50,000 and who receive related services have case managers, compared with about half of students whose household income is between \$25,000 and \$50,000 ($p < .05$) and 41% of students whose household income is \$25,000 or less ($p < .001$). Higher household income also is associated with having a case manager from the school; however, there

are no significant differences across the income groups in the likelihood of having nonschool professionals or family members as case managers.

Acquiring services. Although the majority of families of youth with disabilities learn about related services through their children’s schools (Exhibit 2-13), schools are a source of information for a smaller share of families with lower incomes than of those with medium incomes (78% vs. 85%, $p < .05$). There are no significant differences in the percentages of families that learn about services from other sources.

	\$25,000 or Less	\$25,001 to \$50,000	More than \$50,000
Percentage of youth whose family learned about services through school	77.8 (2.2)	85.1 (2.2)	80.3 (2.4)
Percentage with parents reporting expending a great deal of effort to obtain services for youth	26.3 (4.0)	20.8 (3.8)	14.1 (2.9)
Percentage with problems obtaining services due to:			
Transportation	19.9 (2.1)	9.2 (1.7)	6.0 (1.4)
Language barrier	7.3 (1.4)	2.9 (1.0)	3.1 (1.0)

Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.

In addition, there are income-related differences with regard to the effort parents report expending to obtain services for their adolescent children with disabilities. Whereas obtaining services took a great deal of effort for 14% of parents with annual incomes of more than \$50,000, it took that degree of effort for almost twice as many parents with annual incomes of \$25,000 or less (26%, $p < .05$). Nonetheless, parents’ experiences with barriers to obtaining services are similar for families with different income levels, with two exceptions. Greater problems with transportation and language barriers are associated with being from a low-income household. The former is a barrier for

20% of low-income families, compared with 6% of higher-income families ($p < .001$), and the latter is a barrier for 7% of low-income families, compared with 3% of middle- or higher-income families ($p < .05$).

NLTS2 explored whether the fact that lower-income families report expending greater effort to obtain services is associated with lower-income students’ attending schools with large proportions of low-income students (i.e., those eligible for the free or reduced-price lunch program) and, therefore, schools that potentially have fewer resources for serving students with disabilities. If students do attend such schools, their families may need to expend greater effort to seek services outside the school than families of students in wealthier schools that could provide more services. However, no significant relationships were found between the concentration of low-income students in the school and parent-reported effort to obtain services or the extent to which parents encountered particular barriers to obtaining services. Thus, it appears to be household poverty, not the level of poverty in the student body of students’ schools, that relates to the perceived effort required to obtain services and the extent to which barriers are encountered in doing so.

Unmet need. There are no income-related differences regarding the extent to which parents report that services received by youth with disabilities are sufficient or in the frequency with which youth with disabilities are on waiting lists for additional services.

Students' Racial/Ethnic Background

Receipt of services. As with household income, students' race or ethnicity appears to be unrelated to receipt of the majority of services and supports. However, Hispanic students are less likely than white or African-American students to receive vocational services from any source and from their schools ($p < .05$; Exhibit 2-14). They also are less likely than white students to receive assistive technology services or devices ($p < .01$) at all or from their schools.

Although students of the three racial/ethnic groups are about equally likely to receive diagnostic or medical services, African-American students are more likely than white students to receive such services from their schools (11% vs. 6%, $p < .05$). In addition, among students who receive services, white students are more likely than African-American or Hispanic students to have case managers (60% vs. 39%, $p < .001$) and to have that person be someone at school (52% vs. 28% and 30%, $p < .001$).

Acquiring services. Race/ethnicity is not associated with differences in where families learn about services. However, twice as many African-American as white or Hispanic youth have parents who report expending "a great deal of effort" to obtain services (32% vs. 16%, $p < .01$ and $p < .05$). Of the various barriers to obtaining services investigated in NLTS2, Hispanic students differ from white and African-American students in two regards. They are less likely to have parents who report that cost presents a barrier to services; 9% of Hispanic students, compared with 18% of white and 20% of African-American students, report that cost is a barrier. This difference may relate to the fact that Hispanic youth with disabilities also are more likely to rely on their schools for services; services specified on students' IEPs are to be provided at no cost to families. On the other hand, language is more problematic for Hispanic families; 13% of Hispanic students, compared with 3% of white and 4% of African-American students, indicate that language is a barrier.

Exhibit 2-14 EXPERIENCES WITH RELATED SERVICES, BY RACE/ETHNICITY			
	White	African American	Hispanic
Percentage reported to have received service in the past 12 months:			
Vocational services			
From any source	19.9 (1.6)	23.1 (2.9)	12.8 (3.0)
From the school	17.6 (1.6)	21.2 (2.8)	11.5 (2.9)
Diagnostic medical services			
From any source	23.6 (1.7)	22.8 (2.9)	23.8 (3.8)
From the school	6.2 (1.0)	11.3 (2.2)	9.2 (2.6)
Assistive technology services or devices			
From any source	7.5 (1.1)	6.2 (1.7)	2.6 (1.4)
From the school	5.9 (1.0)	3.4 (1.3)	1.4 (1.1)
Percentage of those receiving services who have a case manager	60.0 (2.2)	38.7 (3.7)	39.4 (5.1)
Percentage with a case manager whose case manager is someone at school	52.0 (2.2)	28.1 (3.4)	29.9 (4.8)
Percentage with parents reporting expending a great deal of effort to obtain services	15.5 (2.1)	32.3 (5.9)	15.5 (6.3)
Percentage with problems obtaining services due to:			
Cost of services	18.4 (1.6)	19.8 (2.8)	8.6 (2.5)
Language barrier	2.9 (.7)	4.4 (1.4)	13.3 (3.1)

Source: NLTS2 Wave 1 parent interviews.
Standard errors are in parentheses.
Note: The exhibit includes only services that differ across demographic groups.

Reported unmet needs. African-American students are less likely than white students to have parents who report that their sons or daughters receive sufficient services (61% vs. 74%, $p < .05$). There are no differences between racial/ethnic groups in the extent to which youth with disabilities are on waiting lists to receive services.

This chapter has shown that students with disabilities receive a wide variety of services that are related to their disabilities, as reported by their parents. The next chapter examines student participation in specialized programs and participation in other types of school-based programs, as reported by school staff.