Appendix A

PREVALENCE ESTIMATES AND DEFINITIONS
OF HANDICAPPING CONDITIONS

This appendix has a dual purpose: to define in more detail the various handicapping conditions that are used throughout the report; and to review various estimates of the prevalence of handicapping conditions. Our prime observations are that (1) definitions presently used in the service system are not the same across various agencies, if the agency defines the handicap at all; (2) the stated definitions are almost never clear; and (3) reliable data on prevalence are generally not available, which results in divergent estimates by different services.

From the standpoint of this HEW-sponsored research, handicapped youth broadly include those with a significant physical or mental impairment that results in the need for special services not required by "normal" youth. Because this study is concerned with the government’s policy of providing services, handicap is defined in terms of the need for services. Types of handicapped youth included are those generally called visually or auditorially or speech impaired, crippled or other health impaired, mentally retarded, emotionally disturbed, or learning disabled. Types not included are those whose problems tend to be imposed by conditions in society, rather than by a physical or mental disability, viz., the "disadvantaged" youth.

Estimates of the number of handicapped youth vary widely depending on the definition used, the data believed, and the type of service needed. While we are not fully satisfied with the reliability of the estimates we present in Table A1, we are confident that they represent the correct order of magnitude of those requiring at least some of the special services described in this report. These estimates are plausible and widely used, but some of the other estimates discussed in this appendix have the same attributes. The definitions used for each handicap are specified as precisely as they can be later. Note that of the 83.8 million aged 0 to 21 youth in the United States in 1970, over 9 million are handicapped. Even taking into account the difficulties of making precise estimates without a comprehensive census of the handicapped population, the figures indicate clearly the tragic proportions of the problem.

Not a great deal of effort in this appendix is directed toward finding the "best" single definition of a handicapping condition, since we believe that a single definition of a handicap for every type of service is inappropriate. Our objective here is to discuss the commonly used definitions. First, handicapping conditions usually have
Table A1

ESTIMATED NUMBER OF HANDICAPPED YOUTH AGED 0–21 IN 1970

<table>
<thead>
<tr>
<th>Type of Handicap</th>
<th>Number of Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual impairment</td>
<td>193,000</td>
</tr>
<tr>
<td>Partially sighted</td>
<td>180,000</td>
</tr>
<tr>
<td>Legally blind&lt;sup&gt;a&lt;/sup&gt;</td>
<td>45,000</td>
</tr>
<tr>
<td>Hearing impairment</td>
<td>490,000</td>
</tr>
<tr>
<td>Deaf</td>
<td>50,000</td>
</tr>
<tr>
<td>Hard of hearing</td>
<td>440,000</td>
</tr>
<tr>
<td>Speech impairment</td>
<td>2,200,000</td>
</tr>
<tr>
<td>Crippling or other health impairment</td>
<td>1,876,000</td>
</tr>
<tr>
<td>Mental retardation</td>
<td>2,800,000</td>
</tr>
<tr>
<td>Emotional disturbance</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Learning disability</td>
<td>740,000</td>
</tr>
<tr>
<td>Multihandicapped</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,550,000</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup>Including 32,000 partially sighted.

multiple dimensions. A person may be handicapped in one dimension and not in another. For example, the usual definition for being legally blind is that corrected visual acuity is no better than 20/200 in the better eye, or the angle of vision subtended is no greater than 20°. This particular test, however, does not measure vision over all ranges of distance. Therefore, many of the legally blind will have the capability to see things close up such as books, and hence are not really "blind" for many of the important functions of everyday life. From a standpoint of service policy, which this report deals with, the definition of handicap for eligibility for service ideally should be based on need or functional capability as well as ability to benefit from the service. Thus, the definition of handicap used should depend on the type of service to be given. Operationally, this means that a set of definitions is needed for each type of handicap, rather than a single definition. This is true even if one can describe functional capability in terms of degree of physical limitation.

Given that one wants to measure the severity of a handicapping condition, another problem is where to draw the line between the handicapped and normal populations. In defining the mentally retarded, for example, an IQ of 75 or below is sometimes used to distinguish the mentally retarded from the normal population. It is not clear, however, why a child with an IQ of 74 needs different educational services, for example, than a child with an IQ of 80. With mental retardation as with all other handicaps there is a continuum in the degree of the severity of a handicap, and the handicap can be measured on different dimensions (e.g., IQ and adaptive behavior for the mentally retarded). Definitions that are one-dimensional and purely binary in nature—the child is either handicapped or he is not—are very blunt and inadequate instruments for measuring a handicapped child's need for service.

Finally, the severity of a handicapping condition depends upon the environment in which the child and later the adult finds himself. That is, whether or not you need services depends on your functional needs. The loss of a leg may not be a significant handicap in the classroom, but may be in many job situations calling for physical activity. Therefore, a child may not be handicapped in the eyes of the
educator, but could be handicapped as viewed by the vocational rehabilitation counselor.

Because of these difficulties in developing definitions, we delineate our assumptions about the handicapping condition and its prevalence so that those who disagree can alter our estimates to arrive at their own conclusions. Table A2 gives some different estimates of prevalence in youth of various handicapping conditions. The most noticeable characteristic of these estimates is the wide variation among sources; the high estimate differs from the low estimate by a factor of 6. The differences noted are partially due to varying definitions used. Those differences and breakdowns within the categories of impairment (e.g., hard of hearing versus deaf) will be discussed in following subsections. Note that two of the estimates indicate a very small fraction are multiply handicapped, implying a small amount of double counting in some of the other estimates.

In interpreting estimates of the percentage of the handicapped population served by various government programs, one should keep in mind the uncertainty about the size of that population. Any conclusions must be tempered by the quality of information in this area. It was not within the scope of this study to analyze the relative merits of each set of estimates. We do note that the relatively recent (1970) estimates of prevalence used by the Bureau of Education for the Handicapped (column b) are comprehensive, were made after a review of multiple studies of incidence, and have received wide usage.

This appendix takes up each handicapping condition in the order listed in Table A1, and discusses its definition and the estimates of its prevalence. We discuss the first impairment in greatest detail, since the various types of definition and estimation problems are common to most other impairments and need not be discussed repeatedly.

VISUAL IMPAIRMENT

Data on the incidence of visual impairment in youth are probably the best among the various disabilities. This stems from several factors: visual impairment is relatively easy to detect, a standard measure of "legal blindness" exists, and more widespread screening is done for it than for most other handicaps. The dichotomous definition of legal blindness does not allow the separation of the various functional capabilities among the visually impaired, and it stands to reason that services should not be the same for all those categorized as "blind." In fact, many of the legally blind are not and do not consider themselves blind, and services that are directed at the totally blind will not train the person who has residual vision to use that vision to best advantage. Therefore, a definition such as that for legal blindness gives some indication of who needs service, but is not sufficiently refined to indicate the type of service required, and does not include all those needing service. For much

More research is needed and is being undertaken in this area, such as the extensive survey described in Sec. 5 being undertaken by Professor S. Z. Nagi of Ohio State University. His work attempts to ascertain not only health status but also the amount and type of government service an individual is receiving. This study, however, will only cover adults 18 years of age and over.
<table>
<thead>
<tr>
<th>Handicap</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>(f)</th>
<th>(g)</th>
<th>(h)</th>
<th>(i)</th>
<th>(j)</th>
<th>(k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally retarded</td>
<td>2.300</td>
<td>2.300</td>
<td>1.480</td>
<td>2.25</td>
<td>6.30</td>
<td>7.000</td>
<td>---</td>
<td>---</td>
<td>1.54</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Auditory impairment</td>
<td>0.575</td>
<td>0.575</td>
<td>0.080</td>
<td>2.10</td>
<td>1.00</td>
<td>0.203</td>
<td>0.95</td>
<td>---</td>
<td>0.10</td>
<td>---</td>
<td>0.585</td>
</tr>
<tr>
<td>Speech impairment</td>
<td>3.500</td>
<td>3.500</td>
<td>2.400</td>
<td>5.00</td>
<td>4.50</td>
<td>1.300</td>
<td>1.30</td>
<td>---</td>
<td>3.60</td>
<td>---</td>
<td>5.000</td>
</tr>
<tr>
<td>Visual impairment</td>
<td>0.090</td>
<td>0.100</td>
<td>0.020</td>
<td>0.08</td>
<td>0.35</td>
<td>0.200</td>
<td>0.06</td>
<td>0.057</td>
<td>0.05</td>
<td>0.054</td>
<td>---</td>
</tr>
<tr>
<td>Emotionally disturbed</td>
<td>2.000</td>
<td>2.000</td>
<td>0.050</td>
<td>3.00</td>
<td>5.00</td>
<td>2.600</td>
<td>---</td>
<td>---</td>
<td>2.00</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Crippled</td>
<td>1.000</td>
<td>0.500</td>
<td>0.028</td>
<td>0.50</td>
<td>0.35</td>
<td>0.180</td>
<td>---</td>
<td>---</td>
<td>0.21</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Learning disabled</td>
<td>1.000</td>
<td>1.000</td>
<td>0.026</td>
<td>5.00</td>
<td>7.00</td>
<td>2.200</td>
<td>---</td>
<td>---</td>
<td>1.12</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Other health impairment</td>
<td>1.000</td>
<td></td>
<td></td>
<td>0.50</td>
<td></td>
<td>0.500</td>
<td></td>
<td></td>
<td></td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>Multi-handicapped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.465</td>
<td>10.035</td>
<td>4.080</td>
<td>18.43</td>
<td>24.50</td>
<td>13.730</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.69</td>
</tr>
</tbody>
</table>

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\(c\) Estimate developed from information contained in 1968-69 *Summary of Special Education Services of Bureau for Special Education, Division for Handicapped Children, Wisconsin Department of Public Instruction, 1970 (mimeo)* as reported in Rossmeiller, op. cit., p. 122.

\(d\) Estimates developed by the North Dakota State Department of Public Instruction as reported in *Description of Special Education Program 1972-1973*, submitted to the Bureau of Education for the Handicapped.

\(e\) Estimates developed by the Nebraska State Department of Education as reported in *Description of Special Education Program 1972-1973*, submitted to the Bureau of Education for the Handicapped.

\(f\) Actual number of children in Alabama identified as needing special education service through teacher referral divided by the number of children 5-17 according to the 1970 U.S. Census. The number of identified children is taken from Alabama Five-Year Plan Program for Exceptional Children and Youth, State Department of Education, Montgomery, Alabama, August 8, 1972. Note that the number reportedly identified is often higher than other estimates of the total handicapped youth in the population.


\(i\) Rossmeiller, op. cit., p. 121. This is the estimate used in the Rossmeiller study after a review of other prevalence data.


\(l\) Included with crippled.
more detailed discussions of definitions and incidence rates than we present here, refer to the Trouern-Trend study cited earlier and to a report by the National Society for the Prevention of Blindness, Inc., and one by the Organization for Social and Technical Innovation, Inc.5

The usual definition of legal blindness is that a person’s visual acuity for distant vision does not exceed 20/200 in the better eye, with best correction; or his visual acuity is more than 20/200 but the widest diameter of his field of vision subtends an angle no greater than 20°. Within this category of legal blindness the quality of vision varies widely.

After considering many data sources, the National Society for the Prevention of Blindness4 indicates that the best data available suggest about 1 child in 4 of school age in the United States needs eye care; about 1 in 500 is partially sighted (i.e., uses sight as a chief channel of learning, including 42 percent of legally blind children and those with acuity after correction of better than 20/200 but less than 20/70); and about 1 in 2000 (0.054 in 100) is legally blind.

Other estimates were shown in Table A2. The data indicate that the education agencies in the states are reporting a higher incidence of visual impairments than the National Health Survey and the Model Reporting Areas for Blindness Statistics. This is primarily due to differences in definition. One need not be legally blind to be visually handicapped in terms of the education process. North Dakota, for example, classified children with only 20/70 vision in the better eye after corrections as partially sighted. As we indicated earlier, the handicap definition should depend on how vision relates to the service, e.g., the education process. It is easy to see that the sole use of the classification of legal blindness is misleading in terms of prescriptive action that the schools or other service agencies must take.

Table A3 presents estimates of the percentage of the legally blind with various degrees of vision. Only a relatively small fraction (16 percent) are totally blind.

Some previous estimates of the prevalence of blindness have assumed that it is not distributed randomly but is in fact related to such things as income and race.6 If this is true, the use of average U.S. rates for individual states could be misleading.

Using the NSPB prevalence estimates, and the fact that there were 83.8 million youth aged 0-21 in the United States in 1970, implies that in 1970 there were about 21 million youth who required eye care; 45,000 legally blind youth; and 168,000 partially sighted youth, of whom perhaps 20,000 were legally blind. If one defines partially sighted to include measurable acuity less than 20/70, with correction, then there are perhaps 180,000 partially sighted youth, of whom 32,000 are legally blind.

HEARING IMPAIRMENT

Hearing losses may be grouped into two broad categories: deafness, or sense of

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4 Estimated Statistics on Blindness and Vision Problems.
5 The approximate acuity with correction at which it becomes possible for the person to read ordinary newsprint.
Table A3

DEGREE OF VISION: AGES 5-19

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute blindness</td>
<td>16</td>
</tr>
<tr>
<td>Light perception</td>
<td>14</td>
</tr>
<tr>
<td>Light projection</td>
<td>1</td>
</tr>
<tr>
<td>Less than 5/200</td>
<td>8</td>
</tr>
<tr>
<td>5/200 but less than 10/200</td>
<td>6</td>
</tr>
<tr>
<td>10/200 but less than 20/200</td>
<td>12</td>
</tr>
<tr>
<td>20/200</td>
<td>26</td>
</tr>
<tr>
<td>Field restriction</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>16</td>
</tr>
</tbody>
</table>


hearing that is nonfunctional for the ordinary purposes of life; and hard of hearing, or a sense of hearing that causes difficulty with such things as understanding speech, but which is at least partially functional. For a more detailed discussion of definitions and sources of prevalence data than we present here, refer to the NINDS report.⁷ According to that report, "Deafness has never been defined to the satisfaction of all authorities," and "... the task of ascertaining how many deaf persons there are in this country has never been accurately performed." We would add that the quality of the statistics on the hard of hearing is considerably worse than that for the deaf. The NINDS report suggests that the most widely accepted definition of deafness is as follows:

Those in whom the sense of hearing is nonfunctional for the ordinary purposes of life. This general group is made up of two distinct classes based entirely on the time of the loss of hearing. a) The congenitally deaf: those who are born deaf. b) The adventitiously deaf: those who were born with normal hearing but in whom the sense of hearing becomes nonfunctional later through illness or accident.⁸

A more detailed and specific classification was used in the 1960-1962 U.S. Public Health Service Health Examination Survey. The breakdown of hearing loss is based on the decibels (dB) of sound loss in the 500 to 2000 Hertz range, which covers most of the speech range. The average hearing level in the better ear is divided into four ranges with the associated functional interpretation:

- 41-55 dB: Frequent difficulty with normal speech
- 56-70 dB: Frequent difficulty with loud speech


⁸ The distinction is made because in the former case language development could not occur with the aid of the sense of hearing.
• 71-90 dB: Understands only shouted or amplified speech
• 91+ dB: Usually cannot understand even amplified speech

Other breakdowns use more categories, slightly different dB breakpoints, or slightly different functional interpretations, but are generically the same. For example, Rossmiller uses a classification wherein a hearing loss of 20-45 decibels in at least two frequencies in the speech range is classified as mildly hard of hearing.\(^9\) Deaf or severely hard of hearing are those with a hearing loss of between 75 to 80 decibels or greater across the speech range without the use of hearing aids.\(^10\) The National Health Interview Survey takes a less scientific approach when it asks respondents if they feel they have deafness or serious trouble hearing with one or both ears. A different type of hearing disorder, on which very little data are available, is one in which the level of sound heard may or may not be normal, but there are dyscusic disturbances primarily symptomized by garbled hearing.

The NINDS report estimates there were 236,000 deaf persons of all ages in the United States in 1970. Using their same data source,\(^11\) we note a prevalence of deafness in persons under age 15 of about 53 per 100,000 and 76 per 100,000 aged 15-24. Using these rates, we estimate the 1970 aged 0-21 deaf population is approximately 50,000. The NINDS report estimates that "about 8,500,000 Americans (in 1970) have auditory problems of one type or another which are less severe than deafness but which impair communication...about 4.5 percent (circa 360,000) are under 17 years."\(^12\) If we extrapolate at the same rate to the 0-21 age range, the estimate is 440,000, or 0.525 percent of those in that age range.

Prevalence estimates from various sources are shown in Table A4.

Table A4

<table>
<thead>
<tr>
<th>Degree of Impairment</th>
<th>Estimate</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>(f)</th>
<th>(g)</th>
<th>(h)</th>
<th>(i)</th>
<th>(j)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard of hearing</td>
<td></td>
<td>0.500</td>
<td>0.500</td>
<td>0.08</td>
<td>2.0</td>
<td>0.85</td>
<td>0.200</td>
<td>0.95</td>
<td>0.1</td>
<td>0.525</td>
<td></td>
</tr>
<tr>
<td>Deaf</td>
<td></td>
<td>0.075</td>
<td>0.075</td>
<td>0.1</td>
<td>0.15</td>
<td>0.003</td>
<td>0.95</td>
<td>0.1</td>
<td>0.060</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: See Table A2 for sources a through k.
\(^1\)Combined.

SPEECH IMPAIRMENT

Speech impairment includes absence of a larynx, stammering, stuttering, poor

\(^10\) Ibid, p. 73.
\(^12\) Human Communication and Its Disorders—An Overview, p. 13.
articulation, and other ill-defined troubles with speech. Since there is no precise
definition of speech impairment, it would seem reasonable that there might be no
reasonable consensus about the prevalence of this impairment. This tends to be
confirmed by the data in Table A2. For a discussion of various prevalence data, see
the NINDS report. In 1970 there were about 63 million youth aged 5-21, which
leads to an estimated 2,200,000 speech impaired youth if a 3.5-percent rate is used,
or to an estimated 3,140,000 if a 5-percent rate is used.

The National Health Survey (NHS) gives by far the lowest estimate. It was
based upon the response to the question about whether there were any speech
defects in the family. One cause could be that most people do not think that their
speech difficulties are as significant as a speech therapist would. Another cause is
that cases of cleft palate and deaf mutism were classified in other categories rather
than speech impaired in the NHS, though they might benefit from speech therapy.

CRIPPLED AND OTHER HEALTH IMPAIRED

Crippled and other health impaired includes physical handicaps not character-
ized as speech, hearing, or visual handicaps. Crippled includes orthopedic or muscu-
lar impairments such as the absence, paralysis, or other impairment of the limbs,
back, or trunk. This category also includes children with chronic disease or other
relatively long-term physical impairment such as problems involving the heart,
blood, respiratory, or digestive systems.

The estimates of the prevalence of a crippling or health condition will be differ-
ent from estimates of a "handicapping" crippling or health condition. That is, a loss
of a finger may not interfere with the educational process, and hence the child would
not be considered handicapped with respect to that service. From an aesthetic or
medical viewpoint, however, the child could be considered crippled. The estimates
for the prevalence rates shown in Table A2 are mainly from education sources and
hence may underestimate those actually crippled or other health impaired. This is
suggested in the table, where the National Health Survey found 2.6 percent of the
population physically handicapped, which is well above any of the estimates from
the other sources.

Using the Mackie, Williams, and Hunter rate, which is consistent with the
rates observed in various service programs, would result in an estimated 1,676,000
youth aged 0-21 with these types of handicaps.

MENTAL RETARDATION

Definitions and prevalence data are presented and discussed in Sec. 10 of this
report, which describes mental health agency programs. Ronald Conley performed
a more extensive review of rates of mental retardation than presented here; the

13 Ibid., pp. 16-19.
reviewed studies reported rates between 1.2 and 18.4 percent. Conley uses a rate of nearly 4 percent in his work on the costs and benefits of mental retardation programs. While this is close in absolute terms to the 2.3 percent used by BEH, the relative difference in percentage terms is 74 percent. Extrapolating Conley’s estimates to the entire 0-21 age range yields a population estimate of about 2.8 million.

EMOTIONALLY DISTURBED

When psychiatrists agree upon what mental health is, and reliable instruments are developed to measure it, then it will be possible to obtain a consensus on the prevalence of emotional disturbance in youth. Current definitions leave a great deal to judgment about whether a child is emotionally disturbed or not. For example, emotionally disturbed children have been defined as those demonstrating one or more of the following characteristics:

1. An inability to learn which cannot be explained by intellectual, sensory or health factors.
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
3. Inappropriate types of behavior or feelings under normal conditions.
4. A general, pervasive mood of unhappiness or depression.
5. A tendency to develop physical symptoms, pains or fears associated with personal or school problems.

Just what is considered “inappropriate” behavior under “normal” conditions will vary by individual assessor. Since teachers are a principal source identifying handicaps and are usually not trained to identify the emotionally disturbed population, a large margin for error is introduced. A tendency may prevail to classify those who are difficult to handle in the classroom as emotionally disturbed. One would expect a relatively large variance in the estimates of the prevalence of emotionally disturbed youth. Table A2 tends to bear this out. If one applies the BEH rate to the aged 3-21 population, one estimate would be about 1.5 million youth.

LEARNING DISABLED

Learning disabled children have been defined as follows:

Children are said to have special learning disabilities when they have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in imperfect function in listening, speaking, writing, reading, spelling,


\(^{18}\) Rossmiller, Hale, and Frohreich, p. 95.
or doing mathematical calculations. Such disorders include conditions described as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia but do not include those with learning problems primarily the result of visual, hearing, or motor handicaps or mental retardation.\textsuperscript{17}

This definition is not very precise. Many responsible for identifying learning disorders have not been trained for such work, and, as a result, many of the classifications are basically educated guesses unsupported by research evidence.\textsuperscript{18}

Estimates of the prevalence of the learning disabled cover a wide range. The Fleischmann Report quoted one figure as high as 20 percent.\textsuperscript{19} Again, however, we have a problem of determining where the cutoff should be made in the continuum of learning disorders. Unless that cutoff is standardized (or various levels of severity are standardized) at an educationally meaningful point, the estimates of prevalence cannot be very helpful as a basis for policy development.

Table A2 contains various estimates of the prevalence of a learning handicap. The Wisconsin study found this disorder to be rare. Only 26 out of 100,000 children would be affected with this type of learning disorder if the Wisconsin estimate were correct. More dramatically, only one out of eight elementary schools with an enrollment of 600 each would be expected to have a learning disabled child. If the Nebraska estimate were correct, then each of these same schools would have 42 learning disabled children. The discrepancy is obvious, but at this point, without more precision of definition and data, it is irreconcilable. Applying BEH prevalence rates to the age 3-21 population leads to an estimate of 740,000 learning disabled in that age range in 1970.

\textsuperscript{17} Minimal Brain Dysfunction in Children, Public Health Service Publication No. 20015, 1969, p. 2.
Appendix B

SURVEY OF STATE AGENCIES SERVING HANDICAPPED YOUTH

This survey conducted by The Rand Corporation for HEW in late 1972 had two purposes: (1) to acquire information on the actual dimensions of states’ programs for handicapped youth, including budgetary data, types of services rendered, and the numbers and types of persons receiving assistance; and (2) to obtain the views of high-level state agency officials on problems and possible ways of improving assistance to physically and mentally handicapped youth.

Program descriptive information was received from 179 of the approximately 300 state agencies surveyed, for an overall response rate of 60 percent. Fewer than half of the responses, however, included views on problems or potential solutions.

The questionnaires were sent to six basic types of agencies in each state: Crippled Children’s Service, Mental Health, Public Health, Public Welfare, Special Education, and Vocational Rehabilitation. The mailing lists in Appendix C were obtained from each of the relevant Federal agencies. Where more or fewer agencies in a given state were responsible for assistance to handicapped youth, the mailing list was correspondingly modified.

The questionnaires are included in Appendix D. They were developed and modified based on interviews with HEW agencies funding programs that in whole or in part reach handicapped youth. They were also modified based on interviews with officials in relevant agencies in the states of Arkansas, California, Illinois, Massachusetts, and Wyoming. Draft questionnaires were pretested in the latter three states before submission to the U.S. Office of Management and Budget (OMB) for clearance. After the questionnaires received OMB approval, they were further tested in mailings to a few randomly selected states.

Every effort was made to ensure a high response rate to the questionnaire. In the full mail survey, initial nonrespondents were sent a second reminder set of questionnaires at the end of six weeks after initial survey.

Approximately one-third of the agencies that did not respond wrote or called to explain why they were unable to cooperate. Some lessons can be learned from the reasons given for not responding. The reasons cited for not completing the questionnaires, along with the number of state agencies citing each reason, are given in Table B1. Basically, the agencies either did not have the basic management data we
Table B1

REASONS GIVEN FOR NONRESPONSE TO THE MAIL SURVEY

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Times Reason was Cited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data are not available</td>
<td>12</td>
</tr>
<tr>
<td>Data are not available for handicapped youth separately from other persons</td>
<td>10</td>
</tr>
<tr>
<td>Data exist only in individual client files, and are &quot;impossible&quot; to retrieve</td>
<td>5</td>
</tr>
<tr>
<td>State funds are used but the counties run the program and have the data</td>
<td>2</td>
</tr>
<tr>
<td>Insufficient staff available to take time from performance of prime service responsibilities</td>
<td>8</td>
</tr>
<tr>
<td>Insufficient agency staff available, but will open files to Rand staff members</td>
<td>4</td>
</tr>
<tr>
<td>Too busy with state agency business now, but could respond in a couple of months</td>
<td>4</td>
</tr>
<tr>
<td>Survey did not have prior clearance from the National Council of State Administrators of Vocational Rehabilitation Agencies</td>
<td>6</td>
</tr>
<tr>
<td>Too many surveys are conducted; all are rejected</td>
<td>5</td>
</tr>
</tbody>
</table>

Requested, or had insufficient staff to collect the data for completion of the questionnaire. It appears that state agencies are grossly overburdened by numerous questionnaires. One official who kept track over a long period reported an average of five per week. Thus, the self-preservation tendency is to reject most or all surveys. One state official wrote, "I would suggest you develop a system or technique of information gathering that in no way involves the time of any agency administrator and/or professional or clerical staff." The National Council of State Administrators of Vocational Rehabilitation (CSAVR) is developing a new policy, not fully operational at the time of Rand's survey, of not having state agencies respond to any survey unless it has prior clearance from the Council.

Several officials in those states that did complete our questionnaire were surprised and enlightened by the data they collected for us and, as a result, thanked us for conducting the survey. Overall, the responses were excellent in the sense that state agencies generally were very cooperative and appeared to be sending all relevant available information. The responses were disappointing in the sense that information available in many state agencies is not broken down in such a way that services for handicapped youth can be analyzed separately from services for non-handicapped youth or for adults. Public health and public welfare programs are two areas in which data typically are not tabulated separately for handicapped youth, although the agencies provide significant amounts of service to that group. Many state agencies summarize data on individual clients only when state budgetary processes or Federal reporting regulations require it.
Appendix C

STATE AGENCIES SURVEYED ON PROGRAMS FOR HANDICAPPED YOUTH

This appendix contains a listing, by state, of the major agencies providing services and assistance to physically or mentally handicapped youth. Six basic types of agencies are included: Crippled Children's Service, Mental Health, Public Health, Public Welfare, Special Education, and Vocational Rehabilitation. Because of variations in the organization of state governments, more or fewer than six agencies may be cited for a particular state. This listing was compiled at the request of the Office of the Secretary of Health, Education and Welfare and was used in conducting a survey to provide information for this research project. The listing was compiled from a variety of sources* and updated where feasible by the relevant Federal agency.

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*Unpublished list of state agencies receiving funds from the Social and Rehabilitation Service, including the Assistance Payments Administration and the Rehabilitation Services Administration, of the U.S. Department of Health, Education and Welfare (D/HEW), August 10, 1972.
Directory of State, Territorial and Regional Health Authorities, 1971-72, D/HEW, Public Health Service, (HSM) 72-10, Stock No. 1720-0035.
Maternal and Child Health Service Programs, D/HEW, Public Health Service, 1972.
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Appendix D

STATE SURVEY QUESTIONNAIRES

O.M.B. No. 85-S72018
Approval expires FEB. 1973

BRIEF OUTLINE OF STUDY ON SERVICES FOR THE HANDICAPPED

A comprehensive study of services for handicapped youth is being conducted by The Rand Corporation under sponsorship of the U.S. Department of Health, Education, and Welfare. Initiated in February 1972, the study is concerned with programs for persons up to 21 years of age who are mentally or physically impaired. The purpose of the study is to provide information that will aid in planning the allocation of Federal resources to provide improved assistance and services for handicapped youth.

The study has two major components. The first (related to the two enclosed questionnaires) is to obtain an estimate of current allocations of Federal and State resources provided for handicapped youth, and to determine who receives what type of assistance or service. The second major component concerns the benefits, effectiveness and impact of government assistance and services on the quality of life of the aurally or visually handicapped. Additionally, the second component may eventually serve as a prototype for subsequent studies of assistance and services to other categories of handicapped persons.

The first step in the study is to acquire information on the actual dimensions of programs for the handicapped, particularly: budgetary data, types of services rendered, the numbers and types of persons receiving assistance. As analysts, we are aware of considerable semantic uncertainties and definitional overlaps that exist regarding various types of handicapped as well as various types of services rendered to them. We shall not concentrate efforts—at least not at the outset of the study—on developing new and stringent definitions. This is because the categories so created, be they of the handicapped or the services rendered to them, might then not coincide with the categories in which statistics or budgets are readily available. (Conceivably, one of the by-products of the study will be new sets of generally applicable definitions both for categories of handicapped and services received by them.)

Two questionnaires will be mailed to officials in all fifty states and serve as instruments to provide the initial data base—Questionnaire I is designed to provide an overview of aid to the handicapped in each state, and Questionnaire II is designed to provide information on individual programs. Ten copies of Questionnaire II are enclosed on the assumption that nearly every state agency or department will have ten or less major programs to be described in the areas of providing assistance or services to handicapped persons, excluding those programs that serve only persons over 21 years of age. [A program is used here to mean an organizational subdivision of the agency or a budgetary subdivision on which separate, specific data are available.] Please call us for additional copies if you need more than ten.

In view of the variation in definitions and the wide differences in categories used in bookkeeping and statistical analyses in the field of services for the handicapped, we do not expect to eliminate all ambiguity from our findings or to provide hard figures for all study categories. Therefore, those in State government filling out the questionnaires should try to furnish estimates where they have no specific figures, and do their reporting on activities and the type of handicapped in terms of such categories as happen to be available—with a word of explanation as to what the categories contain. As interpretation of terms will vary from agency to agency, a considerable divergence in responses and the need for flexibility in the analysis of the results is anticipated.

In case these general comments do not dispel remaining doubts and questions, Dr. James S. Kakalik, director of the study at The Rand Corporation, will be able to provide further information. (Please call collect—213-393-0411.)
Questionnaire I: OVERVIEW OF ASSISTANCE TO HANDICAPPED YOUTH

State: _____________________________________________________________

Name of Agency or Department: _____________________________________

Person Answering This Questionnaire:

Name: _____________________________________________________________

Address: __________________________________________________________

_________________________________________________________________

_________________________________________________________________

Title: ______________________________________________________________

Telephone: (Area Code (   )- ________________________________

Extension: _________________________________________________________

Categories of handicap of interest in these questionnaires include deaf, hard of hearing, blind, partially sighted, crippled or other health impaired, speech impaired, learning disabled, mentally retarded, emotionally disturbed, multiple handicapped, and any other categories of physical or mental handicap that your agency assists. Categories of assistance or service include prevention of handicapping conditions; identification, direction or referral of handicapped persons; medical treatment; psychological counseling; income maintenance; personal care; general education; specialized training in areas such as mobility or speech; vocational training; job placement; sensory aids; equipment; recreation or social activity; training professional service personnel; and research on any of the previously mentioned types of assistance or services.
What programs are in operation in your State under your agency's or department's direction in the areas of providing assistance or services to handicapped persons, excluding those programs that serve only persons over 21 years of age? By the term program we mean an organizational or budgetary subdivision of your agency on which separate specific data are available. In lieu of a brief description of each program, you may wish to append descriptive booklets or other prepared materials. Illustrative examples of programs are: an education agency's residential schools for handicapped children or transportation of students; a rehabilitation agency's sheltered workshops or income maintenance while undergoing vocational training; a health agency's vaccination program or purchases of sensory aids; or a social welfare agency's payments to the blind or counseling of handicapped persons. These examples are not exhaustive, but merely illustrative of the kinds of programs for which we would like you to supply information.

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<tr>
<th>NAME OF PROGRAM</th>
<th>BRIEF DESCRIPTION OF PROGRAM</th>
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</table>
Please attach your answers to the following questions on separate pages.

2. Is there any statistical or other information in this area that you think would be of relevance in a study of such programs? We would appreciate receiving all available material that describes each of your programs, including (1) enabling legislation (State and/or local), (2) annual reports, (3) special reports, (4) descriptive booklets, (5) budget materials, (6) reports you send to other agencies, (7) research reports on any type of assistance, service, or handicap, and (8) your state's legal or regulatory definitions of handicaps.*

3. Would you please summarize any particular problem areas in federal or state assistance-or-services-to-the handicapped programs?

4. Would you care to make some suggestions for improvements in the area of assistance or services to handicapped youth?

*Rand will pay the cost of reproduction and postage if necessary for any of these materials.
Questionnaire II: INDIVIDUAL PROGRAMS FOR ASSISTANCE TO THE HANDICAPPED

Please complete one copy of this questionnaire for each of the individual programs listed in Questionnaire I.

Name of Program: ______________________________________

Is there any statistical or other information on this program that you think would be of relevance in this study? We would appreciate receiving any available material that describes this program, including (1) enabling legislation (State and/or local), (2) annual reports, (3) special reports, (4) descriptive booklets, (5) budget materials, (6) reports you send to other agencies, (7) research reports on any type of assistance, service or handicap, and (8) your state's legal or regulatory definitions of handicaps.*

1. What was the budget for this program in fiscal year 1971?

<table>
<thead>
<tr>
<th>SOURCE OF FUNDS</th>
<th>AMOUNT</th>
</tr>
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<tbody>
<tr>
<td>Federal</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
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<tr>
<td>Local</td>
<td></td>
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<tr>
<td>Private</td>
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<tr>
<td>Total</td>
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</table>

*Rand will pay the cost of reproduction and postage if necessary.
2. What does the money buy? Please provide as much information as possible,** breaking down these general categories for a recent one-year period, preferably FY 1971:

<table>
<thead>
<tr>
<th>BUDGET ITEM</th>
<th>APPROXIMATE BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) State Personnel</td>
<td></td>
</tr>
<tr>
<td>Total Number of State Personnel</td>
<td></td>
</tr>
<tr>
<td>Number of Professionals (A.B. degree or higher required)</td>
<td></td>
</tr>
<tr>
<td>(b) Training of Personnel to Serve the Handicapped</td>
<td></td>
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<tr>
<td>Total Number of persons completing training</td>
<td></td>
</tr>
<tr>
<td>Number of professionals completing training</td>
<td></td>
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<tr>
<td>(c) Research</td>
<td></td>
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<tr>
<td>(d) Payments to private organizations or professionals for services to the handicapped</td>
<td></td>
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<tr>
<td>(e) Direct payments to local or regional public agencies</td>
<td></td>
</tr>
<tr>
<td>(f) Direct payments to the handicapped</td>
<td></td>
</tr>
<tr>
<td>(g) Educational supplies for the handicapped</td>
<td></td>
</tr>
<tr>
<td>(h) Sensory aids and prosthetic devices</td>
<td></td>
</tr>
<tr>
<td>(i) Drugs and medical supplies (other than sensory aids and prosthetic devices)</td>
<td></td>
</tr>
<tr>
<td>(j) Capital expenditures for construction of physical plant</td>
<td></td>
</tr>
<tr>
<td>(k) Maintenance of physical plant</td>
<td></td>
</tr>
<tr>
<td>(l) Other budget categories used by your agency (please describe)</td>
<td></td>
</tr>
</tbody>
</table>

**If exact information is not available, we would appreciate a reasonable estimate. Please indicate numbers that are estimated with an asterisk (*).
What categories of assistance or service are provided or funded by this program? How is each category defined? For example, kinds of services that might be provided include:

<table>
<thead>
<tr>
<th>ASSISTANCE OR SERVICE</th>
<th>ILLUSTRATIVE EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of Handicapping Conditions</td>
<td>Prenatal and maternal care; preventive medical programs</td>
</tr>
<tr>
<td>Identification</td>
<td>Mass screening programs</td>
</tr>
<tr>
<td>Direction or Referral</td>
<td>Diagnostic work-ups; individual comprehensive health planning; matching individuals with services provided</td>
</tr>
<tr>
<td>Medical or Surgical Treatment</td>
<td>Stapedectomy; chemotherapy; physical therapy</td>
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<tr>
<td>Psychological Counseling</td>
<td>Counseling child; counseling family</td>
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<tr>
<td>Income Maintenance</td>
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<tr>
<td>Personal Care</td>
<td>Visiting nurse programs; residential care programs</td>
</tr>
<tr>
<td>Specialized Training</td>
<td>Mobility training for the blind; speech therapy</td>
</tr>
<tr>
<td>Vocational Training</td>
<td>Basic work habit training; occupational training</td>
</tr>
<tr>
<td>Job Placement</td>
<td>Employer education; placement of individuals</td>
</tr>
<tr>
<td>Sensory aids and/or Prosthetic Devices</td>
<td>Hearing aids, glasses, visual image enhancement devices</td>
</tr>
<tr>
<td>Recreational or Social Activities</td>
<td>Field trips, athletic programs</td>
</tr>
<tr>
<td>Training Service Personnel</td>
<td>Paraprofessionals, specialized MD's</td>
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<tr>
<td>Research</td>
<td>On any or all of above assistance or services</td>
</tr>
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</table>

We realize that your data and program may be organized differently and ask that you describe the categories of assistance or services your program offers.
<table>
<thead>
<tr>
<th>CATEGORY OF ASSISTANCE OR SERVICE</th>
<th>BRIEF DESCRIPTION OF CATEGORY</th>
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4. Who is being served? Please provide as much information as you can on what groups of handicapped persons are receiving what services. Use data from a recent one-year period, preferably FY 71.

a. *Type of Handicap:* What categories of handicap does this program serve? How is each category defined? How many persons are in each category? How many persons under age 22 are in each category? Please include persons directly served by state personnel and persons served by other organizations receiving state program funds. (Examples of categories are as follows: deaf, hard of hearing, blind, partially sighted, crippled or other health impaired, speech impaired, learning disabled, mentally retarded, emotionally disturbed, multiple handicapped. Your information may only roughly correspond to these, in which case please provide data by whatever categorization you utilize.)

<table>
<thead>
<tr>
<th>CATEGORY OF HANDICAP</th>
<th>OPERATIONAL DEFINITION</th>
<th>NUMBER SERVED</th>
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<tbody>
<tr>
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<td>TOTAL</td>
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<td></td>
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<td>UNDER AGE 22</td>
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</table>
b. *Age Groups:* What age groups are served by state personnel and/or personnel in other organizations funded by this program? Approximately how many are in each category? Please fill in age groups served even if numbers of persons served are not known. (Preferably, we would like to see age breakdowns as follows: Prenatal; 0-2 years; 3-5; 6-12; 13-17; 18-21; 22 and over. We realize, however, that the data you supply may of necessity be for other age breakdowns.)

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<th>AGE GROUP</th>
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C. *Types of Assistance or Service Received:* How many handicapped persons receive each of the types of assistance or services offered by this program? How many handicapped persons under age 22 receive each type of assistance or service from state personnel and/or personnel in other organizations funded by this program? Please list in terms of the types of assistance described in question 3.
<table>
<thead>
<tr>
<th>TYPE OF SERVICE OR ASSISTANCE</th>
<th>TOTAL</th>
<th>UNDER AGE 22</th>
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Any cross-tabulations of data you may have of services and budget by handicap and age would be especially useful to this study. Please attach on separate pages.
Sex: How many of those served, by state personnel and/or personnel in other organizations funded by this program, are in each category?

<table>
<thead>
<tr>
<th>NUMBER SERVED</th>
<th>UNDER</th>
<th>AGE 22</th>
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<tbody>
<tr>
<td>TOTAL Female</td>
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<tr>
<td>TOTAL Male</td>
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</table>

Race: How many of those served, by state personnel and/or personnel in other organizations funded by this program, are in each category?

<table>
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<tr>
<th>NUMBER SERVED</th>
<th>UNDER</th>
<th>AGE 22</th>
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<tbody>
<tr>
<td>TOTAL Black</td>
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<tr>
<td>TOTAL White</td>
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<tr>
<td>TOTAL Spanish Surname</td>
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<tr>
<td>TOTAL Other</td>
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Economic Status: What groups are served? How many persons in each group are served by state personnel and/or personnel in other organizations funded by this program?

<table>
<thead>
<tr>
<th>FAMILY INCOME RANGE</th>
<th>NUMBER SERVED</th>
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<tbody>
<tr>
<td></td>
<td>TOTAL UNDER AGE 22</td>
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<td>TOTAL UNDER AGE 22</td>
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</tbody>
</table>
5. How is contact established between the handicapped youth and the organizations directly providing the assistance or services funded by this program? Please estimate the percentage from:

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>PERCENTAGE</th>
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<tbody>
<tr>
<td>Physician referral?</td>
<td></td>
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<tr>
<td>Welfare referral?</td>
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<tr>
<td>Rehabilitation referral?</td>
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<tr>
<td>Teacher's referral?</td>
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<tr>
<td>Mass screening program?</td>
<td></td>
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<tr>
<td>Parent initiated?</td>
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<tr>
<td>Other (describe)</td>
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APPENDIX E

INTERVIEW SURVEY OF PARENTS OF HANDICAPPED YOUTH

INTRODUCTION

To evaluate current and alternative future policies comprehensively for service to auditorially and visually handicapped youth, we are collecting information from both the providers and the recipients of service. Part of an ongoing study, the results of which will be given in a subsequent report, the personal interview survey described in this appendix is directed at parents in families receiving services for their handicapped youth.

An extensive survey questionnaire is utilized in an attempt to get the "target population viewpoint" in a number of areas, for example:

- Needs for services;
- Deficiencies in single services or in the mix of services offered;
- Problems with the agency, mechanism, or personnel providing services;
- Goals and objectives of parents of handicapped youth;
- Relative importance of each type of service in relation to the others;
- Past, present, and projected future impact of various services on the general quality of life of handicapped children;
- Impact of various services on physical skills, social skills, psychological states, financial states, etc.;
- Suggestions for service and program improvement.

SURVEY DESIGN

The survey involves administering an extensive questionnaire to a sample of approximately 100 families of children with impaired vision or hearing. The sample size was dictated by the need to have a reasonable number of children in each subclassification (state, age, handicap) consistent with budget and time constraints on this research. Since the information generated by the survey is intended to develop insight rather than to test hypotheses, we felt that an interviewer knowl-
edgeable in the subject area would be able to develop useful information from the replies to semi-open-ended questions obtained from a relatively small sample. Families, rather than the handicapped children themselves, are being interviewed because we felt that youth, especially very young persons, might react unfavorably to being singled out as handicapped, impaired, or "different" in any fashion, or to the implied criticism of those providing service. In the case of older youth, perhaps living away from home, interviews are sometimes being conducted with the handicapped person rather than the family, but these are the exceptions.

As one source of families, we contacted staff members of agencies with whom the project staff had dealt in the earlier phase of the study. Although this approach excludes respondents who are not being served by some agency, this is not a severe drawback. The survey is designed to tap attitudes and opinions concerning the system of services presently offered, and those currently in contact with the system are more likely to have accurate memory and detailed opinion about it. We sought referrals from an assortment of types of agencies serving the handicapped, including health agencies, schools (both those serving the handicapped exclusively and regular schools with programs for the vision or hearing impaired), welfare agencies, and rehabilitation programs. We are also attempting to reach persons the government does not serve by requesting referrals from private clinics and physicians, as well as from associations of the handicapped. We explicitly requested names of parents whose children were representative of the handicapped youth served, and have requested three names for each interview to be conducted, thus making it more difficult for the agency to select "stars," and giving the interviewers some opportunity to choose families from areas of varying ethnic and economic characteristics.

Other strategies designed to ensure a fairly wide range of responses to the questionnaire include a threefold breakdown of the sample—by age, handicap, and geographic location. Four age groups are separated (0-5 years old, 6-12, 13-17, and 18-21). The divisions correspond roughly to life stages—preschool, elementary school, intermediate school, and young adults.

The sample is also broken down by handicap: blind and partially-sighted for the visually handicapped; deaf and hard-of-hearing for the auditorially handicapped. Thus, both severity and type of handicap are controlled. Preliminary results of the survey confirmed our hypothesis that different kinds and amounts of services are offered the more severely impaired.

Finally, the sample includes families from three states—California, Massachusetts, and Wyoming. These states were selected from the five in which members of the project had interviewed agency personnel because the states have diverse types of service systems about which we are knowledgeable, and because the contacts we had made provided a basis for requesting referrals. The particular states chosen provide some variation along an urban-rural dimension. Within California, interviews will be conducted in the San Francisco and San Diego areas as well as around Los Angeles.

Only about 30 families will be interviewed in each state; thus the $4 \times 4$ matrix obtained by subdividing into age and handicap categories permits only two families of each type of child to be interviewed. Such a sample is too small to use for other than heuristic purposes. Since actually drawing a random sample would be difficult
and time-consuming for the referring agencies and would add little to the value of observations generated by the survey, the agencies were asked to use any convenient method of selecting families in the categories specified for the survey.

**QUESTIONNAIRE DESIGN**

The questionnaire was developed after examining, as models, several other instruments designed to assess the service needs of handicapped persons (not, as in the present study, young persons only). Unlike the models, however, Rand’s questionnaire is not rigidly structured, using mostly open-ended questions. Since the survey is intended to serve a heuristic as well as an information-gathering function, open-ended questions seemed more useful. They also permit the interviewer to more easily adapt the scheduled questions to each respondent and to probe for the anecdotal material desired.

The questionnaire is prefaced by a statement of purpose—of The Rand Corporation study and of the survey—and a few paragraphs explaining what is meant by such terms as "service" and "agency." The schedule is organized around ten basic need areas: medical treatment; special equipment; personal care; education; vocational training; job placement; counseling; transportation; recreation; and financial assistance. Past, present, and projected future needs are elicited. Each specific agency either in use or used previously is the subject of a series of specific questions to determine the client’s opinion of its good and bad effects.

A second section of the interview focuses on how the client sees the service system as a whole—what unmet needs exist, what difficulties in obtaining information or assistance have been felt. Respondents are also asked to rate each service’s effect on quality of life, both per se and in relation to other service needs. Attitudes toward alternative roles for government as purveyor of services are also explored in an attempt to gain some perspective on the respondents’ attitudes toward the use of government services (antipathy might be expected to lead to lower rates of use), as well as their opinions of specific options, such as vouchers, insurance-type systems, etc.

The schedule concludes with a series of questions designed to assess the nature and severity of the handicap, and to gain some information about the family (size, composition, etc.). The interviewer estimates socioeconomic status ranking and parents’ attitudes toward the handicap.

**PRELIMINARY RESULTS**

Too few interviews have been completed at this time to permit much generalization from the data, but the first third indicate some potential findings. For illustration, we discuss three types of preliminary findings.
Need for Direction

There seem to be three major access points to the service system, roughly corresponding to what seem to be three most pressing needs for service: doctors (whether private or in agency clinics); schools; and agencies providing financial assistance (such as Medicaid). From these points, clients move on to other agencies in a manner that can be better pictured as a chain than as a decision tree. Instead of surveying possibilities for supplying their needs for service and choosing the best alternative according to some explicit criterion, potential users go from one program to another, seeking referrals from each agency in the chain until they find help for their particular problem. Very few respondents had ever made any attempt to learn what services were available in order to select from among them, though some expressed a desire to do so.

One unmet need is for information, both about the child's handicap and about sources of assistance. The need for information about the handicap takes two forms—a desire for more thorough explanation from the professionals who either examine or treat the child, and a desire for counseling programs to help the parent (and sometimes the child) understand and come to terms with the handicap. The need for information about sources of assistance usually takes the form of a protest that the respondent "doesn't know what can be done or how to find out what can be done" or that they do not know where to get the help they have been told their child needs. They need "direction." Certain patterns of service use begin to emerge. There are parents who seek only the kinds of services that someone—doctor or teacher—tells them that they need to obtain. There are also those who attempt to find out what can be done for their child, but who either cannot find out where to get the service or who fail to follow up on advice given them. Finally, there are parents who actively seek to learn something about the services available and who make persistent efforts to obtain them (with varying degrees of imagination and success).

Need for Transportation

Another unmet need of some respondents is for transportation. One Spanish-American mother who did not drive an automobile described the difficulties of taking her infant son to a clinic across town for eye surgery. Still bottle-fed, wearing eyepads, and uncomfortable from previous surgery, he was hard to manage on a crowded bus. Another feared that a lack of transportation for her partially-sighted daughter would be a problem in finding and holding a job. The family lived in an area poorly served by public transportation, and the parents' job managing an apartment complex often prevented their driving to schools, employment agencies, or social events.

Parental Goals for Children

Some definable types of parental goals for their handicapped children have emerged. The most ambitious is the wish to help the child "live up to his fullest potential"—not merely his potential as a handicapped person, but as a human being. In this view, the handicap is an obstacle to be overcome—not an insurmountable problem. One mother of a 19-year-old high school senior with very little residual
vision remarked that he was able to "make up in intelligence what he lacked in vision." The boy intended to become a scientist and was trying to choose between Berkeley, Caltech, and the Northrop Institute of Technology.

A second parental goal expressed in the interviews is to help the child "be as much like normal children as possible." Normality is seen as the upper bound of the child's possibilities. One mother of two deaf boys had made a particularly thorough attempt to compare her boys to normal children and to duplicate for them all the experiences of the others. She bought them hearing aids and Vibra-alarm clocks to increase their sensory independence; she encouraged them to have paper routes and other money-making projects; a physical education teacher herself, she enrolled them in an ice-hockey league and helped them engage in other sporting activities. She was eager to have them transferred from a special school for the hearing handicapped into regular schools, and liked the special school they attended because transfer was its goal, too.

A third type of parent seems to have more limited goals for the child. Rather than normality, the parent hopes that the child can achieve enough independence—financial and personal—to be a "functioning, if handicapped, member of society." Such parents seem to be particularly concerned with things—special education and training—which are seen as a means to the end of financial independence.

Financially, the least ambitious goal is the wish to help the child "adjust to his handicap," to come to terms with it in the sense of learning to live with it rather than overcome it. As might appear obvious, the extent of parental ambitions for the child is related to the severity of the child's handicap—less was hoped for for those who were most severely impaired. But while the severity of the handicap may be a major variable in parental attitudes, other qualities and styles of service use seem to be related to it. For example, some adjustment-oriented parents mentioned a need for counseling. "Fullest-potential" parents tended to emphasize academic education; the "normalizers" tended to want special equipment to improve their children's sensory skills.
SELECTED BIBLIOGRAPHY


American Association on Mental Deficiency, A Manual on Terminology and Classification in Mental Retardation, Monograph Supplement to the American Journal of Mental Deficiency, 1961.


California State Assembly, Interim Committee on Ways and Means, Subcommittee on Mental Health Services, The Dilemma of Mental Health Commitments in California, 1966.


Dalkey, N. C., Ralph Lewis, and David Snyder, Measurement and Analysis of the Quality of Life, The Rand Corporation, RM-6228-DOT, August 1970.


Deacon, W. E., Development and Application of a Health Problem Index, Indiana State Department of Welfare, Division of Services for Crippled Children, April 1972.

Department of Mental Hygiene, State of California, The New California Mental Health Act, 1969, State of California, Welfare and Institutions Code, Division 5, Section 5001.


ENKI, A Study of California’s New Mental Health Law, ENKI Corporation, Chatsworth, California, 1972.


Federal Register: Vocational Rehabilitation Programs and Activities, Vol. 34, No. 200, October 1969.


MacQueen, J. C., et al., Planning Comprehensive Services for Handicapped Children and Youth, Iowa State Services for Crippled Children, Iowa City, Iowa, April 1972.


Riley, L. E., and S. Z. Nagi, *Disability in the United States: A Compendium of Data on Prevalence and Programs*, Division of Disability Research, College of Medicine, Ohio State University, Columbus, Ohio, 1970.


Stromdorfer, E. M., Review and Synthesis of Cost-Effectiveness Studies of Vocational and Technical Education, Ohio State University, Columbus, August 1972.


U.S. Senate, Committee on Finance, Russell B. Long, Chairman, Material related to H.R. 1, *Aid to the Aged, Blind and Disabled; Social Services; Fiscal Relief for States*, 92d Cong., 1st Sess., 1971.


