

**DEAF AND HARD OF HEARING CLIENTS IN 13 MASSACHUSETTS
AGENCIES:**

COMMUNICATION ACCESSIBILITY AND SERVICE DELIVERY

Russell K. Schutt, Ph.D.

University of Massachusetts at Boston

Report to the Massachusetts Commission for the
Deaf and Hard of Hearing

August, 1988

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EXECUTIVE SUMMARY

Half of the service delivery sites ("offices") of 13 state human service agencies were surveyed; questionnaires were returned by 87 percent.

Two-thirds of the offices encountered deaf or hard of hearing clients, but they did so infrequently. Many offices had neither the technological equipment nor the specialized staff^{a1} needed to provide full service access to deaf and hard of hearing clients; not surprisingly, these clients proved to be more difficult to serve than others. There was a high level of interest in additional services for deaf and hard of hearing clients.

- ***50% had no special equipment;
- ***40% had one or more TDD/TTYs;
- ***60% lacked policies concerning hiring interpreters;
- ***Few identified deaf clients in their client population;
1/4 identified hard of hearing clients;
- ***Fewer than 20% had specially designated staff for deaf and hard of hearing clients;
- ***In 60%, untrained staff worked with deaf and hard of hearing clients;
- ***1/4 had tried to hire an interpreter; this had been difficult for 1/3 on a regular basis and for 2/3 on an emergency basis;
- ***Relatives and writing rather than trained interpreters were often used to communicate with deaf clients;
- ***1/4 had used MCDHH services;
- ***1/5 had trained staff about hearing disabilities;
- ***2/3 were interested in staff training;
- ***1/3 had plans to change services.

^{a1}"Specialized staff" includes American Sign Language Interpreters and others who are fluent in American Sign Language and fully knowledgeable about Deaf Culture, communication variations among the deaf and hard of hearing population, relevant technology and its use, making communication accommodations, and the application of a conceptual understanding of the varying situations of deaf and hard of hearing people to problems in independent living, service access, service delivery, and service utilization.

There were major differences between agencies in their experiences with and orientations toward deaf and hard of hearing clients.

- ***The Mass. Rehabilitation Commission and the Commission for the Blind reported the most deaf and hard of hearing clients and provided the most special equipment and specialized staff for communicating with and conceptualizing the situation and needs of these clients;
- ***The Department of Corrections, the Department of Youth Services, the Department of Public Welfare, the Office for Children, and the Parole Board reported relatively few deaf and hard of hearing clients and also had less special equipment and specialized staff for hearing disabled clients than other agencies;
- ***The Office of Children and the Department of Social Services tended to report difficulty serving the deaf and hard of hearing and were interested in related support services and training;
- ***The Department of Mental Retardation and the Department of Public Health, with relatively many deaf and hard of hearing clients, reported a moderate degree of difficulty in serving deaf and hard of hearing clients and a high level of interest in assistance in serving these clients.
- ***The Department of Mental Health respondents reported difficulty in serving deaf and hard of hearing clients and expressed interest in support services, but did not believe that the MCDHH provide or manage any mental health services directly to deaf and hard of hearing clients;
- ***The Department of Public Welfare's office representatives reported that deaf and hard of hearing clients were served less well than others, but expressed little interest in additional services;
- ***Respondents at the Department of Corrections and the Department of Youth Services, agencies reporting very few hearing disabled clients, had the least interest in assistance in serving deaf and hard of hearing clients.

There was little variation between MCDHH regions in experiences with or orientations toward deaf and hard of hearing clients.

- ***Offices in the Metropolitan Boston region reported fewer deaf and hard of hearing staff than other regions;
- ***Offices in Worcester reported a higher proportion of deaf and hard of hearing clients and staff than other regions;
- ***There was no regional variation in the availability of special equipment and staff for the deaf and hard of hearing;
- ***Offices in the Worcester region used MCDHH services more than offices in any other region;
- ***Offices in Metropolitan Boston made use of other (non-MCDHH) services for deaf and hard of hearing clients than did offices in other regions.

Acknowledgements

The MCDHH Survey of 13 Agencies was initiated and partially funded by the Massachusetts Commission for the Deaf and Hard of Hearing. The survey instrument was designed in part by Dr. Richard Thompson, consultant to the MCDHH, with the assistance of Nan Robbins, Deputy Commissioner for Policy and Programs, Liz Banta, Ed.D., Director of Case Management and Social Services, Kate Seelman, Ph.D., Director of Public Education, Research and Technological Services and Marie Tavormina, VR, Director of Interpreter Services. Dr. Thompson also contributed substantially to the survey's sampling design.

I am deeply indebted to the office directors and supervisors who completed the office questionnaires. The entire research project as well as administration of the office-level survey benefited greatly from the work of the 13 agency representatives to the MCDHH.

Administration of the survey and processing of the questionnaires was managed by Lee Hamilton, graduate assistant at the University of Massachusetts/Boston; her skill and conscientiousness were largely responsible for the survey's success. Lee had the able assistance of Mark Swann, also of UMass/Boston and Katharine London, of the MCDHH.

Murray Frank, of the McCormack Institute at UMass/Boston and James Brennan, of UMass/Boston's Psychology Department helped to make the necessary arrangements for the university's involvement in the project. The Chancellor's Office at UMass/Boston contributed some of the project funds; I am grateful for this to Chancellor Robert A. Corrigan. All data were analyzed with UMass/Boston's VAX computer system; the timely assistance of Computing Services staff is hereby acknowledged.

The final report benefitted from the detailed and insightful comments of Nan Robbins and Richard Thompson. But the report had to be prepared with extremely limited resources. As a result, many data displays had to be left in the form output by a computer; redesign for maximum ease of interpretation was not feasible. I have relegated most of the tables that are particularly difficult to inspect to the appendices.

Tens of thousands of Massachusetts' citizens are deaf, several hundred thousand are hard of hearing.¹ Less visible than many other disabilities, deafness and impaired hearing are often misunderstood and the need for specialized services is often overlooked.

The majority of deaf individuals use American Sign Language, with varying levels of proficiency, either exclusively or as a vital support to their understanding of English. Although many deaf individuals can speak, they must use primarily visual or, often in the case of deaf-blindness, tactile means for reciprocal communications. Sign language is a "tongue" more foreign to the general hearing population than any spoken language: relatively few hearing people understand it, even fewer understand that it is indeed a language, and some--due to their own lack of knowledge--are still quick to label as not fully capable those who use it. Hard of hearing individuals are able to use hearing to some degree to carry on spoken conversations, but they require special amplification and communication devices, accommodation by the speaker to present a clear spoken message, and sometimes modification of other factors in the communication environment.

While hearing disability increases the likelihood of needing social and other human services at some point in one's life, it also makes service provision more difficult. The Massachusetts Commission for the Deaf and Hard of Hearing seeks to lessen these service difficulties--to "improve accessibility and quality of existing services and ... promote development of new services when necessary." As one tool for fulfilling this mandate, the 1985 Act establishing the Commission required that,

Within its initial two years of operation, the commission shall undertake a study of state agencies providing services to the deaf or hearing impaired for the purposes of identifying which services offered by such agency may appropriately be transferred to the commission.

This report represents one portion of the Commission's study: a survey mailed to representatives of offices and other service delivery sites in thirteen state agencies, offices, and commissions responsible for the delivery of social and other human services. The questionnaire focused on the availability of the equipment and special staffing required to communicate effectively with deaf and hard of hearing clients, as well as the number of clients needing

¹National Association for the Deaf.

these services. Questions were also included to identify any problems encountered in serving clients who were deaf or hard of hearing, and whether staff were interested in a variety of forms of assistance, including direct service provision by the MCDHH to deaf and hard of hearing clients (see appendix J). These data allow a comprehensive description of communication accessibility for deaf and hard of hearing persons using these state agencies in fiscal years 1986 and 1987 and of the problems encountered by agencies attempting to become more accessible.

METHODS

Sampling

The 13 agencies selected for inclusion in the study had a total of 406 service delivery sites throughout the state; most of these sites were area offices, some were institutions, a few were private non-profit vendors under contract to a state agency (see appendix A). Half (204) of these service delivery sites were included in the final sample. The sampling fraction varied across the 13 agencies in inverse proportion to the number of sites within each. In agencies with at least 40 service delivery sites, one-third were randomly sampled.² In agencies with between 20 and 30 sites, 50% were sampled.³ In smaller agencies, all service delivery sites were selected.⁴

Two survey goals were to describe the experiences of offices that had served deaf or hard of hearing clients and to identify problems in the use of special equipment or special staff for the deaf and hard of hearing. MCDHH representatives knew a priori that few agency offices had such special equipment or staff and that many offices had very few deaf clients, while those offices providing specialized staff tend to attract still more deaf or hard of hearing clients; it appeared likely that a strictly random sample would include too few of these offices for analyses of different experiences in serving deaf and hard of hearing clients. Therefore, the initial random sample of 170 was supplemented with 34 offices selected on a purposive (nonprobability) basis. These offices were known by MCDHH (or by the agency representative) either to have special arrangements for the deaf or to have a greater chance of

²There was one exception to this procedure. The Department of Public Welfare was able to identify 10 offices that served 75 percent of all DPW clients. This information was used to stratify the DPW sample: all of these large offices were selected; one-third of the remainder were randomly sampled.

³No agencies had between 31 and 39 service delivery sites.

⁴For the sake of brevity, the term "office" is used throughout the report to denote service delivery sites.

having served deaf persons due to location in a highly populated urban area where deaf people tend to congregate.

Eighty-seven percent of the offices in the sample returned questionnaires--a very high rate of return for a mailed survey. The response rate varied from a high of 100% in three agencies to a low of 50% in one agency; in 10 of the 13 agencies the response rate was above 75% (see Appendix A). In only two agencies, the Massachusetts Commission for the Blind and the Parole Board, were fewer than 10 questionnaires returned. Statistical estimates based on the three questionnaires from the Mass. Commission for the Blind are particularly subject to error, since these three offices represent only 50% of the total of six MCB offices. However, additional information was provided by an MCB administrator for the entire agency.

Cases were weighted prior to analysis in order to compensate for the disproportionate sampling strategy used.⁵ Statistics presented are thus comparable to those that would have been obtained with a strictly representative sample in which each office had an equal probability of selection. The actual (unweighted) number of cases corresponding to each major data display is presented in an appendix.

Nonetheless, the obtained sample of offices is biased by nonresponse and by the purposive selection of some of the offices. The rate of nonresponse, 13 percent, is relatively low and unlikely to produce serious misestimates except in agencies with very few offices. The purposively selected offices, however, should lead to the appearance of more deaf and hard of hearing clients and more available services than is in fact the case. The extent of sampling bias cannot be estimated precisely, but in two agencies, the Department of Social Services and the Board of Regents, the proportion of purposively selected offices was over one-fourth of the total offices selected and thus capable of seriously biasing estimates. This potential bias should be taken into account when assessing the findings of the study.

One other complexity in the sampling procedure involved the inclusion of private vendors. As statistics presented in the report indicate, many agency services are provided by private non-profit vendors under contract to the state. It was not possible to sample these vendors directly, but they were surveyed in some instances: The Department of Youth Services requested inclusion of their vendors in the survey (many of these vendors are located in state facilities); the Department of Mental Health sent two questionnaires to

⁵As in most research literature, I use the term "cases" to refer to the units which were surveyed (service delivery sites); this use of the term should not be confused with the use of the same term to refer to agency clients.

private vendors; the Executive Office of Elder Affairs questionnaires were all sent to private vendors (Home Care Corporations)--EOEA has no area offices itself; the Parole Board requested inclusion of one private vendor. With the exception of EOEA, the survey data cannot be assumed to represent adequately the experiences of private vendors.

Measurement

The survey instrument generated a detailed picture of the experiences of offices with deaf and hard of hearing clients as well as more general information that could be used for interpretive purposes. Sections of the questionnaire collected background information about offices and then focused on the number of deaf and hard of hearing clients and arrangements for them: special equipment, interpreters and specialized staff, staff training about hearing disabilities, and other specialized programs and services. In addition, respondents were asked to evaluate the office's ability to serve deaf and hard of hearing clients and to suggest support services or training that would improve services to these clients.

Office directors or service directors for the office usually completed the questionnaire. These representatives were thus in a position to be familiar with the services available in their office as well as with the types of problems encountered by case managers or other service providers. However, it is unlikely that the office representative could answer specific questions about numbers of clients or about frequency of use of particular services without consulting records or other individuals.

There is thus likely to be some measurement error, varying with the effort made by the office representative to secure particular information, the quality of office records, and probably the size of the office. As one respondent explained in response to the question about the number of deaf and hard of hearing clients served:

We [Elder Affairs] do not have a database that can tell us the number of hard of hearing unduplicated number of clients served. This information would have to be generated by an extensive survey of past fiscal year data on clients. To correlate these clients by service received is currently beyond the capability of current staff because of the manual nature of generating specific data.

Nonetheless, half of the respondents stated that their estimate of the number of deaf and hard of hearing clients was very reliable; only 5 percent thought their estimate was not reliable.

The relative reliability of answers to particular survey questions is determined in part by the rate of response. About 11 percent of the respondents did not provide information on the number of clients with hearing disabilities and about one quarter omitted information on the total number of clients; only 2-10 percent failed to answer questions about the presence of special equipment or staff or other service arrangements.

Numbers of staff and of clients are reported both in absolute terms and in proportions. Thus, figures on the total number of service delivery staff are supplemented with calculations of the proportion of these staff who have advanced degrees and who have a Bachelor's degree. Similarly, the number of deaf and hard of hearing staff and of deaf and hard of hearing clients are also expressed as proportions. These proportions help to describe the office context in which services are delivered.

Staff estimates are not included for the colleges and universities under the Board of Regents. Most representatives from these institutions answered the staff (and client) questions in terms of their special offices for disabled students, rather than in terms of the college or university as a whole. It is inappropriate to compare these figures to those representing the entire service delivery staff or caseload of an agency office.

Several indexes summarize information obtained from specific survey items about service provision arrangements, problems, and orientations (see Appendix B). Five of these indexes have reliability coefficients (Cronbach's alpha) of .9 or above (after rounding), indicating that the individual items within these indexes are highly interrelated and little information is lost by focusing on variation in the overall index scores rather than on the individual items. These indexes measure: the number of areas concerning the deaf and hard of hearing in which the office provided staff training; the number of areas concerning the deaf and hard of hearing in which respondents believed training should be offered; the frequency of use of special services from the MCDHH; the frequency with which the office had taken any of 12 actions to improve services to the deaf and hard of hearing; and the level of interest in 11 types of technical assistance or services. An index of the number of special services available to the deaf and hard of hearing in institutional settings (for residential institutions only) had a reliability coefficient of .74--also acceptable by conventional standards.

Two additional indexes are simple counts of the availability of special equipment and of the use of interpreters and special staff for deaf and hard of hearing clients. Both indexes had reliability coefficients of about

.5--too low by conventional standards to support the assumption that the items within these indexes are indicators of the same underlying phenomenon. Nonetheless, as counts of the number of arrangements for deaf and hard of hearing clients, the indexes still facilitate comparisons. In addition, for six agencies selected for intensive study, the separate indicators describing special equipment and staffing arrangements are presented in addition to the index scores.

A number of questions evaluated the office's ability to serve deaf and hard of hearing clients. Three questions concerned the degree of difficulty encountered in securing interpreters; these questions were not highly correlated and are analyzed separately. A more general measure is provided by averaging responses to two questions about the office's ability to serve deaf clients and to serve hard of hearing clients compared to its ability to clients without hearing disabilities. Yes/no responses to two other questions also indicate ability to serve deaf and hard of hearing clients: "Has it been especially difficult to provide any of the agency services to your deaf and severely hard of hearing clients?"; "Should the MCDHH provide any services currently available in your office/institution to deaf and hard of hearing clients?" The specific services and problems mentioned in response to these and other questions were also tabulated; specific responses were categorized into a limited number of generic types.

Analysis

The analysis begins with a state-wide overview of experiences with and orientations to serving deaf and hard of hearing clients. Findings are then presented for each agency, relying largely on the indexes for comparisons of the types of services available to the deaf and hard of hearing, the problems encountered in using these services, and the level of interest in additional services. Six agencies were of special interest due to the importance of their services to deaf and hard of hearing people and due to the particular complexities of offering these services appropriately to deaf people. For these agencies, more detailed information on special equipment, staffing, and use of interpreters is presented. Throughout these sections, the detailed comments made by many respondents are used to highlight, qualify, and specify particular findings.

All respondents indicated their agency on the questionnaire. One questionnaire was filled out jointly by representatives of adjacent Mental Health and Mental Retardation offices; this return is designated as a Department of Mental Health office due to the more recent origin of the Department of Mental Retardation.

Most of the report concerns the distribution of deaf and hard of hearing clients and related services across the 13 agencies surveyed. However, the geographic distribution of these clients and services is also important--regional variation in needs could suggest a need for more facilities in particular areas. Therefore, the five regions into which the MCDHH divides the commonwealth are also used as bases for classifying the findings. Only one respondent failed to identify his or her specific office and so could not be classified by region.

THE COMMONWEALTH

Findings are reported first for the commonwealth as a whole, in part as background information for the analysis of the situation in specific agencies. In this section, responses to the individual questions are presented, rather than index scores.

Staffing

The distribution of total numbers of service delivery staff was highly skewed (see table 1). Half the offices had 23 or fewer staff, while ten percent had between 200 and 1000. The mean number of service delivery staff was 82. The median number of service delivery staff with advanced degrees was just 5, but 10 percent had at least 25 such staff. The number of service delivery staff with Bachelors' degrees was somewhat greater: the median was 9, while 10 percent had 38 such staff.

1. SERVICE DELIVERY STAFF

PROF. STAFF	ADVANCED PERCENT	BA/BS PERCENT	TOTAL PERCENT
0-1	19.0	15.4	2.9
2-5	28.4	24.1	10.7
6-9	22.7	10.6	11.0
10-19	17.0	24.0	16.7
20-29	3.8	7.5	17.7
30-39	2.6	8.4	9.1
40-49	2.2	3.9	4.2
50 or more	4.3	6.0	27.7
	-----	-----	-----
	100.0	100.0	100.0
	(146)	(153)	(164)

Of the total number of service delivery staff, an average (median) of 23 percent had advanced degrees; three quarters had, on average, at least a Bachelor's degree (see table 2).

2. RELATIVE EDUCATION OF SERVICE DELIVERY STAFF

	PERCENT OF TOTAL STAFF	
	WITH GRAD DEGREES	WITH BA/BS/GRAD
0-.09	27.9	2.3
.1-.19	19.4	4.1
.2-.29	10.7	3.9
.3-.39	7.4	4.1
.4-.49	10.8	6.4
.5-.59	8.1	5.3
.6-.69	8.3	16.2
.7-.79	4.9	11.5
.8-.89	.3	9.7
.9-1.0	2.3	36.6
	-----	-----
	100.0	100.0
	(143)	(143)

The presence of deaf or hard of hearing staff in an office suggests that the office may be more able to respond effectively to clients who also have a hearing disability. The survey results indicate that few offices have deaf staff (table 3). Seven percent of the offices had one or more deaf staff, although 29 percent had at least one employee who was hard of hearing. The average (median) total number of deaf and hard of hearing staff per office was thus just .64.

3. DEAF AND HARD OF HEARING STAFF

	DEAF	HARD/HEARING	TOTAL
STAFF	PERCENT	PERCENT	PERCENT
0	93.4	71.3	69.8
1	3.3	17.0	16.6
2	1.3	6.9	8.2
3		2.9	3.2
4+	1.9	1.9	2.2
	-----	-----	-----
	100.0	100.0	100.0
	(162)	(162)	(163)

4. PROPORTION OF DEAF AND HARD OF HEARING STAFF/TOTAL

PROP. DISABLED	PERCENT
0	70.8
.01-.04	13.7
.05-.09	4.8
.1-.19	7.0
.2-.9	3.7

	100.0
	(160)

Clients

The average (mean) number of clients served in 1986 and 1987 through the various service delivery sites varied from a low of 1 to a high over 13,000. As discussed in the measurement section, some of this variation reflected differences in counting schemes: some office representatives counted all persons who had made as much as a phone contact with their office as clients; others counted only clients in regular case loads. Some of the variation reflects the differences between agencies that provide intensive services to small numbers, those that provide basic services to large numbers, and institutions (prisons, universities, etc.) that manage large populations. Nonetheless, the numbers allow general distinctions between sites ("offices"). The median number of clients was 914; about one-third had under 500 clients and about one-third had more than 1500 clients (table 5).

5. MEAN CLIENTS, 1986-87

	PERCENT
0-400	26.3
401-800	18.4
801-1200	14.3
1201-1600	9.7
1601-2000	7.5
2001-4000	9.3
4001 or more	14.4

	100.0
	(118)

Calculated as the number of clients per service delivery worker, caseloads varied from .04 to 1000. The median caseload was 33; one-third of the offices had a caseload under 8; one-third had more than 52 clients per service delivery worker.

Deaf and hard of hearing clients had appeared at most offices between 1986 and 1987--84 percent of the offices reported some clients with hearing disabilities. Of those offices reporting the number of deaf clients in FY 1986 and 1987, 46 percent had had no deaf clients, one quarter had had between one and two deaf clients in each year; about 14 percent had had more than 10 deaf clients on average in both years (table 6). Hard of hearing clients appeared more often. Among offices reporting the number of hard of hearing clients, 36 percent had no such clients and 18 percent had had between one or two hard of hearing clients; almost one third had had more than ten per year. Thus, of offices reporting the number of deaf or hard of hearing clients in FY 1986 or 1987, one-third had had no such clients, 14 percent had had only one or two; just over one-third had had more than ten. In total, the median number of deaf and hard of hearing clients was 3.5 (the mean was 30.3), reflecting a median of .5 deaf clients (and a mean of 6.7) and 2.0 hard of hearing clients (mean=22.3).

6. AVERAGE (MEAN) CLIENTS, 1986-87

	DEAF PERCENT	HARD/H PERCENT	DISABLED PERCENT
0	46.2	36.4	32.6
1-2	25.2	17.6	13.6
3-5	8.7	9.3	8.5
6-10	6.1	7.0	6.2
11-29	10.7	9.7	13.3
30-59	1.3	12.0	13.2
60 or more	1.8	8.1	12.5
	-----	-----	-----
	100.0	100.0	100.0
	(94)	(81)	(78)

As a proportion of their total clients, the representation of the deaf and hard of hearing among total office clients appeared to be meager: the median percentage of their total clients who were hearing disabled was zero, with a mean of .055 (table 7). Among offices reporting the number of hearing disabled clients, fifty-eight had no hearing disabled clients and another one quarter reported that one to four percent of their clients were hearing disabled. Four percent of the offices, those with a special focus on the deaf or hard of hearing, reported that 20 or more percent of their clients were hearing disabled.

7. HEARING DISABLED/TOTAL CLIENTS

PROPORTION	PERCENT
0	57.7
.01-.04	25.8
.05-.09	9.3
.1-.19	3.2
.2-.9	4.0

	100.0
	(88)

Several respondents cautioned that the low numbers of deaf and hard of hearing clients might reflect insufficient agency attention to the problem. For example, an office representative from the Department of Social Services commented that:

[I am] unsure whether clients access services due to lack of planned outreach. The office does not know if there exists a population to outreach.

Programs and Vendors

Most offices provided several services or programs. In some cases, the same clients could be enrolled in more than one program; in other cases, different programs were available for different clients. Half of the offices provided at least four programs, including programs such as AFDC or General Relief (Public Welfare), residential programs and transportation (Mental Health), supported work (Mass. Rehabilitation Commission (table 8)).

8. TOTAL PROGRAMS

<u>Number</u>	<u>PERCENT</u>
1-2	27.4
3-4	23.2
5-6	11.3
7-8	7.7
9+	<u>5.8</u>
	100%
	(147)

Many of the programs were provided at least partially through contracted vendors. A minimum of 40 percent of the offices contracted for some services; missing information and some ambiguous responses prevent more precise statistics on this issue, but it is likely that the actual percent of services that were contracted is much higher.

Special Equipment and Staffing

Half of the offices had no special equipment for the deaf and hard of hearing (table 9). The most common equipment, possessed by four out of ten offices, was a telecommunications device for the deaf--a "TDD/TTY."⁶ Most offices had just one TDD/TTY, although 15 percent had four or five; of those with TDD/TTYs, one-third usually did not use them, while 16 percent used them many times each day.

Other special equipment was less common, in part because it would be less needed by clients in the majority of service delivery sites surveyed. Phones with volume controls, useful for hard of hearing staff and for hard of hearing clients in institutions, were reported by one quarter of the respondents. TV decoders, appropriate in institutional settings with deaf clients, were reported by three percent of all respondents. Five percent had assistive listening devices.

9. SPECIAL ARRANGEMENTS FOR DHH

<u>Arrangement</u>	<u>Percent</u>
OFFICE HAS TDD/TTY	40%(178)
OFFICE HAS ASSISTIVE LISTENING DEVICE	5%(178)
OFFICE HAS VOLUME CONTROL ON PHONES	25%(178)
OFFICE HAS TV DECODERS	3%(178)
NO SPECIAL EQUIPMENT	50%(178)
OFFICE ADVERTISES COMMUN. DEVICES	43%(90)
AWARE OF MA TTY-TEL. RELAY SERVICE	42%(173)
OFFICE HAS VISUAL FIRE-SMOKE ALARMS	23%(168)

About 40 percent of those who did have special equipment advertised its existence. Two in five were aware of the Massachusetts TTY/Telephone Relay Service; of these, almost 3 in five had not used it, while one quarter had problems with frequently busy lines. One in five of the offices reported a visual smoke/fire alarm. When these indicators of the availability of special equipment were combined in an index, one quarter of the offices reported no special arrangements; almost forty percent of the offices reported two or more arrangements.

Many offices lacked any experience with special staff for the deaf or hard of hearing (table 10). Forty-six percent had neither tried to hire an interpreter nor had any special staff for the hearing disabled clients in FY 1987.

⁶A TDD, telecommunications device for the deaf, is a small typewriter-like device on which messages may be typed, transmitted via the telephone and received in a visual and/or printed display by another TDD. "TTY" is the old name for a TDD, meaning teletypewriter. The name "TTY" is preferred by deaf people in Massachusetts.

Another quarter of the offices had taken only one of a possible eight actions. In terms of specific actions, one quarter had tried to hire an interpreter while two in five had policies for hiring interpreters. One in ten reported an interpreter on their staff⁷ and 17 percent assigned full time staff to work with the deaf or hard of hearing. The reason for infrequent use of interpreters can be a lack of demand, although the lack of demand can in turn reflect the difficulties of serving a particular clientele, rather than a lack of need for interpreters. One respondent from the Department of Mental Health explained that in their vocational and employment programs,

Interpreters [are] needed rarely and intermittently in different locations--the interpreter there full time is not utilized much; clients often don't have skills, confidence or resources to tell staff when they need an interpreter.

In 17 percent of the offices staff working with the deaf or hard of hearing were required to know Sign Language; in almost 3 of every 5 offices, untrained staff were assigned to work with deaf or severely hard of hearing clients. A few offices (6 percent) required some staff to learn Sign Language. In these offices, training was usually offered in the agency or by referral to classes outside; in both cases, training was usually on agency time.

10. SPECIALIZED STAFF FOR DEAF OR HARD OF HEARING CLIENTS

STAFF FOR DEAF AND SEVERELY HARD OF HEARING %

POLICIES/PROCEDURES RE INTERPS	41%(165)
TRIED TO HIRE CERT. FREE-LANCE INTERP	26%(173)
INTERPRETERS ON STAFF	11%(175)
DESIGNATED FULL-TIME STAFF FOR D-HH	17%(173)
STAFF WORKING WITH D-HH KNOW SIGN	17%(161)
UNTRAINED STAFF WORK WITH D-HH	57%(131)
ASSIGNED STAFF REQUIRED TO LEARN SIGN	9%(173)

Interpreters were funded through a variety of arrangements; in most cases, they were paid for through a line item in the central account (rather than through a regional OR AREA account) or with a blanket contract for interpreters. Offices most commonly sought to hire

⁷This suggests there are a total of about 19 interpreters in these agencies--a figure 3 times the number of certified/state approved interpreters known to the MCDHH in these agencies. The discrepancy apparently is due to the fact that some office representatives were erroneously reporting staff with some degree of proficiency in sign language as "interpreters."

interpreters through the statewide MCDHH Interpreter Referral Service or with direct contact (table 11). One in ten of the offices tried to hire interpreters through a college; three in ten attempted to hire them through community agencies, such as schools for the deaf, independent living programs for the deaf, etc.

11. ARRANGEMENTS FOR HIRING INTERPRETERS

<u>Source of Interpreters</u>	<u>PERCENT</u>
HIRE THROUGH MCDHH	55%(42)
CONTACT INDIVIDUAL INTERPRETERS	54%(42)
HIRE THROUGH COLLEGES	10%(42)
HIRE THROUGH COMMUNITY AGENCIES	30%(42)

The process of attempting to hire interpreters was often difficult. Almost two-thirds of the offices that had tried to hire an interpreter in FY 1987 reported that it was very or extremely difficult to find an interpreter in an emergency; one third reported that it was very or extremely difficult to hire an interpreter on a regular, planned basis (table 12). Obtaining internal funding for interpreters was less difficult: only one in five offices that had tried to fund interpreters reported it was very or extremely difficult.

12. DIFFICULTY FINDING AND FUNDING INTERPRETERS

	<u>FINDING</u>	<u>EMERG.</u>	<u>FUNDING</u>
EXTREMELY DIFF	15.1%	35.1%	8.1%
VERY DIFFICULT	21.8	29.5	12.8
SMWT DIFFICULT	43.5	27.7	29.2
NOT DIFFICULT	19.6	7.7	49.9
	-----	-----	-----
	100.0	100.0	100.0
	(45)	(42)	(42)

Lack of interpreters or specialized staff in turn created difficulties in providing services:

Without specialized staff (which is not available within the office [DSS]) and the needed interpreter coverage it is especially difficult to provide services.

In-person communications between Signing clients and non-Signing staff were handled in a variety of ways; oftentimes in ways that were likely to be inadequate. Relatives or friends and written notes were used at least sometimes in over 80 percent of the offices (table 13). Coworkers were used slightly less often; other clients were used at least sometimes in 40 percent of the offices. Many

offices also reported "other" means of aiding communication. Signing staff or paid interpreters were used at least sometimes in about 60 percent of the offices.

13. TECHNIQUES USED BY NON-SIGNING STAFF FOR COMMUNICATING WITH DEAF CLIENTS

<u>Techniques</u>	<u>Usually</u>	<u>Some</u>	<u>Never</u>
RELATIVE OR FRIENDS HELP	29.2%	51.6	19.2 100%(91)
COWORKERS HELP DEAF CLIENTS	20.0%	34.8	45.2 100%(71)
COMMUNIC. BY WRITING	26.1%	58.2	15.7 100%(82)
SIGNING STAFF HELP	43.1%	22.1	34.8 100%(77)
PAID INTERPRETERS ASSIST	25.3%	33.1	41.5 100%(81)
OTHER CLIENTS HELP	.8%	38.2	61.0 100%(63)
SPECIFY OTHER MEANS	37.2%	32.0	30.7 100%(30)

Use of MCDHH and Other Services

The Massachusetts Commission for the Deaf and Hard of Hearing is a relatively new agency; it has intentionally not yet advertised its services widely due to staffing limitations, nor has it had the resources to provide many important services. It is thus not surprising that almost two-thirds of the offices had not used any Commission services and just 10 percent had used at least six MCDHH services one or two times in FY 1987 (corresponding to an index score of six) (table 14). The most often used MCDHH service was simply the provision of information materials, received at least once in FY 1987 by about one quarter of the offices. Consultation, advocacy, or case management services were also received by about one in five offices. Only one other MCDHH service, assistance in finding specialized services, was received by as many as ten percent of the offices. Other types of assistance, payments or referrals for interpreters, training, assistive listening devices, training in independent living skills, and development or cofunding of specialized programs were rarely used.

14. USE OF MCDHH SERVICES

Number of Times Used in FY 1987

<u>Service</u>	<u>3+</u>	<u>1 or 2</u>	<u>Not at All</u>	<u>Total</u>
Payment for interp.	.6	6.6	92.8	100%(169)
Interpreter refer.	7.4	8.3	84.4	100%(170)
Info materials	13.3	12.4	74.3	100%(169)
In-service training	.3	5.3	94.4	100%(168)
Borrow assist. dvce	.3	2.0	97.7	100%(167)
Asst. finding srvce	3.4	14.5	82.1	100%(163)
Consult,advcy,c.m.	10.5	10.0	79.5	100%(169)
Training indep. lvg	2.5	7.5	90.1	100%(167)
Consult re prog.	1.8	8.7	89.6	100%(168)
Cofunding re prog.	.9	2.9	96.2	100%(167)
Other services	3.8	1.8	94.5	100%(75)

About half of the offices with any deaf or hard of hearing clients had made no other special service efforts, out of 11 actions listed (table 15). The most common action taken was to consult with outside experts, done to "some" extent by forty percent of the offices answering this set of questions. About one-third of the offices had met with advocates or initiated plans for changes in services to the deaf and hard of hearing. Between one-fifth and one-quarter of the offices had received service complaints on behalf of their deaf or hard of hearing clients, had conducted training or educational seminars, maintained special records on their deaf and hard of hearing clients, had made some effort to improve access for the hearing disabled, had made budgetary changes or instituted special services for the hearing disabled. Less than ten percent of the offices had hired any deaf staff; 16 percent had hired hard of hearing staff.

15. OTHER ACTIONS TAKEN FOR DEAF OR HARD OF HEARING CLIENTS

EVER TOOK ACTIONS, FY 1987	OFTEN	SOME	NONE	TOTAL
CONSULT OUTSIDE EXPERTS	7.1%	36.1	56.7	100%(133)
MEET WITH ADVOCATES	8.3%	26.0	65.7	100%(131)
REC. COMPLAINTS RE D-HH	1.9%	25.3	72.8	100%(134)
CONDUCT TRAINING-EDUC SEMINARS	2.4%	22.4	75.2	100%(134)
MAINTAIN SPECIAL RECORDS D-HH	13.6%	10.4	76.1	100%(131)
HIRED DEAF STAFF	2.7%	4.4	92.9	100%(134)
HIRED HARD HEARING STAFF	3.0	13.0	84.0	100%(131)
IMPROVED ACCESS FOR D-HH	3.4	16.2	80.3	100%(133)
BUDGET CHANGED TO IMPROVE SERV.	7.9	11.8	80.2	100%(133)
INITIATED SPEC. SERV. FOR D-HH	6.2	17.3	76.5	100%(134)
INITIATED PLANS FOR CHANGE	7.9	23.6	68.5	100%(134)

Twenty-three office representatives responded to a set of questions about the special services relevant in residential settings with any deaf or hard of hearing clients, such as hospitals, prisons and colleges (table 16).⁸ Of 13 actions that such institutions might take on behalf of hearing disabled clients, 81 percent of the respondents reported taking at least one; half had taken at least four of these actions. The most common action, reported by three quarters of these respondents having any deaf or hard of hearing clients, was to make phone calls for clients. About 40 to 50 percent of the respondents reported that their site provided interpreters as needed, had visual safety signalling devices, had staff competent in Sign Language, provided audiological follow-up, provided specialized counseling services or consulted on resources for the hearing disabled. Between 20 and 30 percent of

⁸All valid responses are included here for respondents reporting any deaf or hard of hearing clients. Some respondents in non-institutional settings answered these questions.

these service sites provided TDD-TTYs on loan, trained staff in deafness, assisted relatives, or grouped signing deaf with signing deaf peers. Few loaned TV decoders for the deaf or hard of hearing.

16. SERVICES RELEVANT IN RESIDENTIAL SETTINGS*

<u>SERVICES PROVIDED TO D-HH RESIDENTS</u>	<u>PERCENT</u>
INTERPRETERS PROVIDED	53.5%(22)
VISUAL SAFETY DEVICES	36.5%(22)
TDD-TTY LOANED TO RESIDENTS	26.0%(22)
STAFF MAKE PHONE CALLS	75.6%(23)**
TV DECODERS LOANED TO RESIDENTS	9.5%(23)
STAFF TRAINED IN DEAFNESS	22.0%(23)
STAFF COMPETENT IN SIGN LANGUAGE	39.4%(23)
ASSISTANCE BY RELATIVES	24.6%(23)
AUDIOLOGICAL FOLLOW-UP	38.7%(23)
DEAF CLIENTS GROUPED WITH DEAF PEERS	20.5%(21)
SPECIAL COUNSELING SERVICE	43.4%(22)
CONSULT RE RESOURCES	47.4%(23)
OTHER SERVICES	18.2%(8)

*Only respondents with any deaf or hard of hearing clients.

**Rather than a benefit, the use of staff to make phone calls may reflect the unavailability of TTYs.

Staff Training

Six out of ten office representatives reported no in-service staff training about hearing disabilities in Fiscal Year 1987; three quarters reported training in no more than two of the 11 areas listed. One-quarter reported training in the use of TDDs; between 13 and 20 percent reported some in-service training in nine of the other 10 areas; just four percent reported training in the use of assistive listening devices (table 17).

17. STAFF TRAINING ABOUT HEARING DISABILITIES

<u>TRAINING AREA</u>	<u>TRAINING: PROVIDED PERCENT</u>	<u>NEEDED PERCENT</u>
IN TDD	26%(171)	46%(141)
ASST. LISTENING DEV.	4%(163)	46%(134)
FIND-USE INTERPRETERS	16%(164)	63%(147)
IN DEAF CULTURE	13%(164)	63%(139)
NEEDS-CHARACT. DEAF	19%(165)	65%(144)
NEEDS-CHARACT. HH	20%(166)	71%(145)
SPEC. SERV. NEEDS DEAF	14%(162)	65%(139)
SPEC. SERV. NEEDS HH	14%(162)	72%(143)
SPEC. REFERRALS DEAF	15%(159)	70%(150)
SPEC. REFERRALS HH	18%(163)	74%(150)
RE COMMUNIC. W D-HH	18%(163)	78%(148)
OTHER TYPES OF TRAINING	16%(79)	42%(53)

Many office representatives, however, believed that training was needed in a number of areas. The median number of areas in which training was sought was 6; less than one in five believed training was not needed in any of the areas. Training was desired most, by about two-thirds of the respondents, in special tips for communicating with the deaf and hard of hearing and in the needs of and referrals for these clients. Just under half of the respondents believed that their staff needed training in the use of TDDs or assistive listening devices.

Several more specific suggestions for training were also made:

Understanding how defects in communication skills impact upon a wide range of social, educational, vocational endeavors.

Keeping up with the technology and the medical advances in addressing health needs of individuals with hearing losses.

Providing "awareness" training to our staff would probably be most beneficial in delivering services to our deaf and hard of hearing population.

Ability to Serve the Deaf and Hard of Hearing

Almost half of the representatives of offices that had served any deaf or hard of hearing clients in FY 1987 felt that they were able to serve deaf clients less well than hearing clients (table 18). One quarter felt that hard of hearing clients were served less well than hearing clients.

18. ABILITY TO SERVE DEAF, HH CLIENTS COMPARED TO HEARING

<u>Able to Serve:</u>	<u>Deaf</u>	<u>Hard of Hearing</u>
Less Well	46.3%	25.1%
As Well	53.5	74.1
Better	<u>.5</u>	<u>.8</u>
	100%	100%
	(104)	(116)

Overall, almost 7 of every 10 office representatives believed that it had been particularly difficult to provide some of their agency services to deaf and severely hard of hearing clients. Some respondents mentioned specific service problems in response to an open-ended question; these responses were coded and then grouped into seven categories. The most common such problems involved communications/equipment, inadequate training, the nature of deafness and hearing disabilities, and insufficient resources (table 19). Insufficient resources and inadequate training were problems that occurred about as frequently in

serving deaf as in serving hard of hearing clients; resources were mentioned by about 30 percent, training by over 40 percent. Problems in making external connections for deaf and hard of hearing clients were mentioned less often--by about one in five respondents.

The prevalence of some service problems varied between deaf and hard of hearing clients. Equipment problems were more likely to be mentioned in connection with hard of hearing clients (in over 60 percent of the cases, compared to 45 percent of the cases in reference to hard of hearing clients), while the unique nature of hearing disability was seen more frequently as a problem with deaf clients (by about half of the respondents, compared to one in three when in reference to hard of hearing clients). Securing interpreters for deaf clients was mentioned as a problem by about one in five respondents.

19. PROBLEMS IN SERVING HEARING DISABLED CLIENTS*

	<u>DEAF</u>	<u>HARD/H</u>
	PERCENT	PERCENT
Commun, Equip	44.8	64.3
Resources	31.8	26.8
Staff Training	42.9	48.4
Nature of Impairment	51.0	30.1
Relations with Other Agcy	23.2	20.1
Interps	21.2	8.4
Other	4.0	2.5
None	9.3	21.5
	-----	-----
	228.2	222.0**
	(108)	(89)

*Multiple responses permitted.

**Percent of total responses.

Office representatives expressed interest in many forms of technical assistance or other services for deaf and hard of hearing clients (table 20). On a scale ranging from 0 to 22, where 22 represents a definite interest in each of 11 specific services and 11 represents some interest in each service, the average score was 10. Only 12 percent of the offices sought no assistance. Definite interest in information materials was expressed by 58 percent. Between 40 and 50 percent were definitely interested in payment for interpreters or referrals to interpreters, assistance in finding specialized services, consultation-advocacy-case management, and in-service training. About one-third expressed a definite interest in independent living skills training, in developing or cofunding specialized programs, and in borrowing assistive listening devices.