

DEMOGRAPHIC CHARACTERISTICS OF THE POPULATIONS OF  
MINNESOTA INSTITUTIONS FOR THE MENTALLY RETARDED  
AND THEIR RELATION TO PROGRAM PLANNING AND DEVELOPMENT

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In one way or another our society recognizes and accepts the responsibility to protect and provide for its members who are unable, due to intellectual impairment, to care for themselves. However, most members of our society are either ignorant of, or apathetic about the problems of mental retardation. In recent years efforts to provide public education and develop concern about the many and varied problems of mental retardation have been increasing. The problems and the needs of the mentally retarded have become the subject of a great deal of public discussion. Both governmental and private groups have "investigated" and recommended the establishment of new programs and various reforms in existing programs. In response to growing public concern tremendous steps have been taken toward expanding existing programs and services and providing new programs, facilities, and services for the mentally retarded throughout the state of Minnesota. During the last session of the legislature a bill was passed providing for 421 new staff positions in state institutions for the mentally retarded. Funds were also provided for construction of a new dormitory at Faribault State School and Hospital and for additional community-located day activity centers.

In January, 1965, a planning council appointed by the governor began a study of the "problem" of mental retardation in Minnesota. This council selected representatives of business, government, education, medicine, and other fields to be members of task forces to investigate, discuss, and make recommendations concerning specific areas of retardation. This would appear to be an excellent approach to the development and formulation of programs for the mentally retarded. However, this council is encountering many problems because many of the task force members are ignorant of the facts of retardation and the characteristics of the retarded population. Basic to any type of program formulation, inception, or implementation is knowledge, of a demographic nature, concerning the population to which the programs are applicable.

Planning for the mentally retarded is not concerned only with the institutional population. However, any planning must take into account the existence of these facilities

and the very distinct possibility that these institutions, or some other type of residential care facility, will be the ultimate destination of the vast majority of the mentally retarded. The population of Minnesota's institutions for the mentally retarded has greatly increased and changed during the past ten years. These population increases and changes combined with increasing public recognition of needs of the mentally retarded has stimulated the provision of new programs and the planning for future action. In this paper I will be concerned primarily with the populations of Minnesota's institutions for the mentally retarded. I am concentrating on this segment of the retarded population for the following reasons:

1. This population is composed of people who have been legally adjudged mentally retarded. Therefore, I am freed from the problems associated with making the decision as to who is "mentally retarded".
2. In the future these institutions will be the central facilities and programs about which other community facilities and programs will be established. An understanding of present populations will better enable us to integrate these large multi-purpose institutions into future planning.
3. These large multi-program facilities with heterogeneous populations may be the facilities which a major proportion of the mentally retarded will encounter at some time in his career.

I will primarily use demographic data from Minnesota's three major institutions for the mentally retarded which are located at Faribault, Brainerd, and Cambridge. These three institutions are known as "state schools and hospitals". Although it is questionable whether they function as either a "school" or a "hospital", the fact that they are officially designated in this way may have some influence on the type of staff selected and on the types of programs and philosophies developed. The data which will be presented in this paper indicates that much planning in the area of mental retardation is not related or responsive to the demographic characteristics of institutional populations.

Page Three

Identification of the retarded population

One of the first problems encountered in the area of mental retardation is that of determining who is mentally retarded. The definition of mental retardation and the categorization of the retarded population (as to the degree of retardation) has direct bearing on the number and type of persons admitted to institutions and the development of programs within the institutions. The American Association on Mental Deficiency defines mental retardation as follows:

"Mental retardation shall mean subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior."

This group defines a mentally retarded person in the following way:

"Mentally retarded person shall mean a person in whom there has been found, by comprehensive evaluation, a condition of mental retardation of such a nature and degree as to constitute a substantial, continuing, prospective, educational, vocational, and social handicap."

In Minnesota a mentally retarded person is defined by statute as follows:

"Mentally deficient person means any person, other than a mentally ill person, so mentally defective as to require supervision, control, or care for his own or the public welfare."

None of the above definitions have a real utilitarian value in determining whether or not a person is labeled "mentally retarded" or whether or not he should be considered eligible for the "services" available to this group. In an attempt to determine what working definitions of mental retardation were being utilized by practitioners in public welfare, the Minnesota Mental Retardation Planning Council sent a questionnaire to the County Welfare Directors in each county in Minnesota. Seventy-three of the 87 County Welfare Directors responded. The following question was asked:

"What does your agency use as a working definition of retardation?"

The following is a listing of the various responses. The wide range of definitions given indicates that there is no standardized, accepted criteria of mental retardation which is utilized throughout the state. Therefore, commitment to an institution is based on a very subjective evaluation which may be influenced by various factors such as the socio-economic status of the family, geographic location of the family (rural or urban) and the availability of community facilities for the mentally retarded.

Responses of 73 County Welfare Directors

Definition found in Subdivision 6 of 525.749, Minnesota Statutes.

If (the person) is lacking intellectual development that is associated with or the basis of personal and social inadequacy,

If the child cannot do regular school work.

Any person who is so diagnosed by recognized authority.

Below normal I.Q. (from psychological tests) and unable to attend school classes.

I.Q. under 80.

A person who functions at an intellectual level below that of the average person.

I.Q. under 90

I.Q. of 70 or lower.

State psychologist's definition as determined by exams.

Referral from the physician, inability to keep up with school work, parent's statements and psychological test<sup>3</sup>.

Official disorder with commitment or institutionalization.

Educable and below.

Condition meaning impaired or incomplete mental development and unable to master environment.

Unable to function without assistance.

That found in manual on Mentally Deficient and Epileptic, page 5, Section 2b.

Evaluation by Mental Health Clinic or Child Development Center.

**I.Q. of 75.**

Persons functioning well below usual mental levels.

Persons considered retarded only if they have been committed as mentally deficient.

Any person other than a mentally ill, so mentally defective as to require supervision, control or care for his own public welfare.

No definite definition.

Legal commitment.

Medical diagnosis of retardation.

An individual's lack of intellectual capacity hindering his or her ability to conceptualize, thus, impairing self-support, self-direction, etc. which would be in keeping with normal expectations for his or her chronological age group and necessitating supervision to cope with their environment.

A person who, because of limited intellectual ability, cannot meet the problems of daily living.

Adult M.R. and child M.R. defined as such only after psychological evaluation.

Obviously mentally retarded.

Includes individuals whose I.Q. is below 70 on two psychological examinations plus a medical evaluation and history of inadequate social adjustment.

Unemployable and school drop-out because of M.R.

A lack of intellectual development that is associated with, or the basis of, personal or social inadequacy.

... and our own judgment.

The above "definitions" of mental retardation indicate the need for the development of standardized criteria for the classification and categorization of the mentally retarded population.

#### Population Characteristics of Minnesota's Three Major Institutions for the Mentally Retarded

In Minnesota mentally retarded and/or epileptic persons are committed to the supervision of the Commissioner of Public Welfare rather than directly to an institution. However, if the individual is adjudged to be urgently in need of institutional care, he may enter an institution immediately upon commitment. Other individuals for whom institutional care is only recommended are placed on a waiting list. For still others, commitment may be only a protective measure and they never enter an institution and are never placed on the waiting list. Although this report is primarily concerned with the institutionalized population, some reference will be made to the waiting list.

According to a monthly report from the Department of Public Welfare, on January 31, 1965, there was a total of 5,907 resident patients on the books of the three major institutions for the mentally retarded. However, this report does not show a breakdown of this population. It is primarily concerned with admissions, discharges, and other patient movement data. The last comprehensive

report on the institutional population was prepared by the Department of Public Welfare for the fiscal year of 1962-63. This report is supposed to be published annually, however, this has not been done.

This problem of maintenance of continuous, comparable, and accurate records is frequently encountered and becomes a major hindrance to conducting research or formulating programs in the area of mental retardation. Most of the data presented in this paper has been taken from these annual reports and is therefore somewhat dated. However, I think that they are adequate to show some very general population characteristics and trends.

Table I below shows the population at each of the three major institutions in Minnesota as of June 30, 1963. The figures in parentheses are the population figures as of January 31, 1965.

TABLE I

	Total Population		Male %		Female %	
Brainerd	981	(1231)	546	56	435	44
Cambridge	2107	(1827)	1022	50	1085	50
Faribault	3030	(2849)	1666	55	1364	45
TOTAL	6118	(5907)	3234	53	2884	47

As of June 30, 1963, there was a total of 6118 resident patients in the three major institutions for the mentally retarded in Minnesota. Of this number 53% were males and 47% were females. January 31, 1965, there were 5907 resident patients in these institutions. Contrary to much of the "public information" being circulated, these figures indicate that the institutional population has not increased during the past two years despite the fact that during that period two new buildings were opened at Faribault. Brainerd is the only institution which

has grown in population. However, this is a new institution which is just developing and much of this growth has been due to transfers from other institutions.

#### AGE

Table II depicts the age distribution of the institutional population.

TABLE II

Age Group	Brainerd	Cambridge	Faribault	Total
Total Pop.	981	2107	3030	6118
Under 5 years	3 - 1%	13 - 12	15 - 12	31 - 1%
5-9	57 - 6%	151 - 7%	189 - 62	397 - 62
10-14	100 - 10%	311 - 15%	294 - 10%	705 - 122
15-19	112 - 11%	303 - 14%	338 - 112	753 - 122
20-24	114 - 11%	259 - 12%	313 - 102	686 - 112
25-29	97 - 10%	177 - 8%	263 - 92	537 - 92
30-39	187 - 10%	307 - 152	199 - 162	993 - 16%
40-64	295 - 30%	532 - 25%	930 - 312	1757 - 30%
65+	16 - 2%	54 - 3%	188 - 62	258 - 4%
Median Age	30.4	25.5	32.1	27.9

In these institutions there are very few young and very few old people. Less than one percent of the total population are under five years of age and only four percent are over 65. It is interesting to note that over 41% of the population are under 24 years of age and 34% are over 40. There are inter-institutional differences in the age distribution of the resident population. Cambridge has the "youngest" population (only 282 over 40) and Faribault has the oldest (37% over 40).

#### Degree of Retardation

Table III shows the distribution of institutional population in terms of the degree of mental retardation. This classification of intellectual level is that of the American Association on Mental Deficiency. Table III is shown on Page 8.



TABLE III

Degree of Retardation	Brainerd	Cambridge	Faribault	Total
Total Pop.	981	2107	3030	6118
Severely & Profoundly	306 - 31%	528 - 25%	908 - 30%	1742 - 28%
Moderate	389 - 40%	783 - 37%	1458 - 48%	2630 - 43%
Mild	144 - 15%	377 - 18%	559 - 18%	1080 - 18%
Borderline	13 - 1%	14 - 1%	7 - 1%	34 - 1%
Not mentally deficient	14 - 1%	53 - 3%	6 - 1%	73 - 1%
Not reported	115 - 12%	352 - 17%	92 - 3%	559 - 9%

According to reports from the Department of Public Welfare, most of the institutional population is moderately retarded and relatively few are classified as mildly-retarded, borderline, or not mentally retarded. However, during the summer months of 1964, a study of staffing at these three institutions was conducted by the Minnesota Association for Retarded Children. In the course of this study, the administrations at each of these three institutions classified the population on each of the wards in terms of degree of retardation (two buildings at Faribault and two wards at Cambridge were not in this study due to atypical conditions.) When the individual ward classifications were tabulated, a different type of population distribution emerged. Table IV below shows this distribution.

Degree of Retardation	Brainerd	Cambridge	Faribault	Total
Severely and <b>profoundly</b>	436 - 40%	845 - 49%	2120 - 68%	3401 - 28%
<b>Moderate</b>	472 - 43%	564 - 33%	631* - 20%	1670 - 28%
Mild	11*8-11*2	266 - 16%	263 - 8%	677 - 11%
Borderline	18 - 2%	28 - 1%	65 - 2%	111 - 2%
Not Mentally Retarded	13 - 1%	15 - 1%	16 - 1%	44 - 1%
<b>TOTAL</b>	1687	1718	3098	5903

Both reports from Brainerd regarding the distribution of the population in terms of the degree of retardation were much the same. However, the population distribution at Cambridge and Faribault were reported much differently to the Department of Public Welfare than to the Minnesota Association for Retarded Children. In both of these institutions approximately twice as many patients were classified as being severely and profoundly retarded in the MARC study as were reported to the Department of Public Welfare. Cambridge did not report the degree of retardation

for 17% of its population in its report to the Department of Public Welfare. If this portion of the population is included in the classification "severely and profoundly retarded" in the Department of Public Welfare report then the difference between these two reports is minimized. However, at Faribault this is not the case. The terrific increase in the classification "profoundly and severely retarded" reported to MARC is at the expense of the other categories of mental retardation. It is interesting to note that Faribault reported the degree of retardation for 91% of its population in the Department of Public Welfare report while Brainerd reported 87% and Cambridge only 85%.

#### Physical and Emotional Characteristics

In the MARC study the patient populations were classified according to physical and emotional characteristics. Table V below shows the distribution of the patient populations in terms of these characteristics.

	TABLES \			
	Brainerd	Cambridge	Faribault	Total
Not toilet trained	280 - 25%	511 - 30%	634 - 23%	1425
Must be fed	217 - 19%	356 - 21%	388 - 14%	961
Physically handicapped	382 - 34%	770 - 45%	851 - 31%	2003
Non-ambulatory	109 - 9%	281 - 16%	188 - 7%	578
Hyperactive	314 - 28%	534 - 31%	550 - 20%	1398
Bedridden	53 - 5%	161 - 9%	233 - 8%	447
Receive medications regularly	600 - 53%	1209 - 71%	1187 - 43%	2996

If some of the above characteristics were to be utilized as criteria of degree of mental retardation (not toilet trained and must be fed), the differences among institutional populations diminish, particularly among the population differences reported in the MARC study. It is also interesting to note the large percentages of the populations regularly receiving medication. It is of particular interest to note that 71% of the population at Cambridge regularly receive medication. Most of the medications regularly given to patients are tranquilizers of some type. The population at Cambridge tends to be younger and more active which may partially explain the fact that such a high percentage is regularly receiving medication. The differences in the percentages of the

populations receiving medications regularly may also be indicative of different philosophies of "treatment" which exist in these institutions.

#### Admissions

During the fiscal year 1962-63 a total of 274 patients were admitted to these three major Minnesota institutions for the mentally retarded. Of this number, 169 were males and 105 were females. Table VI below shows the distribution of these admissions in terms of age.

TABLE VI				
Age on admission	Brainerd	Cambridge	Faribault	Total
Under 5 years		4 4%	23 16%	27 10%
5-9	<b>5 16%</b>	26 27*	38 26*	69 2%
10-14.	5 16%	19 20*	30 20*	54 20%
15-19	5 16%	2k 2%	18 12*	47 17%
20-24	8 25%	7 7%	12 8*	27 10%
25-29	4 12%	2 2%	.5 3%	11 4%
30-39	3 9%	4 4%	8 5%	15 5%
40-64	2 6*	10 10*	11 1%	13 5%
Over 65	—	—		
TOTAL	32	96	146	274

It is interesting to note that 72% of the total admissions are children under the age of nineteen. Only six percent of the total admissions are over 40 years of age.

Apparently there are differences in admissions policies in these institutions. The median age at admission at Brainerd was 13.6 years, at Cambridge 14.8 years, and at Faribault 12.0 years. At Faribault 42% of the patients admitted were under nine years of age. At Cambridge 31% of the admissions were in this age category and at Brainerd only 16% of the admissions were under nine years of age. It is interesting to note that at Brainerd 52% of the persons admitted were over twenty years of age. Admissions to each of these institutions are officially on the basis of geographic location of patients family. However, upon perusal of table VI, one is led to wonder whether other factors are not entering into the selection of

persons entering these institutions (types of programs offered at each institution, differential criteria for admission in different areas, differing philosophies at the state level concerning admissions to each of these institutions).

Table VII below shows the distribution of admissions to these institutions in terms of the degree of mental retardation of the individuals admitted.

TABLE VII

Degree of retardation	Brainerd	Cambridge	Faribault	Total
Profound	<b>3</b> 9%	8 8%	51 35%	62 23%
Severe	<b>5</b> <b>16%</b>	20 21%	<b>42</b> <b>29%</b>	<b>67</b> <b>24%</b>
Moderate	<b>7</b> <b>22%</b>	26 <b>21%</b>	<b>27</b> <b>18%</b>	59 22%
Mild	7 22%	20 21%	18 12%	<b>45</b> <b>16%</b>
Borderline	<b>2</b> <b>6%</b>	7 1%	<b>1</b> <b>1%</b>	10 4%
Not Classified	7 22%	11 <b>11%</b>	<b>6</b> <b>4%</b>	<b>2k</b> <b>9%</b>
Not mentally retarded	<b>1</b> <b>3%</b>	<b>4</b> <b>4%</b>	<b>1</b> <b>1%</b>	<b>6</b> <b>2%</b>
TOTAL	32	<b>96</b>	<b>146</b>	274

Of the 274 admissions to these institutions 129 (47%) were classified as being profoundly or severely retarded. Table VII shows an inter-institutional differentiation in terms of intellectual level of persons admitted as well as age as noted above. Sixty-four percent of the persons admitted to Faribault were classified as being severely or profoundly retarded while only 25% were so classified at Brainerd and 29% at Cambridge. These differences may reflect differing admissions policies or differing criteria for classifying persons upon admission to the institution. It is interesting to note that the percentage of admissions at Faribault classified as severely or profoundly retarded (64%) is very close to the percentage of the entire population so classified by the institutional administration in the MARC study previously referred to.

I have previously noted that persons are not committed directly to institutions in Minnesota, rather they are committed to the supervision of the Commissioner of Public Welfare. Upon being committed to his supervision those for whom institution-

alization is deemed necessary are placed on a waiting list. As of June 30, 1963 there were 676 persons on the waiting list awaiting admission to institutions for the mentally retarded. Table VIII below shows the length of time from commitment until the individual was first admitted to an institution.

TABLE VIII

Length of time from commitment to admission (first admissions)

	Brainerd	Cambridge	Faribault	Total
Under one month	1 4%	13 15%	15 11%	29 12%
1-2 months	5 19%	9 10%	8 6%	22 9%
3-5 months	3 12%	4 5%	2 2%	9 4%
6-11 months	2 8%	4 5%	2 2%	8 3%
1-2 years	6 23%	15 17%	15 11%	36 15%
2-3 years	5 19%	19 22%	36 27%	60 25%
3-4 years	1 4%	12 14%	38 29%	51 21%
4-5 years		2 2%	6 5%	8 3%
Over 5 years	3 12%	8 9%	9 7%	20 8%
TOTAL	26	86	131	243

Seventy-two percent of first admissions to these three institutions had been on the waiting list more than one year. Almost one-third of these individuals had been on the waiting list more than three years. The length of time from commitment to admission varies among these three institutions. At Brainerd 43% of the first admissions had been on the waiting list less than one year and at Cambridge 35% were admitted less than one year after commitment. However, at Faribault, 75% of the first admissions had been on the waiting list for more than a year. This difference in admission policy among institutions is of interest because admissions at Faribault tend to be younger (16% of admissions are under five years of age) and more severely retarded (64% of admissions severely or profoundly retarded). These figures indicate the possibility of differences in commitment procedures in terms of the institutional destination of the individual committed. Individuals are committed to Faribault at a younger age than at either

of the other two institutions although the median age at this institution is higher (refer to table II).

There is an inverse relationship between the intellectual capacity of the individual and length of time he spends on the waiting. The less retarded the individual, the shorter the time interval between commitment and admission. Table IX shows the length of time from commitment to first admission in terms of degree of

TABLE DC												
Length of time from commitment to admission	Degree of Retardation											
	Profound		Severe		Moderate		Mild		Unclassified		Total	
Under one month	<b>4</b>	7	<b>4</b>	6	5	9	10	28	,6	18	29	12
1-2 months	2	3	2	3	4	7	8	22	6	18	22	9
3-5 months	1	2	1	1	4	7	—		3	8	9	4
5-11 months	—		3	<b>5</b>	3	6	2	5			8	3
1-2 years	<b>4</b>	7	15	23	7	13	6	17	5	lit	37	15
2-3 years	23	39	21	33	9	17	—		7	21	60	24
3-4 years	18	31	10	16	12	22	7	19	5	14	52	21
4-5 years	1	2	2	3	5	9	«...		2	6	10	4
Over 5 years	6	10	6	9	5	9	3	8	—		20	8
Total	59		<b>64</b>		54		36		<b>3k</b>		247	

There is a relationship between an individual's age upon admission and the length of the time interval between commitment and admission. The younger the individual is at admission the greater the possibility that he has spent a considerable length of time on the waiting list. There was no one admitted to an institution under five years of age who had been committed to supervision for less than one year. Table X on page 14 shows the length of time from commitment to first admission in terms of the age of the individual. This data indicates that communities have a tolerance threshold for various kinds of misbehavior (McCulloch, 1947; Tizard, 1953), deviation from the norms becomes more intolerable as the individual grows older this leads to his being classified as an "emergency case" and committed to an institution after only a very brief waiting period.

TABLE X

Length of time from  
commitment to admission

Ages of Admissions

	Under 5	5-9'	10-14	15-24	Over 25	Total
Under one month		2 3	6 12	9 15	12 29	29 12
1-2 months		4 6	5 10	9 15	4 10	22 9
3-5 months	—	.1 1	1 2	5 8	2 <b>5</b>	9 4
6-11 months		1 1	1* 8	1 2	2 <b>5</b>	8 3
1-2 years	1 <b>4</b>	10 14	9 18	14 23	3 7	37 15
2-3 years	9 37	33 47	8 16	4 6	6 15	60 24
3-4 years	13 <b>54</b>	15 21	11 22	13 21	—	52 21
4-5 years	1 <b>4</b>	3 4	4 8	--	2 <b>5</b>	10 4
Over 5 years	<b>24</b>	. 1 1	3 6	6 10	10 24	20 8
TOTAL		70	51	61	41	247

Discharges

During the fiscal year 1962-63 there were 167 persons discharged from the three major institutions for the mentally retarded in Minnesota. Table XI below shows the distribution of discharges from institution books in terms of age of the person upon discharge.

TABLE XI				
Age at discharge	Brainerd	Cambridge	Faribault	Total
Under 10 years		2 3	6 7	8 5
10-14	1 5	3 4	1 1	5 3
15-19		9 13	3 4	12 7
20-24	3 15	7 10	12 15	22 13
25-39	3 15	9 13	28 35	40 24
40 +	13 65	37 55	30 37	80 48
TOTAL	20	67	80	167

The data in the above table shows that there are some interinstitutional differences, however, the general discharge policies in all institutions is to discharge older patients. Older patients discharged generally are going into community nursing facilities (homes for the aged). This is a relatively new policy and it is questionable whether or not individual is receiving adequate services in these facilities.

This discharge policy seems to have developed concurrently with the extensive construction of these community facilities (many of which encountered financial difficulties due to a lack of residents).

Table XII shows the distribution of discharges in terms of the degree of mental retardation.

TABLE XII				
Degree of retardation	Brainerd	Cambridge	Faribault	Total
Severe and profound	4 20	7 10	8 10	19 11
Moderate	<b>7 35</b>	17 25	22 27	46 28
Mild	<b>5 25</b>	24 36	<b>40 50</b>	69 41
Borderline		<b>3 4</b>	2 2	5 3
Unclassified	2 10	10 15	<b>6 7</b>	18 11
Not mentally retarded	2 10	6 9	2 2	10 6
Total	20	67	00	167

The data presented in Table XII indicates that most of the persons discharged from Minnesota's institutions for the mentally retarded are mildly or moderately retarded. It is interesting to note that at Cambridge about one-fourth of the persons discharged are categorized as "unclassified" or "not mentally retarded". Seventeen percent of the total number of persons discharged are either "unclassified" or "not mentally retarded."

#### Death Rates

There were a total of 106 deaths in the three institutions for the mentally retarded during the fiscal year 1962-63. Of this number 67 were males and 39 were females. The median age at death was forty years. The median length of institutionalization was 9.9 years. Table XIII shows the distribution of institution death in terms of age. Table XIII is shown on page 16.



TABLE XIII

Age at death	Brainerd	Cambridge	Faribault	Total
Under 10 years	6- 43	11 28	<b>4 8</b>	21 20
10-14	1 7	4 10	1 2	6 6
15-19	1 7	2 5	4 8	7 7
20-21).	1 7		1 2	2 2
25-39	-	8 20	8 15	16 15
<b>40 +</b>	5 36	14 36	35 66	<b>54 51</b>
<b>TOTAL</b>	14	39	53	106

About one-half of the deaths in these institutions were individuals who were over forty. At Cambridge and Brainerd, a relatively high proportion of the deaths occurred among those individuals under ten years of age. This is not the case at Faribault despite the fact that there is relatively the same proportion of the population in this age group as there is at the other two institutions. The proportion of deaths occurring in the over-forty age grouping is nearly twice as great at Faribault as it is at either of the other institutions. The death rate per one thousand is as follows: Faribault - 16.9; Cambridge - 19.1; Brainerd - 15.1.

Table XIV shows the distribution of institutional deaths in terms of the degree of mental retardation. About one-fifth of all the patients who died were "unclassified" as to intellectual capacity.

TABLE XIV

Degree of retardation	Brainerd	Cambridge	Faribault	Total
Severely and profoundly	7 50	9 23	17 32	33 31
Moderate	2 14	9 23	23 43	34 32
Mild	-	4 10	10 19	14 13
borderline	-	2 5	-	2 2
Unclassified	5 36	12 31	3 6	20 19
Not mentally retarded	-	3 8	-	3 3
<b>TOTAL</b>	14	39	53	106

Population Changes

Since 1954 the number of mentally retarded in institutions in Minnesota has increased about forty-one percent. During this time the institutions at Cambridge and Faribault have expanded their physical facilities and a new institution was opened at Brainerd in 1958. Table XV below shows the number of patients on institutional books from 1954-1963.

TABLE XV

POPULATION CHANGES—1954-1963

Patients

on Books	Brainerd (male female)			Cambridge (male female)			Faribault (male female)			Total (male female)		
June 30, 1951*				1103	518	585	3246	1626	1620	4349	2144	2205
1955				1100	515	585	3244	1637	1607	4344	2152	2192
1956				131*6	61*1	705	331*3	1728	1615	4689	2369	2320
1957				1443	694	749	3310	1721	1589	4753	2415	2338
1958	20		20	11*86	718	768	3097	1629	1468	1*603	231*7	2256
1960	355	269	84	1970	998	972	3311*	1789	1525	5372	2791	2581
1961	526	294		1969	983	986	3260	1727	1533	5584	2979	2605
1962	930	506		2000	1029	971	3327	1771	1556	5853	3091*	2759
1963	981	546		2051	964	1087	3131	1730	1401	6112	3200	2912
				2107	1022	1085	3030	1666	1361*	6118	3231*	,2881*

The population in Minnesota's institutions for the mentally retarded has increased and changed in terms of age and degree of retardation. Table XVI shows the age distribution of the populations from 1956-1963. Table XVII depicts the degree of retardation of these populations during this period.

TABLE XVI

Total number of patients on books		Under 10	10-11*	15-21*	25-39	40+	Median Age
1956	5160	414 7%	588 11%	1190 23%	1419 27%	1537 30*	28.9
1957	5298	317 6*	607 10*	1274 24%	1463 28%	1632 31*	29.5
1958	5212	277 5*	560 11%	1294 25%	1399 27%	1676 32%	30.1
1959	5828	1*38 8*	675 12*	1430 25%	1460 25%	1823 31*	28.8
1960	6046	1*56 8*	732 12*	1492 25%	1479 21%	1887 29%	28.3
1961	6321	478 8%	814 13%	1578 25%	1499 24%	1951 31*	27.9
1962	6565	501 8*	821* 13*	1651 25%	1551 24%	2037 31*	27.8
1963	61*69	446 7%	796 12*	1681 26%	1530 21**	2015 31%	27.9

TABLE XVII

Total number of patients on books		Degree of Mental Retardation					
		Severe (inc. profound)	Moderate	Mild	Unclassified, Borderline, Not M.R.		
1956	5160	989 19*	2325 45%	1378 27*	468	9%	
1957	5298	1010 19	2365 1*5	1527 29	396	7	
1958	5212	1012 19	2395 1*6	11*15 27	390	7	
1959	5828	1200 21	2600 6	1512 26	516	9	
1960	6046	1279 21	2743 45	1519 25	515	9	
1961	6321	1402 22	2736 1*3	11*61 23	722	11	
1962	6565	1510 23	2761 1*2	11*65 22	829	13	
1963	6469	1745 27	2655 41	1324 20	745	12	

The age distribution in the institutional population has remained quite stable.

However, the distribution in terms of degree of mental retardation has changed

somewhat. The proportion of severely and profoundly retarded individuals has

increased about eight percent while the proportion of mildly retarded has decreased

about seven percent. It is interesting to note that the proportion of the popula-

tion designated as "unclassified", "borderline", and "not mentally retarded" has

increased about three percent. These population changes regarding degree of mental

Nineteen

retardation may in part be due to changes in classification procedures and criteria.

Most agencies and organizations in the field of mental retardation in Minnesota are concerned with institutional populations and problems such as inadequate staffing and housing. They are also concerned with the formulation and development of suitable institutional programs. In discussing staffing requirements and program formulation concern is expressed over the changing institutional population. References are constantly made to "our institutional population, which is rapidly becoming younger and more severely retarded." The institutions cite this trend when presenting requests for additional staff. Each institution reports their populations are becoming younger and more severely retarded and that this trend creates problems due to the increasing shortage of patients with intellectual capabilities which would enable them to become suitable patient workers. When one examines the data presented in Table XVI and XVII this trend becomes partially apparent. There is a trend toward a higher proportion of the population being classified as severely and profoundly retarded. An examination of admission trends will provide some insight into the population changes occurring in the institutions for the mentally retarded. Table XVIII below and Table XIX on the following page show these trend in terms of age and degree of mental retardation.

TABLE XVIII

	AGE GROUP										Median Age	
	Total Admissions	Under 10		10-14		15-24		25-39		40+		
1955-56	531	229	k3%	113	21%	99	19%	k6	9%	34	6%	11.3
1956-57	239	38	16	58	2k	75	31	44	18	2k	10	17.6
1957-58	233	65	28	40	17	75	32	32	14	20	9	16.1
1958-59	841	306	36	187	22	143	17	99	12	104	12	13.0
1959-60	414	161	39	92	22	86	21	39	9	36	9	12.5
1960-61	530	211	40	116	22	111	21	44	8	48	9	12.3
1961-62	433	191	44	79	18	97	22	37	9	29	7	11.6
1962-63	309	106	3k	68	22	85	27	26	88	21	8	13.6

TABLE XIX

		DEGREE OF RETARDATION							
Total Admissions		Severe (incl, profound)		Moderate		Mild		Unclassified borderline not mentally retarded	
1955-56	531	45	8%	156	29%	172	32%	158	30%
1956-57	239	15	6	58	25	133	56	33	11*
1957-58	233'	37	16	84	36	91	39	21	9
1958-59	841	217	26	289	34	188	22	147	17
1959-60	414	102	2\$	159	38	120	29	33	8
1960-61	530			—				—	
1961-62	433	142	33	72	17	87	20	132	30
1962-63	309	129	42	62	20	60	19	58	19

The data presented in Table XVIII does not indicate any great changes in the age distribution of the persons being admitted to institutions for the mentally retarded. The data presented in Table XVI and XVIII does not substantiate the assertions that the institutional population is becoming younger. The data presented in Table XIX does indicate that there is a higher proportion of the persons being admitted to institutions are classified as being severely or profoundly retarded. The data presented in Tables XVII and XIX show that a substantial proportion of the institutional population is categorized as "unclassified", "borderline", or "not mentally retarded". Most of the individuals in this category are "unclassified". Successful program formulation and patient placement with the institution are dependent upon careful analysis and specific individual designation of persons in this group.

The number of people discharged from Minnesota institutions for the mentally retarded remained relatively stable from 1955 through 1961. During the fiscal year 1962-63, the number of people discharged from these institutions approximately doubled. Tables XX and XXI show the age and degree' of retardation distributions of persons discharged from 1955-56 through 1962-63. The greatest proportion of the persons discharged are classified as being moderately or mildly retarded. During 1962-63 six percent of the persons discharged were classified as being severely-

or profoundly retarded. A significant proportion of these discharge are reported as being "unclassified", "borderline", or "not mentally retarded".

The data presented in Table XX indicates that the major proportion of the persons being discharged from these institutions are over fifteen years of age. Prior to 1962-63 relatively few persons over forty years of age were being discharged from these institutions. The number of persons discharged in this age range during 1962-63 was about three times greater than the number discharged in this age range during the previous year. The increase in the number of discharges during 1962-63 are a reflection of the inception of the policy of placing institutionalized persons into community facilities such as nursing homes, and group care homes for the aged.

		AGE GROUP						
Number of <u>Discharges</u>		Under 10	10-14	15-24	25-39	14+	Median Age	
1955-56	149	13 9%	6 4%	62 42%	42 28%	23 15*	23.6	
1956-57	102	5 5	5 5	51 50	30 29	11 11	23.0	
1957-58	126	3 2	5 4	59 47	41 33	17 13	21*.5	
1958-59	131	8 6	8 6	65 50	20 15	30 23	22.7	
1959-60	105	4 4	8 8	44 42	31 30	18 17	24.4	
1960-61	174	15 9	7 4	81 47	34 20	37 21	23.6	
1961-62	156	15 10	3 2	78 50	32 21	28 18	23.0	
1962-63	308	9 3	9 3	145 47	59 19	86 28	24.4	
1963-64	293	7 2	9 3	128 44	40 14	109 37	25.9	

TABLE XXI

Discharges from Institutional Books

		DEGREE OF RETARDATION			
Number of Discharges		Profound & Severe	Moderate	Mild	Unclassified borderline not mentally retarded
1955-56	149		6 4%	62 28%	101 68%
1956-57	102	-	14 14	74 73	14 14
1957-58	126	4 3%	25 20	85 67	12 10
1958-59	131	7 5	29 22	81 62	14 11
1959-60	105	4 4	21 20	76 72	4 4
1960-61	171*		-	-	
1961-62	156	3 2	29 19	96 62	28 18
1962-63	308	19 6	92...30	145 47	
1963-64	293	19 6	72 25	143 49	59 20

During the fiscal year 1962-63 the death rate in Minnesota's institutions for the mentally retarded was 16.4. per 1000 patients on institutional books. The death rate in institutions has changed relatively little since 1956. Table XXII and Table XXIII shows institutional deaths in terms of age and degree of retardation. The death rate is highest among children under the age of ten. In 1963 the death rate for this age group was 47.1 per thousand. The number of deaths was greatest in the age group over forty. However, the death rate in this group was not as high as in the age group under ten. The death rate for the age group over forty was 26.8 per thousand. The data in Table XXIII indicates that the median age at death has increased about ten years since 1957. In 1963 the median age at death was 41.3 years.

TABLE XXII

Deaths in Institutions

		D E G R E E       O F       R E T A R D A T I O N							
Number of Deaths		Death Rate per 1000 pop.	Severe & Profound		Moderate		Mild		Unclass. Borderline Not Mentally Retarded
1955-56	79	15.3	22	28%	20	28%	18	23%	19 24%
1956-57	68	12.3	22	3k	25	38	8	12	10 15
1957-58	84	16.1	26	31	25	30	12	14	21 25
1958-59	90	15.4	38	k2	29	32	10	11	13 14
1959-60	95	15.7	34	36	31	33	21	22	9 9
1960-61	87	13.8	-		-		-		-
1961-62	92	14.0	ill	45	31	34	14	15	6 7
1962-63	106	16.4	33	31	34	32	14	13	25 24

TABLE XXIII

Deaths In Institutions

## A G E G H O U P

Number of Deaths		Under 10	10-14	15-24	25-39	40+	Median Age
<b>1955-56</b>	79	<b>15 19%</b>	<b>6 8%</b>	<b>5 6%</b>	15 19%	<b>12 15%</b>	
1956-57	65	12 18	3 5	12 18	11 17	27 42	31.8
1957-58	84	7 8	8 10	18 21	14 17	35 42	33.6
1958-59	90	22 2k	<b>4 4</b>	15 17	12 13	36 40	32.5
1959-60	<b>95</b>	16 17	<b>6 6</b>	15 16	11 12	<b>47- 49</b>	39.4
1960-61	87	. 19 22	12 14	6 7	14 16	36 41	32.0
1961-62	92	13 Hi	7 8	15 16	8 <b>9</b>	k9 53	li2.1 ;
1962-63	106	21 20	6 6	9 8	16 15	54 51	41.3

i.

Tables XXIV, XXV, and XXVI (pages 24,25,26) show the admission, discharge, and death rates per 1,000 patients from 1955 through 1963.



TABLE XXIV

ADMISSION RATES PER 1,000 PATIENTS IN MINNESOTA INSTITUTIONS FOR THE MENTALLY RETARDED

	DEGREE OF RETARDATION							AGE ON ADMISSION				
	Overall	Male	Female	Severe	Moderate	Mild	Unclassified	Under 10	10-14	15-24	25-39	Over 40
1955-56	102.9	117.7	87.3	45.5	67.1	124.8	337.6	553.1	192.2	83.2	32.1*	22.1
1956-57	45.1	50.6	39.0	14.9	24.5	87.1	83.3	119.9	95.6	58.9	30.1	14.7
1957-58	44.7	49.2	40.0	36.6	35.1	64.3	53.8	231*.7	71.4	58.0	22.9	11.9
1958-59	144.3	163.5	122.7	180.8	111.2	124.3	284.9	698.6	277.0	100.0	67.8	57.0
1960-61	83.8	74.5	94.7	117.7	35.8	82.8	202.2	441.4	142.5	70.3	29.4	24.6
1961-62	66.0	65.0	67.0	94.0	26.1	99.4	159.2	381.2	95.9	58.8	23.9	14.2
1962-63	47.8	55.1	<u>39.4</u>	73.9	23.4	1*5.3	77.9	237.7	85.1*	50.6	17.0	11.9
1963-64	1*0.0	43.5	35.9	1*5.2	20.8	1*i*.8	92.9	171.9	67.3	1*8.8	17.1	13.7

TABLE XXV

DISCHARGE RATES PER 1,000 PATIENTS IN MINNESOTA INSTITUTIONS FOR THE MENTALLY RETARDED 1956-1964 (Total Population)

	DEGREE OF RETARDATION							AGE OF DISCHARGE				
	Overall	Males	Females	Severe	Moderate	Mild	Unclassified	Under 10	10-14	15-24	25-39	Over 40
1955-56	28.9	30.6	27.1	—	2.6	30.5	215.8	31.4	10.2	52.1	29.6	15.0
1956-57	19.3	17.2	21.5	—	5.9	48.5	35.4	15.8	8.2	40.0	20.5	6.7
1957-58	24.2	22.6	25.9	<b>4.0</b>	10.4	60.1	30.8	10.8	8.9	45.6	29.3	10.1
1958-59	22.5	25.0	19.7	5.8	11.2	53.6	27.1	18.3	11.9	45.5	13.7	16.5
1959-60	17.4	19.5	16.4	3.1	7.7	50.0	7.8	8.8	10.9	29.7	21.0	9.5
1960-61	27.5	26.5	31.4	—*	—*	—*	—*	31.4	8.6	51.3	22.7	19.0
1961-62	23.8	25.2	23.2	2.0	10.5	65.5	33.8	29.9	3.6	47.2	20.6	13.7
1962-63	47.6	50.2	44.7	10.9	34.7	109.5	69.8	20.2	11.3	86.3	38.6	42.7
1963-64	46.5	43.8	49.6	9.8	28.3	120.8	94.6	18.2	24.6	77.2	26.3	<b>55.4</b>

\* Data not available

TABLE XXVI

DEATH RATES PER 1,000 PATIENTS IN MINNESOTA INSTITUTIONS FOR THE MENTALLY RETARDED

	Overall	Male	Female	Severe	Moderate	Mild	Unclassified	Under 10	10-14	15-24	25-39	Over 40
1955-56	15.3	19.6	10.8	23.2	8.6	13.1	40.6	36.2	10.2	4.2	10.6	7.8
1956-57	12.2	9.7	15.1	21.8	10.6	5.2	25.3	37.9	4.9	9.4	7.5	16.5
1957-58	16.1	17.7	14.4	25.7	10.4	8.5	53.8	25.3	14.3	13.9	10.0	20.9
1958-59	15.4	15.9	14.9	31.7	11.2	6.6	25.2	50.2	5.9	10.5	8.2	19.7
1959-60	15.7	16.8	14.5	26.6	11.3	13.8	17.8	35.1	8.2	10.1	7.4	24.9
1960-61	13.8	13.5	14.0	—*	—*	—#	—*	39.7	14.7	3.8	9.3	18.5
1961-62	14.0	16.6	11.1	27.2	11.2	9.6	7.2	25.9	8.5	9.1	5.2	24.1
1962-63	16.4	<u>19.4</u>	12.9	18.9	12.8	10.6	33.6	47.1	7.5	<b>5.4</b>	10.5	26.8
1963-64	14.6	15.7	13.3	21.6	11.8	9.3	14.4	28.6	11.6	7.8	12.5	20.3

\* Data not available

Table XXVII below shows the rate of increase in institutional populations. These populations showed varying rates of increase except, the last two fiscal years. The decrease in the population during these two years is the result of the increase in the discharge rate and the decrease in the admission rate during this period. These rate changes are the result of increasing community facilities and changes in the philosophy regarding institutional discharge.

TABLE XXVII

RATE OF INCREASE; MINNESOTA INSTITUTIONS FOR THE MENTALLY RETARDED 1955-1963  
 . (Per 1,000 Patients;

	Admission Rate	Death Rate	Discharge Rate	Rate of Increase
1955-56	102.9	15.3	28.9	58.7
1956-57	<b>45.1</b>	12.2	19.3	13.6
1957-58	44.7	16.1	24.2	<b>4.4</b>
1958-59	144.3.	<b>15.4</b>	22.5	106.4
1959-60	68.5	15.7	17.4	35.4
1960-61	83.8	13.8	27.5	- 42.5
1961-62	66.0	14.0	23.8	28.2
1962-63	47.8	<u>16.4</u>	47.6	- 16.2
1963-64.	40.0	14. 6	46.5	- 21.1

## CONCLUSIONS

### General

1. There is no standardized, accepted criteria of mental retardation which is generally utilized by county welfare departments throughout the state.
2. Continuous, comparable, and accurate records concerning institutional populations are not being maintained.
3. First admissions tend to be young and severely or profoundly retarded and most of these individuals had been on the waiting list for more than one year.

4. The greater proportion of the discharges are older and are categorized as mildly or moderately retarded.
5. The admission and death rates are higher for males than for females.
6. There is an inverse relationship between intellectual capacity and the length of time first admissions have spent on the waiting list.
7. One-half of the persons who died in these institutions during 1962-63 were classified as being severely or profoundly retarded or "unclassified".

#### Trends

1. The age distributions of these institutional populations have remained quite stable during the period 1956-1963.
2. The number of severely and profoundly retarded patients on institution books increased 76% from 1956 through 1963. During this same period the number of moderately retarded increased only 14% and the number of mildly retarded decreased four percent.
3. From 1956 through 1961 the institutional population was increasing. In 1962 and 1963 the population decreased due to decreasing admission rates and increasing discharge rates. In 1963 the discharge rate was greater than the admission rate.
4. Admission rates have tended to be highest for the group categorized as "unclassified, borderline, and not mentally retarded", however these have been subject to great fluctuation.
5. Prior to 1958, admission rates were lowest among the severely retarded. Since 1958 the admission rates for this group have been higher than for either the mildly or moderately retarded groups.
6. With the exception of the "over 40" age grouping, admission rates have generally declined. The rank-order of admission rates among the various age categories have remained the same.
7. The overall discharge rate from these institutions has increased sharply during the fiscal years 1962-63 and 1963-64.. •
8. The discharge rates have shown the greatest increase among individuals who are more severely retarded.
9. Discharge rates have generally increased for each age category with the exception of the "under 10" and the "25-29" age group. The greatest increase was registered in the "over 40" age group.
10. The median age at death in these institutions has increased nearly ten years since 1955.

### DISCUSSION

The characteristics of patients institutionalized as mentally retarded in Minnesota are changing. There were overall increases in institutional population until 1962. Since then this population has decreased due to lower admission rates and increasing discharge rates. The proportion of persons being admitted to these institutions classified as severely or profoundly retarded has increased from eight percent in 1955 to forty-two percent in 1962. During this same period those being admitted classified as mildly retarded has decreased from 32 percent to 19 percent. Sabagh and Windle (1960) found this to be a national trend. However they indicated that there was a corresponding increase in the admission rates of younger persons and a decrease in the admission rates of older persons. The data presented above indicates that the greatest proportion of the admissions to Minnesota institutions for the mentally retarded are the young (under 14 years of age), however, this proportion has remained relatively stable during the past eight years. The proportion of persons being admitted over 40 years of age has also remained quite stable. The median age at admission has fluctuated but has not decreased.

Patton and Weinstein (1960) found that institutional populations in New York had steadily increased from 1950 to 1958. They also found that the greatest increases occurred in the age groups five to 14 years and 35 years and over. They attribute the increase in the five to fourteen group to the increased birth rate during the World War II period. They felt that the increase in the number of patients over 35 was because patients were living longer. An analysis of the data presented here does not indicate that the proportion of patients 14 years of age and under or over 40 is increasing. Neither is there any indication that the death rate for the older group of patients is decreasing; however, the median age at death increased approximately ten years from 1956-57 through 1962-63.

The overall discharge rate in Minnesota institutions for the mentally retarded is

increasing. There was a sharp increase in 1962-63 and this high rate was maintained in 1963-64. (Table XXV) Discharge rates for the groups under ten years of age and between 25 and 39 have not increased. Prior to 1963-64 there was no increase in the discharge rate for the 10-14; year-old group, however in 1963-64 the discharge rate for this group doubled. The discharge rate is highest for the 15-24 year-old group and showed large increases during 1962-63 and 1963-64. The discharge rate for the over 40 age group showed the sharpest increase in 1962-63 and increased again in 1963-64. Patton and Weinstein (1960) reported that in 1958 in New York state one out of every three discharges was 15 to 19 years of age. In 1950 this age group comprised about 29 percent of the total discharges. They reported that the discharge ratios among the groups of younger and older patients were smaller in 1958 than in 1950. They feel these changes took place because "with restrictions on admissions of younger children because of space shortages, those who are admitted are the more seriously defective—who are less likely to be discharged". This may be an explanation of the decreasing discharge rates among patients under ten years of age in Minnesota institutions for the mentally retarded.

Several arguments have been advanced in explanation of the population changes which are taking place in institutions for the mentally retarded throughout the United States. Among them are: 1) Increasing community facilities such as educable and trainable classes, day activity centers, and sheltered workshops. 2) Increments in medical knowledge have provided therapies which have led to a lower death rate among mentally retarded individuals both in and out of institutions. (Goldstein, 1959) 3) The increasing activities of parent groups such as the National Association for Retarded Children (Lund, 1959) have developed increased public awareness of many of the problems of mental retardation and may have reduced the stigma attached to having a retarded child in the family, thereby encouraging parents to delay institutionalizing their child. However, none of these factors have been empirically demonstrated to be related to changes in institutional populations.

In general, changes in institutional populations have implications for various program policies and serve as an index of changing social attitudes toward deviant behavior. (McCulloch, 1947; Tizard, 1953) Several changes have taken place in Minnesota in terms of provision of community facilities and services, formulation and development of institutional programs, and changes in the philosophy regarding the mentally retarded. The number of educable classes in Minnesota has increased from 191 in 1956 to 581 in 1963. During that period the number of trainable classes increased from 21 to 70. State supported day activity centers have been established and continue to grow in number and the number of sheltered workshops are increasing. However, most important there has been some changes in the philosophy regarding the mentally retarded which have had profound effects upon the planning for future programs, services and facilities. The most important philosophical changes have been in regard to the role and functions of the large, multi-service institutional facility serving a heterogeneous population. In the past the philosophy toward the provision of services for the mentally retarded has gone through three stages: 1) the establishment of schools to educate the retarded according to the physiological training methods devised by Itard and Seguin. 2) A reaction of alarm concerning the retarded which was caused by mistaken ideas about the role of heredity in the incidence and perpetuation of mental retardation. This reaction was further reinforced by the development of widespread intelligence testing which uncovered the "moron" who many felt was responsible for the majority of the crimes committed in our society. 3) Attempts at social rehabilitation in large multi-service institutions and extra-institutional placement.

The philosophy which is growing in Minnesota in regard to the future development of programs and services for the mentally retarded throughout the state is based upon the concepts of treatment, training, motivation, re-motivation, habilitation, and rehabilitation with the goal being to keep the individual out of the institution as long as possible and to get the institutionalized individual back into the community. The data present in this



paper indicates that this philosophy is being partially operationalized (decreasing admission rates and the sharp increase in discharge rates, particularly for the older and more severely retarded patients). The persons responsible for the planning and development of future programs and services for the mentally retarded in Minnesota see the following occurring:

1. The "development of a program of comprehensive services including diagnostic facilities, short-term institutional care, day care, vocational rehabilitation, occupational workshops, and out-patient service at institutions.
2. A reduction in the population of the three large residential care facilities in the state.
3. The development of these three large residential care facilities into central facilities about which community centered satellite residential care units such as long and short-term boarding homes, nursing homes, half-way houses, and special treatment facilities would radiate.
4. These central residential facilities would function as intake centers and the programs would be geared to providing treatment and training which would enable the individual to either return to the community or be transferred to a community residential facility.
5. There would be an increase in the numbers of professional staff at each of the central residential facilities.
6. New central residential facilities would be established in various regions in the state.

The data presented in this paper indicates that the population of Minnesota's major institutions for the mentally retarded are becoming more severely retarded and more dependent. As this trend continues the demographic characteristics of these institutional populations will require that the role of these institutions in society be modified. It would appear that the following effects of these population changes are indicated and should be considered in the formulation of any extensive future programming.

1. As these institutional populations are more severely retarded and dependent, the demands of these populations would require that the institutions become less oriented toward training and rehabilitation of patients of higher mental status and more concerned with the provision of total, custodial type care.

2. There will be a decrease in the discharge rates which will reduce the number of available spaces for new admissions. As a result these institutions will be less able to serve society unless they are expanded or new facilities constructed for the same purpose.
3. The costs of operating these institutions will increase due to the need for more attendant personnel to provide the total care needed for these populations and to perform the tasks which are presently being done by working patients of higher mental status.
4. Training programs for institutional personnel must be initiated which are pertinent to the needs of these changing populations.
5. The schools in these institutions will be required to change their programs from those designed for the educable to those designed for the trainable mentally retarded.
6. Psychological and various rehabilitation staffs will be reduced as the number of dischargeable resident patients is reduced.
7. The treatment facilities, therapeutic programs, and professional staff which is presently concentrated on a small group of patients of higher intellectual level will have to be modified and adapted toward the planning and establishment of a decent, pleasant, livable social environment for career patients.

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