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A study of the adjustment of children with cerebal palsy discharged from the Cerebal Palsy Unit of the Lakeville State Sanatorium, Middleboro, Massachusetts.

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A STUDY OF THE ADJUSTMENT OF CHILDREN WITH  
CEREBRAL PALSY DISCHARGED FROM THE CEREBRAL  
PALSY UNIT AT THE LAKEVILLE STATE SANATORIUM,  
MIDDLEBORO, MASSACHUSETTS

A thesis

Submitted by

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(B.S., Springfield College, 1950)

In Partial Fulfillment of Requirements for  
the Degree of Master of Science in Social Service

1953

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CHAPTER I

INTRODUCTION

GENERAL PURPOSES AND SCOPE: This is a study of the first ten cerebral palsied children referred from the Services for Crippled Children clinics under the supervision of the Northeastern District of the Massachusetts Department of Public Health, to the Cerebral Palsy Unit at Lakeville State Sanatorium, Massachusetts Department of Public Health. The primary purpose of this study is to determine the contribution of a program of total care, including medical treatment, medical social work, physical therapy, speech therapy, and other programs provided in the Cerebral Palsy Unit, to the adjustment of these children after discharge from such a setting. The attempt was made to find answers to the following questions: What factors seem significant in determining the child's adjustment before, during, and after a program of total care? Did the degree of physical involvement seem to have a material bearing on the child's adjustment? Was there any relation between the child's medical progress and fluctuations and the overall adjustment while at Lakeville? Were the circumstances of discharge related to the child's adjustment after discharge? Was the adjustment after discharge similar to that made while at the institution?

What did the child or parents feel was accomplished as a result of this program of total care?

SOURCES OF DATA: Material for this study was obtained from medical and social case records in the District Office and at Lakeville State Sanatorium. A great deal of material was obtained by personal contacts with staff personnel in both places. In four of the cases studied, the writer had worked with the child and/or the parents for the past several months. In the remaining six cases, home visits were made, at which time the child and/or the parents were interviewed for the purpose of gaining sufficient material on which to determine their present adjustment.

All the material for Chapter IV was obtained by personal observation and by interviews with administrative and program personnel at Lakeville State Sanatorium.

METHOD OF PROCEDURE: The case records at Lakeville and at the District Office on all ten children were examined to obtain the material necessary for the completion of the schedule. Many of the case records in both settings were rather lengthy and involved, with many different social workers and therapists having worked with these ten children. Each case was summarized in order to focus on that material considered to be pertinent to the study. Several of these summaries were quite lengthy, as it was felt that there was

considerable material that had to be examined to determine those factors that were significant in adjustment. Consequently, several of the case presentations prepared from these summaries are also rather lengthy. Though an evaluation was made of the child's adjustment before, during, and after training at the Cerebral Palsy Unit, the cases were grouped according to the child's adjustment after discharge; good, fair, poor. The factors considered in determining the nature of the adjustment precede the case presentations.

Included in nine of the case presentations are graphs which were prepared from periodic evaluations made by the various staff personnel at Lakeville, for the purpose of seeing the fluctuations in physical development that take place and for a general picture of the child's physical status while at the Cerebral Palsy Unit. In the case of Joan Martin, No. 6, no such evaluations were made; therefore, no graph appears in the case presentation.

In those situations in which the child was not known previously to the writer, and where special interviews had to be conducted, the writer formulated certain questions that he hoped to have answered through having the child and/or the parents talk about the present situation and the experience at Lakeville. These questions depended on what was all ready known about the child.

LIMITATIONS: There are certain obvious limitations in a study of this nature. Certainly, there is bound to be a degree of subjectivity when the attempt is made by one person to evaluate the nature of an adjustment, especially in those situations where the writer has had considerable personal contact.

When consideration is given to the vast number of physical and emotional manifestations of cerebral palsy, it can be seen that the number of cases studied is extremely small, with the result that no general conclusions can be drawn. Findings made and conclusions drawn apply only to the ten children studied.

Because of the small number of cases studied, and because of the many factors involved in such a procedure, only a general definition of the degree of physical handicap appears in the individual case presentations. Several of the ten children studied are very severely handicapped, others only moderately so. In the study of a larger number of cases, this is an area that would bear closer examination. There is also the question of speech involvement, in which the outward or obvious manifestations of physical involvement are not marked, but which, as an intergral part of the total physical status, plays a significant role in the problems of adjustment.

## CHAPTER II

## MEDICAL ASPECTS OF CEREBRAL PALSY

The purpose of this chapter is to acquaint the reader with the medical aspects of cerebral palsy. Comparatively speaking, it is only within fairly recent years that considerable attention has been given to this condition. As might be expected, there are differences of opinions between medical authorities. However, the attempt has been made to bring together in this chapter, the important medical aspects on which there is quite general agreement.

**DEFINITION:** Cerebral palsy is a condition that occurs when there is damage or injury to those cells in the brain which transmit impulses to various muscles throughout the body. It is not a disease; it is not contagious, and in the usual sense or strict sense of the word, it is not generally considered hereditary.<sup>1</sup>

**MORBIDITY:** Presently, there are about 550,000 known cases of cerebral palsy among children and adults who have been palsied since birth. In the United States, 10,000 babies, or approximately seven out of every 100,000 births, are born each year with this condition, for an average of one every three minutes. This takes place with almost mathematical regularity, with the result that cerebral palsy has been

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<sup>1</sup> Creating Community Assets, Prepared by United Cerebral Palsy Associations, Inc.

termed the "predictable crippler".<sup>2</sup>

**SYMPTOMATOLOGY:** Cerebral palsy is characterized by paralysis, incoordination, or any other aberration of motor function due to pathology in the motor centers of the brain.<sup>3</sup> The damage may be great or little. It may involve the arms, legs, throat, or the portions of the brain which control seeing or hearing, or portions which involve the thinking processes.<sup>4</sup> The inability of the cerebral palsied child or adult to perform is not always due to a motor disability, but may be due to a combination of motor and sensory defects, which often results in the sometimes mistaken notion that a particular individual is mentally deficient.<sup>5</sup>

**TYPES OF CEREBRAL PALSY:** In order to understand the medical implications of this condition, it is necessary to understand that there are five general categories or types of cerebral palsy. In a given individual, these characteristic types may appear singly, or in certain combinations.

**Spasticity:** Spasticity, which is due primarily to damage

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2 Ibid.

3 Perlstein, Meyer A., M.D., "Medical Aspects of Cerebral Palsy," American Journal of Occupational Therapy, April, 1950 (reprint).

4 U.S. Children's Bureau, Folder No. 34, The Child With Cerebral Palsy, p. 5.

5 Ashman, Ruth, R.N., "The Nurse as a Member of the Cerebral Palsy Team," Nursing World, July, 1951 (reprint), pp. 284-286.

to the pyramidal tract, is manifested by hypertonicity of the muscles and loss of control of the voluntary muscles. When motion is attempted, opposing muscles contract simultaneously, which results in a blocking of motion and the expenditure of a great deal of energy in an attempt to overcome this and perform the intended activity. Some of the involved muscles are weak while others are excessively strong, which may result in physical deformities. In spasticity the ability to swallow and speak is often greatly affected.<sup>6</sup>

Ataxia: The ataxic type of cerebral palsy is due to lesions of the cerebellum. It is evidenced by a lack of equilibrium and incoordination when attempting to perform skilled acts. In ataxia, speech and swallowing are rarely seriously affected.<sup>7</sup>

Athetosis: Athetosis is marked by irregular, involuntary movements caused by damage to the basal ganglia. These uncontrolled, irregular motions frequently affect the muscles of the tongue and throat and interfere with swallowing and speech. In this type hearing may also be affected.<sup>8</sup>

Rigidity: The rigidity type of cerebral palsy is manifested by rigidness of the muscles, which are soft and putty-like. This type is caused by diffuse damage to the brain and

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6 Ibid.

7 Ibid.

8 Ibid.

it responds rather poorly to treatment.<sup>9</sup>

Tremor: That type of cerebral palsy known as tremor is the result of lesions in the basal ganglia. It is marked, unlike athetosis, by slow and rhythmic involuntary movement.<sup>10</sup>

ETIOLOGY: Sometimes the infant's brain is damaged as the result of a difficult birth experience. In many cases, however, cerebral palsy is noted with very easy births. The responsible factor may be in effect before birth, during birth, or after birth.<sup>11</sup> Many lay people believe that cerebral palsy occurs only as the result of poor medical management during delivery, and while this is a responsible factor in some cases, it is obviously not the causative factor in the majority of cases.<sup>12</sup>

There are certain predisposing factors that must be examined. Cerebral palsy is more common, for quite obvious reasons, among premature infants than among full-term infants. It is more common among first-born children and those with heavy birth weights, where prolonged labor is usually more frequent. It occurs more frequently in infants born to older women who generally have heavier babies. Also, it occurs

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9 Ibid.

10 Ibid.

11 U.S. Children's Bureau, Folder No. 34, The Child With Cerebral Palsy, p.4.

12 Ashman, op. cit.

more frequently in male infants, who, on the average, weigh more at birth than female infants. The prevalence of cerebral palsy also seems to be higher among white than colored children.<sup>13</sup>

Anoxia, or lack of oxygen at birth, and cerebral hemorrhage are two of the most common causes of cerebral palsy. Anoxia is more likely to produce an athetoid child, however, whereas cerebral hemorrhage is more likely to produce a spastic child.<sup>14</sup>

The prenatal causes of cerebral palsy are divided roughly into two classes. First, there may be familial anatomical or physiological factors predisposing to such anomalies as cerebral palsy. These are not common causative factors. Second, there are congenitally acquired factors. In these cases cerebral palsy is caused by noxious conditions which affect the fetal brain as the result of disease or trauma to the mother or uterus, such as anoxia, cerebral hemorrhage, infections, metabolic disturbances, malnutrition, and blood incompatibilities between the fetus and mother in terms of the Rh factor.

The natal causes of cerebral palsy fall into two main categories; anoxia and vascular damage or trauma.<sup>15</sup>

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<sup>13</sup> Perlststein, Meyer A., M.D., "Medical Aspects of Cerebral Palsy," American Journal of Occupational Therapy, April, 1950 (reprint).

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

The postnatal causes of cerebral palsy refer to anything that might affect the brain after birth. Included among these are trauma, as after a serious fall, infection, neoplasms, drugs, vascular conditions, or anoxia.<sup>16</sup>

TREATMENT: The treatment of cerebral palsy, in most cases, if it is to be fully effective, requires first, the skilled services of the physician, orthopedist, surgeon, and other members of the medical profession. Closely allied with this is the necessity of the combined services of various professional groups; physical therapists, occupational therapists, ~~trained~~ psychologists, speech therapists, special teachers, psychiatrists, and medical and psychiatric social workers. There must be a complete understanding of the multiplicity of social and emotional factors that need to be dealt with in a plan for total treatment. No two victims or parents have the same personal needs or problems, even though the physical diagnosis or psychological findings or family situations seem similar. As pointed out by Dr. Kurt Jellinek,<sup>17</sup> teamwork is essential in the treatment of cerebral palsy, perhaps more so than with any other affliction.

Motor reeducation, according to the needs of the particular muscles involved, is one of the basic methods of

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<sup>16</sup> Ibid.

<sup>17</sup> Assistant Superintendent, Lakeville State Sanatorium, Middleboro, Massachusetts.

treatment. In cases of spasticity, muscle training is the most important phase, while in athetosis, relaxation and guided movement from the relaxed position are the basis of treatment. Mental education and physical reeducation must be given in equal doses and closely coordinated.<sup>18</sup>

Orthopedic surgery can sometimes accomplish wonders with the spastic child. On the other hand, surgery is very seldom helpful in the presence of athetosis.<sup>19</sup>

Physical therapy, occupational therapy, speech therapy, braces and other mechanical measures, and drugs for the purpose of relaxation and reduction of incoordination are the fundamentals of non-surgical treatment. Treatment, whatever the type, should begin at the earliest age at which the child will benefit, and insofar as possible, the normal developmental sequence of childhood should be carefully followed.<sup>20</sup>

PROGNOSIS: As mentioned previously, there are seven cases of cerebral palsy in every 100,000 births. Of these seven, one dies in infancy or soon after. Four of the remaining six cases, or two-thirds, are definitely treatable. The two remaining cases are feebleminded and require permanent

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18 Phelps, Winthrop M., M.D., "Cerebral Palsy and Poliomyelitis as they Concern the Family Doctor, the Orthopedist, and the Neurologist," Journal of the Medical Society of New Jersey, February, 1938 (reprint), p.7.

19 Ibid.

20 Ibid.

custodial care. One of the four treatable cases will be severely handicapped, homebound, and essentially hopeless from the point of view of physical rehabilitation. One case will be so mild that any prolonged degree of treatment is unnecessary. Two cases will be moderately handicapped and capable of great improvement, occasionally complete restoration of function.<sup>21</sup> However, it must be borne in mind that there is no clearly defined standard for predicting results. Some of the most severe cases sometimes make the most outstanding improvement. Some of the mildest cases make no improvement at all. Of course, much depends on the individual's will or determination or lack of it.<sup>22</sup> Cerebral palsy cannot be cured, but many of the victims of this condition can be trained and educated to lead useful lives if centers and personnel are available to give to each the benefit of known and established methods of treatment.<sup>23</sup>

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21 Phelps, Winthrop M., M.D., Cerebral Palsy.

22 Phelps, Winthrop M., M.D., "Questions Parents Ask and Answers," The Crippled Child, 25:4-5, August, 1947.

23 McKann, Charles F., M.D., A Brighter Outlook for America's Cerebral Palsied, p.3.

## CHAPTER III

## EMOTIONAL AND PSYCHOLOGICAL ASPECTS OF CEREBRAL PALSY

No one who has ever worked with the handicapped person can be unaware of the emotional difficulties created by crippling. Discouragement, despair, insecurity and anxiety are responsible for the many adjustments and readjustments that must be made by the person with cerebral palsy. Obviously, the ultimate aim for training of the cerebral palsy victim should be in the direction of helping him reach, within his abilities, the greatest possible degree of self-sufficiency. If the optimum results are to be achieved, it is important to know the personality or make-up of the individual and the way in which the individual responds to treatment.

Before discussing some of the more general emotional and psychological aspects of cerebral palsy, it must be recognized that there are somewhat characteristic personality traits in the person with one or another of the types discussed in the previous chapter. Three of these types will be discussed in relation to these factors.

The spastic child is inclined to be introverted, or a shut-in type. The athetoid, on the other hand, has all the characteristics of the extroverted personality type. The spastic holds himself tense as a means of protection against factors that might be disturbing to him. In the spastic, the involuntary muscles can react without any warning to outside

stimuli. In order to reduce the amount of contraction, the spastic holds himself in readiness, both physically and emotionally, by keeping all his muscles tensed. The attempt is made to control, as much as possible, the effects of external stimulation.<sup>1</sup>

Where the spastic has many fears, whether they be fear of his own actions, fear of falling or of loud noises, the athetoid is, on the other hand, quite fearless. His reaction to outside stimuli is of a nature that more closely resembles that of a normal person. Stimuli may have a disturbing effect momentarily, but they are soon forgotten.<sup>2</sup>

The spastic does not like to meet people and is afraid of strange situations. He tends to stay alone in those situations he knows best; whereas the athetoid generally likes to mingle with people, preferably normal people. Frequently he does not care how he looks and pays little attention to what is thought of him. Love and affection are highly developed in the athetoid, largely due to his lack of fear of people. The same is not true of the spastic, prior to treatment, who often prefers verbal expressions of pity to demonstrations of love.<sup>3</sup>

Both experience periods of anger. The spastic usually

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1 Egel, Paula, Techniques of Treatment for the Cerebral Palsy Child, p. 28.

2 Ibid.

3 Ibid.

rises to the state of anger more slowly and maintains this state for a comparatively shorter period of time; the athetoid is quick to show anger and frequently holds it for a longer period of time.<sup>4</sup>

The ataxic child generally has characteristics resembling those of the athetoid. His fears are not too highly developed. His inability to direct a motion, once started, produces anger or rage. The ataxic child dislikes repetition and gives up easily. His ability to show affection is quite highly developed and he is inclined to be quite demonstrative.<sup>5</sup>

The inability to communicate with one's fellows, as in the aphasic child, either by language or gesture, appears to constitute a far greater handicap than blindness, deafness, or paralysis, taken singly or in combination.<sup>6</sup>

In all normal children, activity, whether self-motivated or induced by others, is one of the basic methods of learning of the world about them. The emotional stability of the cerebral palsied child is definitely affected by his slowness of performance and other difficulties which, to a greater or lesser degree, limits his activities.<sup>7</sup> Consequently, it is

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4 Ibid.

5 Ibid

6 Myers, Russell, M.D., and Myers, Mary, R.N., "The Adjustment of the Aphasic Child," The Crippled Child, 28:10, April, 1951.

not unusual to see the cerebral palsied child with a high degree of self-preoccupation.<sup>8</sup>

The child's relationships with other children is a factor that assumes great significance quite early in life. The cerebral palsied child who is physically able, may watch other children at play and perhaps attempt to participate. Frequently he meets with rejection. Initially, he might not be aware that his deformity is the cause, but he sooner or later becomes aware of this. The natural response is to withdraw from this experience.<sup>9</sup>

The child's relationship with other children and with adults must give him a feeling of self-respect and enable him to develop to the fullest possible extent, his capacity to participate in those social activities open to him. Social contact, either with normal or other cerebral palsied children, depending on his particular needs, is essential.<sup>10</sup> Without this contact, the child may choose to escape from a world of reality into a world of fantasy or make-believe and may become openly aggressive or hostile. Some cerebral palsied children, like normal individuals, are negativistic and

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7 Ashman, op. cit.

8 Strothers, C.R., Ph.D., "Developing Personality," The Crippled Child, 25:18-20, August, 1947.

9 Greenwood, Edward, M.D., "The Psychiatrist's Role in the Treatment of Cerebral Palsy," The Crippled Child, December, 1951 (reprint).

10 Strothers, op. cit.

look upon the world as a hostile experience. Clearly, the nature of the cerebral palsied child's ability to adjust to the world around him is related directly to his ability to relate to others in his environment.<sup>11</sup>

It is necessary that the cerebral palsied child's experience with his physical environment involve sufficient success to develop his self-confidence and encourage self-reliance. In other words, he must be taught and must learn to do as many things for himself as possible. This is not only essential for the realistic attainment of a maximum degree of independence, but it is equally important in the development of self-confidence. It is only success that can foster interest and persistence. The tasks confronting the child with this condition must be difficult enough to challenge, but not so difficult as to discourage his efforts.<sup>12</sup>

Though it is in terms of his relationship with his parents and his immediate family, that are seen the greatest potentialities for emotional stability or instability, the relationship of the cerebral palsied child to others in the environment assumes almost equal importance.

A great deal depends on the reaction of the normal person to this condition. This reaction does not have to be expressed verbally, but by facial expressions and behavior.

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11 Greenwood, op. cit.

12 Ashman, op. cit.

Common feelings encountered by the child with this condition are curiosity, pity, over-solicitousness, disdain, repugnance, rejection, fear, or perhaps sympathetic understanding.<sup>13</sup>

Equally important to recognize, is the fact that the severely handicapped person has his own reactions to normal individuals. The child with cerebral palsy knows that he is a physical handicap since birth, is less likely to have emotional problems about it than the adult who experiences a handicapping condition after a period of normal life. However, as pointed out previously, these children do have emotional problems, often of enormous proportions, caused not only by their physical limitations but also by the circumstances of the world in which they live.<sup>14</sup>

As indicated earlier, it is the parents of the cerebral palsied child who perhaps play the most important role in terms of the child's adjustment.

Obviously, complete emotional acceptance of the child by his parents is an essential condition for the development of a wholesome personality. There are many factors that can prevent this acceptance. The parents may feel guilty and consider the birth of such a child as punishment for a sin.<sup>15</sup>

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<sup>13</sup> Menninger, William C., M.D., "Emotional Adjustment of the Handicapped," Proceedings, Convention, National Society of Crippled Children, 1949, p.173

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

According to some authorities, the most common adverse parental attitude encountered is rejection. Frequently, parents may subject their children to pressures which have their origin in their own unmet needs. They are faced with disappointment arising from the shattered hopes they held for their child. They may feel that the family has been disgraced or burdened excessively.<sup>16</sup>

Children learn to understand their parents, not only by what they say, but also by their actions, their movements, and their unconsciously concealed attitudes. If the parents are excessively burdened with hostility or love, such feelings are conveyed to the child. The child may utilize these feelings to find his own solution, neurotic or otherwise, to his life's situations.<sup>17</sup> If acceptance is based on pity, it has a destructive effect on the child, destroying his self-esteem and fostering dependence.<sup>18</sup> Parents who truly accept and love their child, must guard against overprotection and overindulgence.

The child's relationship to his parents must provide emotional security derived from the consistency with which he is treated and the assurance that nothing can threaten the affection in which he is held. Inconsistent behavior

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16 Greenwood, op. cit.

17 Ibid.

18 Strothers, op. cit.

towards the child often results from conscientious attention to the child's physical care, but with a certain amount of resentment of the burdens associated with this care. He may be spoiled one minute and severely corrected the next in an effort to counteract behavior resulting from the initial method of treatment. These changes cause insecurity, and it is important that the child feel, regardless of what might happen, that his parents' love for him will never cease.<sup>19</sup>

A typical example might be in the matter of table manners. Insistence on strict manners could put an insufferable strain on the awkward child. Other parents may have a tendency to be too obviously lenient regarding the child's deficiencies and therefore are apt to undermine the self-respect of the child who has critical judgment enough to appreciate the artificial note of their enthusiasm for accomplishments that he himself considers inadequate.

It must not be overlooked that there are certain reality factors in the meaning of a handicapped child to his parents, some of which have already been mentioned, and there needs to be a constant sensitivity to these factors. The actual expense involved is often very great. With such expenses going on year after year, the child sees his parents and

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19 Ibid.

20 Meyers, Edith, Ph.D., "Role of Psychology in the Cerebral Palsy Training Unit," The Crippled Child, October, 1951 (reprint).

siblings deprived because of his unusual needs. The daily care he requires, if he is at home, is much greater than with normal children. Tensions can grow out of extreme or prolonged sibling rivalry. The physically frail mother, whose physical endurance is taxed daily, can become discouraged and depressed, which naturally influences her attitude towards the child.<sup>21</sup>

Even those parents who can accept the child fully and react normally, are faced with reality sooner or later, in the special arrangements that must be made, not only in regard to recreation, but in vocation and education, which present problems not encountered by the normal individual.

Many acts of the cerebral palsied child are attributed to feeble-mindedness. While some are feeble-minded, others are normal or bright, and it is impossible to determine this by the way the child looks or acts.

A study of the educational needs of 3400 cerebral palsied children in New York City revealed that fifteen per cent should be in regular classes, eleven per cent in mental retardation classes, thirty-two per cent in state schools, nineteen per cent in special academic classes for cerebral palsied children, and twenty-three per cent in special cerebral palsy classes for mentally retarded children. Studies

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<sup>21</sup> Weymouth, Edna, "Medical Social Work - Aid to Adjustment, " The Crippled Child, February, 1950, (reprint).

in Rochester, Buffalo, and England have confirmed the rather high prevalence of mental retardation among cerebral palsied children.<sup>22</sup>

It is estimated by Drs. Phelps and McIntire that only about one-third of the cerebral palsy victims are hopelessly uneducable. The other two-thirds are definitely educable, with intelligence ranging from slightly superior to superior. Of the group of educable children, twenty-five per cent of these cases would be mild. They could attend regular schools and live quite normal lives. Twenty-five per cent would be so severe as to require constant attention. These children would be confined to a bed or a wheel chair and though educable, be unable to feed or dress themselves. The remaining fifty per cent would be moderately severe. These children would be able to walk, dress, eat unaided, work, go to school, etc., depending on, among other factors, the severity of physical involvement.<sup>23</sup>

It has been stated by Dr. Kurt Jellinek that there is no "fool-proof" test for the determination of the mentality in the severely involved cerebral palsied child. Improvement, however, shown by those tests which are applicable, is

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<sup>22</sup> "Study on Educability of Cerebral Palsied Children," New York State Department of Health Bulletin, 4:157-158, March, 1950.

<sup>23</sup> Perlstein, Meyer A., M.D., The Problem of Cerebral Palsy Today, New York: Association for the Aid of Crippled Children, 1947, p.8.

possible. The intelligence quotient may be increased up to ten points. Dr. Jellinek estimates that in one hundred cases, approximately fifty per cent would have an I.Q. of fifty or below, twenty-five per cent would have an I.Q. of fifty through eighty, and the remaining twenty-five per cent would have an I.Q. of eighty or above.

In any case, the process of obtaining an education is difficult for the cerebral palsied child, whose multiple handicaps may affect his ability to write, to speak clearly, or to develop head and eye control for reading.<sup>24</sup> The effect of the disability itself frequently does not permit normal, progressive mental development, and there must be a clear differentiation between actual mental retardation and the physical inability to respond or develop.<sup>25</sup>

For medical care and treatment to be effective, attention must be given to these emotional and psychological implications of this condition and the effect that they have on the child's development.

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24 Association for the Aid of Crippled Children, The Cerebral Palsied Child and his Care in the Home, p.18.

25 Ashman, op. cit.

## CHAPTER IV

THE SETTING  
LAKEVILLE STATE SANATORIUM  
MIDDLEBORO, MASSACHUSETTS

HISTORY: Lakeville State Sanatorium, operated by the Massachusetts Department of Public Health, was opened in the year 1910 for the exclusive care of adults with pulmonary tuberculosis. In 1926, the program was revised to provide care only for persons with extra-pulmonary tuberculosis. Since that time, the program has been broadened considerably. In addition to the extra-pulmonary category of care, treatment is now given to the crippled child, which included those with orthopedic deformities and those convalescing from poliomyelitis. There are also several arthritic children, and plans call for the provision of care for adults with this condition. The Cerebral Palsy Unit was officially opened on January 1, 1950. Legislation for the development of such a unit had been passed in 1948, but considerable time and effort had to be spent in adequate preparation for the inclusion of this unit into the institution's total program.

THE CEREBRAL PALSY UNIT: The Cerebral Palsy Unit is centrally located on the institutional grounds in a separate building, and is readily accessible from all parts of the institution.

Presently, the unit has a bed capacity of thirty children; fifteen boys and fifteen girls. It has been set up on a two-

ward basis; one for boys and one for girls. An attempt has been made to provide a setting that is pleasant, attractive, and as appealing as possible to the children in the unit.

**ADMISSION REQUIREMENTS:** Care in the Cerebral Palsy Unit is available to children under twenty-one years of age, living in Massachusetts, who, after evaluation at Children's Medical Center, Boston, or similar agencies, show evidence of being able to participate, physically and mentally, in the program of total care offered. A child is not accepted for custodial care, but may remain from the minimum age at admission - four years - until the age of twenty-one years, providing he continues to profit from this experience. Most of the children in this unit are referred through Services for Crippled Children, under whose care they have been. These children are initially referred to the clinic program by the private physician.

**PERSONNEL:** With the exception of the nursing staff, the Cerebral Palsy Unit does not have its own staff as such. Doctors, physical therapists, teachers, occupational therapists, the speech therapist, and the medical social work supervisor have responsibilities to the entire patient census, which at full capacity is three hundred and four. However, the present ratio of staff to patient, one to one, is such that excellent care and therapy can be provided for all patients. In addition

to the full-time medical and orthopedic specialists on the staff, the services of consultants in other specialized areas are secured when the need for such is indicated.

**PROGRAM:** In addition to medical and surgical services provided for the children in the Cerebral Palsy Unit, an extensive program of therapy and education is carried on.

Physical therapy, occupational therapy, and speech therapy, are provided on a regular basis with a doctor's recommendation. Whether any or all therapies are given, and the intervals at which they are given, depends on the particular needs of the child.

In the physical therapy program, most of the stress with the cerebral palsied children is on walking, balance, corrective exercises, and similar activities. As with all programs at Lakeville, the attempt is made to make activities desirable and purposeful, through proper motivation. The purpose is to stimulate the child, and the result might be referred to as "stimulated motion".<sup>1</sup> Competition among the children in the Cerebral Palsy Unit is encouraged, and this seems to have a very beneficial and positive effect on them.

In occupational therapy, the emphasis is largely on the use of the upper extremities. This is carried on by the use of buttoning boards, pegs, and similar measures. The attempt

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<sup>1</sup> Dr. Kurt Jellinek, Assistant Superintendent.

is also made to teach color, form and shape conception, counting, and other such activities on the pre-school level. This program is provided not only on an individual basis, but also on a group basis. Participation in a rhythm band, for example, is an activity that provides the child with a group experience that he might not be able to get otherwise.

In speech therapy also, the attempt is made to make this activity as pleasurable and as stimulating as possible. This, too, is provided on a group basis, where the best results are frequently obtained, as well as on an individual basis, if the child needs this type of treatment.

A full-time school program under the direction of trained teachers is available to all children who can benefit from such, either on a regular or special class level. Schooling is given to any child, regardless of age, who can profit from this program.

A very valuable phase of the program is under the direction of a trained nurse, who has the title of Educational Director. In addition to what might be called coordination of the various therapeutic programs, one of her primary functions is to help the children use the skills that are developed in such a way that they contribute to his performance of activities that are carried on in daily living.

In many respects, it represents the culmination of the various therapy programs.

A planned recreational program is carried on under supervision; also, there are periods during the day for free activity. A Girl Scout and Boy Scout troop have been organized, though not too many children in the Cerebral Palsy Unit can participate in this particular activity because of the nature of their handicaps.

**FUNCTIONS OF THE SOCIAL WORKER:** Because of the nature of this study, and its concentration on the social and the emotional adjustment of children discharged from the institution, a closer examination of the functions of the social work supervisor seems important.

One of her primary concerns is in the area of the child's adjustment on the ward and to the total program. If the child has difficulty in adjusting to the routine, to staff personnel, or to other patients, the attempt is made to discover and remove the source of difficulty, whether its origin is emotional or environmental.

In her contacts with the other staff personnel as problems arise daily, and at the regular Cerebral Palsy Unit staff meetings, social and emotional factors that are significant and affect the treatment of the child and his response to this treatment, are shared for the purpose of providing a more

complete understanding of him as an individual.

Another major function is concerned with discharge planning. Often, a long period of preparation is necessary, not only for the child, who frequently gains a new security in such a setting, but for the parents, who may need much interpretation when it comes time to take their child back into the home, or to make plans for a different placement, if this is necessary. Also, the parents of these children often need help in understanding and accepting medical recommendations.

During the period of hospitalization and at the time of discharge, there is close cooperation between the social work supervisor at Lakeville and the medical social worker in the District Office covering the area in which the particular child resides. There is frequent consultation on problems that can and often do arise. In many cases, the medical social worker in the District Office is seeing the child's family while he is hospitalized and being seen by the social work supervisor at Lakeville. Pertinent information that might affect the child's adjustment is shared in this manner.

## CHAPTER V

CASE STUDIES OF INDIVIDUALS  
WHO HAVE MADE A GOOD ADJUSTMENT

In this chapter six cases are presented in which, from evidence available, the individuals concerned appear to be making a good adjustment since their discharge from Lakeville. All but one of these youngsters are now in their own homes, with the other now in a different placement. Adjustment is considered good for these youngsters who, within the limitations of their physical handicaps, have related well to members of the family and other individuals, who are responsive to social, educational, or therapeutic opportunities provided them. They seem to have utilized to a full extent, their physical, emotional, and social capacities.

Case No. 1 - Marjorie Carter

Marjorie, now nineteen years old, and the only child of middle-aged parents is a severely handicapped girl with a diagnosis of cerebro-spastic palsy, quadriplegia, athetoid. The parents have attempted to provide a more normal atmosphere, as well as to help financially, by providing care for several foster children. Presently there are three adolescent girls who have been with the family for several years.

Marjorie was born at the end of a full-term pregnancy, with manual rotation and forceps necessary for delivery. She was not expected to live at birth and little is known of her post-natal care. At the age of ten months, she was not sitting up as her parents thought she should be. Examination at a children's hospital revealed a diagnosis of cerebral palsy. It was felt that her condition was the result of a difficult birth experience. The prognosis for general physical and mental

development was poor.

During this period, her mother was convinced that Marjorie was intelligent. She had been trained to say "bathroom" when necessary and was clean and dry both day and night when slightly over one year of age. Her ability to say "I can't sleep" when she couldn't and such things as reminding her mother that there was a cake in the oven, were regarded by the mother as signs of intelligence.

Between the ages of two and three years, she received physical therapy at a hospital out-patient department from one to three times per week. From the ages of three to six she did exercises under her mother's care. There were no significant changes in her physical development but there were advances mentally.

At the age of six, she started receiving home teaching, and her mother felt that there was tremendous progress under this teacher, whose period of instruction lasted for about eighteen months. Mrs. Carter was regarded by clinic personnel as an intelligent person, anxious to do everything possible for her daughter, and to learn as much as possible about her condition. Until the age of nine, except during those periods in which she was hospitalized, Marjorie was seen regularly at the Services for Crippled Children clinic, where she learned to sit up. There was continued progress in her school work.

Mrs. Carter began to feel that more could be accomplished in a specialized setting, where it would be possible for Marjorie to receive more adequate care. Mrs. Carter recognized her own tendency towards overprotection and she felt that Marjorie needed association with girls of her own age, which was lacking due to the severity of her condition. The medical social worker seeing the family during this period did not feel that the parents were rejecting Marjorie, but that they were aware of their own inadequacies in terms of providing the type of care that was needed. However, there were signs of ambivalence. Her mother became quite emotionally upset at times, was discouraged with Marjorie's progress, and felt that God was punishing her.

At the age of seven Marjorie was placed in a home for children, where she remained for several months. After discharge she became a behavior problem and her

mother became even more convinced that only an institution could offer Marjorie the care and treatment needed. Speech training, under the supervision of the home teacher was provided by Mrs. Carter, along with a program of physical therapy and home instruction. The result was an improvement in Marjorie's and Mrs. Carter's emotional status.

At a clinic visit in 1946, Mrs. Carter became very emotional when talking with the medical social worker. She felt that no one was willing to do anything for Marjorie and that there was no real recognition of her potentialities. The worker was impressed with Mrs. Carter's feelings of guilt, inadequacy, hostility, rejection, and overprotection. Both parents showed hostility towards the community because of a realistic lack of resources for the cerebral palsied child, and it was necessary for the worker to help the parents accept existing limitations in planning for her. At the age of twelve, Marjorie was almost completely helpless, and the medical social worker felt that there were potentialities that could not be realized in the home, and that she might be able to benefit in a specialized setting.

At the age of twelve, Marjorie was admitted to a school for crippled children in another state for a three month period of observation, at the end of which, the school's authorities felt that Marjorie's progress had been slow; but inasmuch as there had been some development, it was felt that another six months would be valuable. Both parents were happy about this placement and anxious to have her remain as long as possible. She was discharged when it was felt that nothing further could be accomplished. A few months after her return home, her parents were instrumental in having her admitted to another hospital-school. However, she was discharged to her home after five weeks at the request of the parents, who were dissatisfied with the care received.

In normal health, Marjorie was now getting along fairly well in a wheel chair and walker. She had to be fed and clothed, and it was impossible to understand her speech, with Mrs. Carter having to interpret everything that was said, but it was felt that the parents were more realistic about her limitations and needs. In the latter part of 1949, they requested information about Lakeville, largely through their own initiative, but with the support of the medical social worker.

Marjorie was admitted to Lakeville in 1950, at the age of fifteen and discharged in February 1952 at the age of seventeen, for a total of 645 days of care. Marjorie's medical progress while there was not greatly marked though her condition was improved at the time of discharge when it was felt that maximum benefits had been realized. She was still confined to a wheel chair or walker, athetosis was still a major problem, and there had been little improvement through intensive speech therapy. All were impressed with Marjorie's desire to improve and the manner in which she availed herself of opportunities.

It was in her school work at Lakeville that she showed the greatest progress. She learned to attempt writing by use of an arm brace. She learned to read, did third grade spelling and arithmetic, fifth grade English, and some history and geography. She was described as a "good worker" with an excellent attitude.

She received an intensive program of physical therapy, but because of the severity of her condition, little could be accomplished, despite her efforts.

In speech therapy, the amount of progress that could be expected was questioned because of the severe athetosis, and because her speech was "good" considering the severity of her handicap. However, her speech was slightly more understandable at the time of discharge, than at admission. The therapist felt that Marjorie had "problems" which might have interfered with speech work.

Occupational therapy included training in typing. This was not successful with the use of her arms, but she did learn to type by using her feet in a specially constructed frame.

Early in Marjorie's stay at Lakeville, she was seen as a withdrawn and unhappy girl. As time passed, there was progress in her adjustment. She became more positive, outgoing, and friendly, both with members of the staff and other patients. The medical social worker could see this improvement in attitude, but at first, Marjorie seemed to have no desire to talk with her. As the relationship gradually strengthened, Marjorie began to confide in this worker.

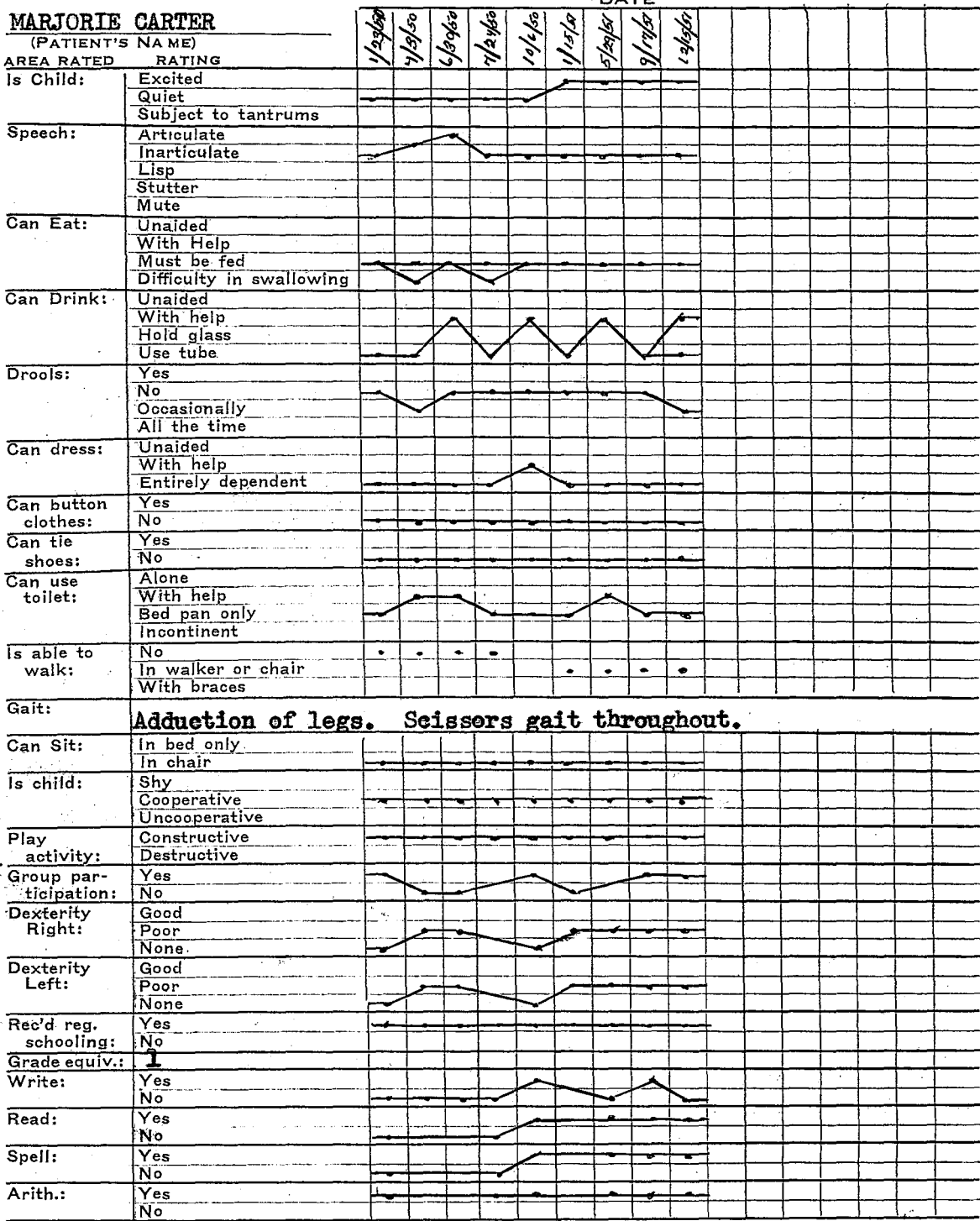
When discharge plans were first discussed, Marjorie informed the medical social worker that she would rather

**GRAPH I**  
**Fluctuations in Developmental Progress While in Cerebral Palsy Unit at Lakeville State Sanatorium**

**MARJORIE CARTER**

(PATIENT'S NAME)

AREA RATED      RATING



**1 Special class, second and third grade level.**

go home than to another institution that provided only custodial care. At the same time, she didn't think it fair to her parents, as her presence hindered them from living a normal life. She felt badly about keeping them tied down and wasn't sure that her mother really wanted her. The worker was able to help Marjorie work through some of her confused feelings about her condition and her relationship with parents and was impressed with Marjorie's insight into her own problems.

During the fourteen months Marjorie has been out of Lakeville, she has continued to be seen at the S.C.C.<sup>1</sup> clinic every several months. There was of course the inevitable loss of certain accomplishments she had realized at Lakeville as the result of intensified care and treatment. However, physical therapy is now being provided on a regular basis through clinic personnel, with one goal being the preparation of Marjorie for speech therapy, which will also be given by clinic personnel. She enjoys weekly visits from the local parish priest, and occasionally is able to attend church. She is receiving home teaching on a regular basis, and is interested in taking part in a specialized cerebral palsy recreational program. The medical social worker now seeing the family, is helping her to plan for a program of occupational therapy in the home. Clarification and reassurance have been necessary, not only with Marjorie, but with the parents as well. As always, Marjorie is availing herself of these services to the fullest possible extent.

#### Interpretation

In view of the total situation, Marjorie's general adjustment before admission to Lakeville was good. Despite her many institutional placements, she related well to other individuals, to her family, and to the environment, and seemed to make an attempt to adjust to the social life of others, in spite of her limitations. Those services that were provided, either in the institutional setting or at home, were utilized

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<sup>1</sup> Services for Crippled Children.

to the fullest possible extent by Marjorie.

As can be seen in the case presentation, parental attitudes were not completely favorable. Though both parents seemed to have a genuine love for her, with her welfare always uppermost in their minds, there were obviously ambivalent feelings. Reality factors, such as the lack of resources and knowledge that Marjorie was not being helped to utilize her potentialities to the fullest, served as a constant source of frustration to them. It was difficult, especially for her mother, to accept Marjorie's limitations.

Marjorie's adjustment at Lakeville was good, and this was maintained after discharge, when she returned to her home. Though it was difficult to understand her speech, the worker found her more aggressive and more mature as a result of the program of care at Lakeville. Her mother seemed to have a more realistic understanding of her limitations and was able to accept them with less emotion. The discharge, being medically recommended but at the same time upsetting to the parents, involved case work services which seemed to help the parents in their acceptance of the situation. The same applies to Marjorie and her understanding of the situation.

The present attitude of Marjorie and her parents, due in no small way to what they feel was accomplished at Lakeville, can best be described by the word "faith" - faith that something can and eventually will be accomplished. Marjorie

and her mother are devout in their religious beliefs, and this seems to play a significant role in the adjustment of each.

The relationship between Marjorie and her parents seems to have improved a great deal. The parents include Marjorie in all their activities in their home or outside, whenever this is possible. When friends come into the home, she enjoys it immensely. However, frequent association with girls of her own age is recognized by Marjorie as one of her paramount needs.

Despite the care she has received during her lifetime, there has been relatively little improvement in her physical condition, and her handicap is still of a very severe nature. She cannot carry on activities in the home and her recreational outlets are extremely limited. With her parents having to do so much for her, there are bound to be indications of overprotection.

The effect of efforts that have been made, in addition to the actual services provided and accomplishments realized, has been to give Marjorie and her parents what might be best described as a new lease on life. They feel that more has been accomplished in the past year than in any other year Marjorie has been at home.

Marjorie represents a case of cerebral palsy in which the extent of physical involvement could not be too much

greater, and in which many problems have been encountered. Yet, because of her own personality strengths and her determination, she has been able to make a good adjustment throughout her life.

Case No. 2 - Joseph Dorne

Joseph, now ten years old, is the youngest child of a middle-aged mother widowed in 1948, and left with Joseph and his four brothers and two sisters. The degree of physical involvement is moderately great, with a diagnosis of cerebro-spastic palsy, quadriplegia, and coxaplasia.<sup>1</sup>

In this case, there was a question of the condition being secondary to infantile jaundice, and later it was discovered that Mrs. Dorne was Rh negative and Mr. Dorne Rh positive. Other than whooping cough at an early age, and the necessity of blood transfusions at birth, there were no other known complications.

Joseph was extremely slow and retarded in motor development and movement. He did not begin to walk until the age of three, and from the beginning had a stumbling-type gait, which became progressively worse with a limp in the right leg. At the age of five, he fell while at school, which seemed to result in greater incoordination of his gait and increased limp.

Prior to his admission to S.C.C. clinic in November, 1947, he had received no regular medical supervision, with the exception of one visit with a neuro-psychiatrist in October of the same year. Apparently, Joseph suddenly became unable to walk for no obvious reason. After treatment, he started to walk again in a week, but when this proved temporary, he was admitted to S.C.C. clinic through the interest of the local school nurse.

Joseph had been attending school for a year, but his rate of learning was extremely slow. His teachers were naturally concerned, not knowing what they could do

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<sup>1</sup> A condition involving bone and cartilage at the head of the femur, characterized by atrophy during the age of growth.

for him within a large group of children without physical or mental retardation. They felt that because of his condition he was excitable and nervous, and not yet ready for this experience. He had begun school at an early age, especially in view of his physical and mental limitations. Mrs. Dorne was considered by school authorities to be very cooperative, capable, and understanding, despite the necessity of supporting a family, at this time, through her own efforts.

In June of 1948, neurological and psychological evaluation was recommended by the clinic consultant, and it was on the basis of this evaluation that the diagnosis of cerebral palsy was made. Evaluation revealed that Joseph seemed to do all that was within his ability, but that he was immature and that a specialized placement might be very beneficial. There was poor motor coordination and difficulties in hand dexterity. His speech was very poor, and this appeared to be due, in part, to physical involvement, but also, to lack of practice. There was considerable discrepancy between his performance on verbal and non-verbal items, with non-verbal results higher. His ability to respond to directions and instructions was poor.

Though Joseph enjoyed schooling, and associated easily with the other children, it was considered quite probable that he would never be able to get along in a regular class setting, and that eventually he would be special class material. Mrs. Dorne could neither fully understand the situation nor accept it realistically at the time.

While under clinic supervision, the attempt was made to treat Joseph, partially at least, by bed rest, which in his case was necessary. Though Mrs. Dorne put a great deal of effort into it, she found it difficult to enforce medical recommendations. He was not cooperative, and it was difficult to keep him in bed despite the efforts of Mrs. Dorne and the other children to keep him amused and interested.

Within the limits of her abilities, Mrs. Dorne was a capable woman who did well in the management of such a large family, and who followed as completely as possible, medical and physical therapy instructions. Though she recognized that Joseph was slow, and different from other children, the diagnosis of cerebral palsy was shocking to her, and it was extremely difficult for her

to accept its implications. When Lakeville was discussed as a suitable placement, his mother was ready and willing for Joseph to be admitted, even though she recognized that it would be emotionally disturbing to part with him, as home and family ties were very strong. Actually leaving him at Lakeville was very upsetting to her, though he seemed to accept the placement and transition quite easily.

Joseph was admitted to Lakeville in September 1948, at the age of six, before the Cerebral Palsy Unit had been officially opened. He was discharged in March 1951, at the age of eight, having received a total of 901 days of care. Originally in another ward, he was transferred to the Cerebral Palsy Unit during its opening month, January 1950.

At the time of his admission to Lakeville, Joseph still had a rather severe speech defect, and a quite spastic gait. Initially, he was treated by bed rest and daily muscle training, relaxation, and breathing exercises. As his condition improved, he was gradually allowed to be up and given an intensive program of physical therapy, speech and occupational therapy, and school work. By the time of discharge, he was up and about "ad lib".

In speech therapy, Joseph showed tremendous improvement. In the beginning, however, this improvement was of a very gradual nature. It was discovered that he had a moderate hearing loss of congenital origin. When this was corrected through the use of a hearing aid, the rate of improvement was quickly accelerated.

In physical therapy, he received an intensive program of relaxation exercises, stretching, muscle training, and extensive walking practice. As a result, there was considerable improvement in this area also.

In occupational therapy, he responded well to the group program, and through remedial measures and practice, with the individual attention that was possible, there was improvement in the control and dexterity of the hands and fingers.

In his first year at Lakeville, Joseph was put in the regular first grade, where his progress was slow. In his second year, he was put in the second grade special class. In this setting he showed more improvement,

GRAPH II

Fluctuations in Developmental Progress While in Cerebral Palsy Unit at Lakeville State Sanatorium

| JOSEPH DORNE          |   | DATE    |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|---|---------|----------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| (PATIENT'S NAME)      |   | 7/25/52 | 10/14/52 | 1/9/53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AREA RATED            | RATING  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Is Child:             | Excited   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Quiet   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Subject to tantrums   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Speech:               | Articulate  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Inarticulate  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Lisp  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Stutter   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Mute  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can Eat:              | Unaided   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With Help   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Must be fed   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Difficulty in swallowing                                      |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can Drink:            | Unaided   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With help   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Hold glass  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Use tube  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Drools:               | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Occasionally  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | All the time  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can dress:            | Unaided   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With help   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Entirely dependent  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can button clothes:   | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can tie shoes:        | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can use toilet:       | Alone   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With help   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Bed pan only  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Incontinent   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Is able to walk:      | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | In walker or chair  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With braces   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gait:                 | <b>Abduction of right foot and stiff right leg with limp.</b> |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Can Sit:              | In bed only   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | In chair  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Is child:             | Shy   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Cooperative   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Uncooperative   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Play activity:        | Constructive  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Destructive   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Group participation:  | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dexterity Right:      | Good  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Poor  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | None  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dexterity Left:       | Good  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Poor  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | None  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rec'd reg. schooling: | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade equiv.:         | 1   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Write:                | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Read:                 | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spell:                | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arith.:               | Yes   |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No  |         |          |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1 Regular first grade and later second grade.

and with individual attention, was able to progress at his own rate. By the time of discharge, he was doing work, in some areas, on the third grade level, and it was evident that he was interested and capable of learning. However, because of his handicap and very short attention span, it was felt that special class instruction after discharge would be more beneficial.

In the early part of Joseph's stay at Lakeville, it was recognized that he did have an adjustment problem, but the source of this difficulty was not known. He was very timid and shy, with a rather pronounced inferiority complex. It was later realized that his hearing difficulties had largely been responsible. When this was corrected there was a considerable change, with the result that he made a very good adjustment to the total program, to his therapy programs, and to the staff and other patients.

Discharge was recommended when it was felt that Joseph had gained maximum benefits from care and treatment. It was felt that very satisfactory progress had been achieved, and that improvement would continue after discharge.

After discharge, Joseph returned immediately to his home, and apparently, his readjustment to the family group was accomplished quite easily and without difficulty. He was happy to be with his mother and siblings and they were pleased to have him home.

The public school authorities decided to place Joseph in the regular second grade, as the teacher of this class was friendly with both Mrs. Dorne and Joseph, and it was felt that it would be a better means of evaluating the total situation. However, Joseph was not promoted, apparently because the class was extremely large, and there was little opportunity for individual attention. Presently, he is doing work on the third grade level. His school work is still slow, with a great deal of effort required on his part. He is doing passing work however, and this seems to please him greatly.

Though he has been out of Lakeville for over two years, his speech is still somewhat of a problem. He is now receiving speech therapy once per week from a private therapist, to whom his response has been good. Under this program, his speech has continued to show improvement. With the exception of the speech difficulty, he

is otherwise doing quite well physically. There is still evidence of physical involvement, particularly spasticity, but he is now walking and running without difficulty.

His relationship with other members of the family seems to be good. He participates in family activities, gets along very well with his mother and siblings, and enjoys doing his share of work in the home. He has several close friends in the neighborhood, and is normally active in their play activity. He hopes to join the Boy Scouts as soon as he is old enough.

#### Interpretation

As can be seen in the case presentation, maternal attitudes before Joseph's admission to Lakeville were not completely favorable. Though there was complete devotion, it was difficult for Mrs. Dorne to accept fully the implications of the diagnosis, in addition to having heavy responsibilities. Also, there were indications of overprotection resulting from her own anxieties.

These factors, along with a hearing loss that went undetected, would seem to have been largely responsible for the fair adjustment that was made by Joseph before his admission to Lakeville.

In addition to the marked progress physically, which Mrs. Dorne attributes to his experience at Lakeville, Joseph was given the opportunity to develop all his potentialities to the fullest. A speech difficulty in itself presents tremendous problems in adjustment, but when coupled with a hearing defect, problems can be anticipated. As soon as this

hearing loss was corrected during his stay at Lakeville, there was a marked change in his progress and general adjustment.

That Joseph has been able to maintain a good adjustment, despite physical involvement, seems to be due to several factors. His progress at Lakeville gave Mrs. Dorne new confidence, with the result that her present attitude seems to be much more realistic and normal. More significant, Joseph's physical and emotional capacities for normal living have been appreciably enlarged. While at Lakeville, he was away from a very protective situation, and permitted to develop.

One cannot help being impressed with Joseph's sense of humor, his smiling countenance, and the impression that here, after all, is a pretty average, happy boy.

#### Case No. 3 - Fred Stearns

Fred is one of twin boys, and with his brother, is next to the youngest in a family of seven children of middle-aged parents. The degree of physical involvement is moderately great, with a diagnosis of cerebrospastic palsy, hemiplegia, right.

Fred, along with his twin brother, was born prematurely at the end of an eight months' pregnancy. Labor lasted for several hours, but there were no known difficulties and delivery was normal. As far as is known, the pre-natal and neo-natal periods were without complications. By the time he was fourteen months old, his parents had become concerned over his slow rate of development, as compared with his twin brother. He was not growing and behaving as his twin brother was, could not sit up well, and could not stay in an upright position or bend forward without support.

When he was twenty-one months old, he was admitted to S.C.C. clinic. It was at this time that a diagnosis

of cerebral palsy, due to cerebral hemorrhage, was made. Supervision by this clinic continued on a regular basis, with physical therapy, consisting of stretching and walking exercises, being given in the home whenever possible.

At the age of three years, he was admitted to the orthopedic service of a children's hospital for lengthening of the right heel cord. Hospitalization was for a period of two months, and rather than being returned to his home, a few months of convalescent care in a specialized home for children was provided, where adequate supervision could be given. Following this, Fred was followed at a children's hospital, receiving physical therapy on an out-patient basis. By this time, he was doing fairly well. Supervision was continued under S.C.C. clinic until Fred was ten years old.

He returned to the clinic program again in 1950 at the age of twelve, after a lapse of over two years. The doctors felt that there could be considerable improvement in the functioning of the right hand through surgery. Also needed was an intensive and closely supervised program of physical therapy, regardless of whether or not there was an operation. This was something that could not be realized while Fred was in the home. Lakeville was recommended as a placement, and this plan was accepted by both parents who felt that they could not give him the needed treatment, and by Fred as well. At this time, Fred, along with his twin brother, was repeating the fifth grade in public school, where his work continued to be poor, in spite of what was considered to be normal intelligence and articulation of speech.

In terms of the parents' relationship with and attitudes towards Fred, there are certain reality factors that must be examined. First, Fred was only one child in a large family, and it was difficult for the parents to give him the type of individual attention that was needed in order for him to do his exercises and to carry out medical recommendations.

Fred was admitted to Lakeville in December, 1950, at the age of twelve years, and discharged in August, 1951, at the age of thirteen years, for a total of 256 days of care. During his stay, Fred received an intensive program of physical therapy, occupational therapy, and school work, and was up and about "ad lib".

In physical therapy, treatment sessions consisted



of baking, massage, muscle training, et cetera, on an average of three times per week. There was no appreciable return of power to the muscles of the right upper extremity, and the orthopedic consultant felt that little or nothing could be accomplished by surgery.

In occupational therapy, emphasis was on the utilization of those activities that would encourage the use of the right hand and arm, and there was some improvement in this area. However, Fred depended largely on the use of his left arm and hand, and through practice, learned to compensate for the right arm and hand in many areas.

In his school work at Lakeville, he showed considerable improvement, probably because of the individual attention he received. He did well in reading and spelling, and showed much progress in arithmetic. He liked school and was diligent in his efforts. At the time of discharge, it was felt that he was ready for sixth grade work.

Discharge was recommended when it was felt that Fred had realized maximum benefits from the program of care and treatment.

At Lakeville, Fred's general and social adjustments were good. He had a very pleasant and constructive outlook on life, was ambitious, and generally had an excellent attitude. He was active in the Boy Scout troop and similar activities. He assisted other patients who were more physically involved than he, and seemed to have a natural inclination and liking for this type of activity. Towards the end of his stay, he anticipated his return home, looking forward to doing some farm work nearby his home, so that he could earn some money before returning to school in the fall. While at Lakeville, he enjoyed his contacts with the other patients, and made many friends during this period. Upon discharge, Fred returned to his home.

In the year and a half that he has been out of Lakeville, Fred has done quite well physically. His arm is still deformed, but he attends a treatment center conducted by the staff physical therapist and does his exercises faithfully. He is able to walk, run, and ride a bicycle without difficulty.

The family lives in a very isolated part of the state, with no neighbors within an area of several miles.

Fortunately, Fred's relationship with his parents and siblings seems to be very positive. Most of his recreational activity is carried on out-of-doors with his brothers. When in the home, he has his own interests, as well as those that he shares with the other members of the family.

He is now in the seventh grade in public school, gets along well in the classroom, and with his twin brother, is doing satisfactory work. He seems to accept his physical handicap fully, and apparently, it has not been disturbing to him to have but limited use of one hand and arm.

#### Interpretation

Before Fred's admission to Lakeville, both Mr. and Mrs. Stearns appeared interested and well-meaning, but reality factors, either singly, or in combination with emotional factors which might have been in effect, prevented them from carrying out medical recommendations. Because of the isolated location of the home, regular supervision of therapy in the home by members of the clinic team was not possible. As a result, Fred's physical progress was not as marked as it might have been under other circumstances.

There are many areas in which nothing is known of Fred's general adjustment before his admission to Lakeville. However, on the basis of what is known, it would seem that his adjustment had been fair. In following through on physical therapy recommendations, he was not cooperative, even when he grew older and should have better understood what was involved. His school work had been very poor, even though he apparently had the mental capacity for improved work. He was becoming

more aware and self-conscious about the deformity of his right upper extremity, and frequently tried to hide it. This was probably a source of many of his difficulties, along with seeing that he was not developing physically as was his brother.

Both Fred and his parents feel that his stay at Lakeville was an extremely beneficial experience, which has helped him to make a good adjustment since his discharge. To be certain, the amount of actual physical progress does not appear to have been too great. However, it is important that they feel something was accomplished. His social contacts before his admission to Lakeville were undoubtedly very limited because of the location of the home, and the experience at Lakeville seems to have contributed much in this area. It also provided him with a sense of the routine that is necessary for his rehabilitation, which he seems to have been able to carry back to the home setting.

For some time, he was disappointed because his arm was not operated on while he was at Lakeville, as he considered this one of the reasons for which he was admitted to this program. However, he now understands and accepts the reasons for which surgery was not performed.

Case No. 4 - Marilyn Anderson

Marilyn, now ten years old, is the only child of parents now in their thirties. The degree of physical involvement is moderately great, with a diagnosis of cerebro-spastic palsy, quadriplegia, athetoid. Marilyn was the third of four children born of a mother who is Rh negative and a father who is Rh positive, which resulted in the death of the other children.

Marilyn was considered to be perfectly normal by her parents until she reached the age of six months, when it was noticed that she could not hold a bottle or turn over without assistance. She was over two years old before she began to sit, and did not begin to walk or talk until she was over three years of age. During these first few years, while Mrs. Anderson worked, Marilyn was cared for by her maternal grandmother. Since that time, with the exception of the months in which she was at Lakeville, Mrs. Anderson has assumed this responsibility.

Before taking residence in Massachusetts, Mr. and Mrs. Anderson had Marilyn under the supervision of the S.C.C. program in another state, as well as a private orthopedist. She first became known to the S.C.C. clinic in Massachusetts in 1947, at the age of four. At this time, it was noted that she had no fixed deformities. The biggest difficulty was seen in her lack of motor control, for which, among other measures, corrective exercises were given. Also, there was rather severe speech involvement.

Clinic supervision under the Massachusetts S.C.C. program was continued until 1949, when, for several months, the family took up residence in a nearby state, where Mr. Anderson felt there were better employment opportunities. While in this state, Marilyn attended a school for crippled children and adults. She attended this program three mornings per week, and did quite well in this setting. Unfortunately, this had to be discontinued after a month or so, as Mr. Anderson's employment opportunities had not worked out as anticipated, resulting in financial difficulties for the family.

When Mr. and Mrs. Anderson returned to Massachusetts, they again had Marilyn placed under the supervision of the S.C.C. program. Lakeville was recommended as the type of setting which could offer Marilyn the benefits of more intensive speech therapy and physical therapy. There was complete acceptance of this plan by the parents.

who realized that the community did not offer those facilities which were needed.

During the time in which the family was known to the clinic staff, prior to Marilyn's admission to Lakeville, her parents were considered to be devoted to her, and capable and cooperative in carrying out medical recommendations. They also seemed to be realistically aware of her limitations and needs. Though they were hopeful that Marilyn would improve at Lakeville, they understood the necessity of a three months' trial period, with the understanding that she could remain longer if she continued to benefit.

She was admitted to Lakeville in January, 1950, at the age of six and discharged in December, 1950, at the age of seven, for a total of 304 days of care. At the time of admission, she could walk fairly well, and even had learned to do simple errands for her mother. There was marked athetosis in the upper extremities, which resulted in difficult control and clumsiness of the arms and hands. She involuntarily tore her clothing and pulled off buttons when attempting to dress herself, and she needed help in eating. There was a moderate degree of spasticity and her speech was quite inarticulate.

During her stay at Lakeville, Marilyn received an intensive program of habit training, speech therapy, and physical therapy, consisting of daily gait training and relaxation exercises, along with other corrective measures. She also participated in the school and occupational therapy programs. Except for being confined to bed for several episodes of upper respiratory infections, and attacks of tonsillitis, she was up and about "ad lib".

In the first few months of her stay, Marilyn showed considerable progress in many areas. In occupational therapy, there was improvement in the use of the buttoning board and other such apparatus, resulting in improved dexterity of the upper extremities.

In speech therapy, there was consistent and steady progress in her efforts in speech correction, which carried over to regular speech. For no apparent reason, there was some regression, and it seemed as though she had reached a temporary plateau.

In the school program, Marilyn began work on the first grade level, but it was discovered that this was beyond her mental capacities. She was therefore placed



in the pre-primary group, where her progress was slow but of a satisfactory nature.

Initially, Marilyn's adjustment on the ward was only fair. She appeared to be somewhat excited and nervous when playing with other children, but these symptoms disappeared gradually, as did her dependence and excessive craving for attention. However, her over-all adjustment was good. She got along well on the ward, joined freely in group activities, and appeared to be very happy and contented. Her response to the therapy programs provided was very positive .

As indicated earlier, it seemed that Marilyn had reached a plateau, and towards the end of her stay, there was no appreciable physical progress. Her mother was disturbed by this, and in conference with the medical staff, it was agreed that discharge would be medically advisable, as it seemed that maximum benefits from training and treatment had been realized. There was the understanding that Marilyn could return again in a year or so if this was medically advisable.

By the time of discharge, Marilyn's speech had become more articulate. She had learned to eat and drink unaided, to use the toilet by herself, and to dress with help. She was able to walk quite well, and generally was much more independent. After being discharged from Lakeville, she returned to her home, and shortly afterwards, the family moved to another state.

Upon returning home, Marilyn started receiving home instruction. She was able to do first grade work satisfactorily, which of course pleased her parents. Now out of Lakeville for  $2\frac{1}{2}$  years, she is attending the first grade in public school, and is doing quite well. She responds favorably to her teacher, enjoys her contacts with the other pupils, and her speech, though still somewhat inarticulate, has shown considerable improvement as a result of this experience. She has learned to write some, but reading is her favorite subject.

Marilyn has many friends, in and out of the school group, whom she visits, and who visit her in the home. Parental attitudes would seem to be very favorable, with the attempt being made to provide a normal-like and wholesome setting for Marilyn.

Last year she attended a camp for crippled children, and apparently enjoyed this experience. According to

Marilyn, she is looking forward to repeating it during the coming summer.

Physically, Marilyn is now doing quite well. She has received no regular medical care or therapy since her discharge from Lakeville. She now walks very well, eats and dresses completely by herself, and generally is very active physically. According to Mrs. Anderson, her attention span has increased considerably.

### Interpretation

As far as can be determined, Marilyn's adjustment before entering Lakeville was good. She was a very responsive child, interested in things about her, and considering her below normal I.Q., she did very well. Undoubtedly, one reason for this was favorable parental attitudes. All indications were that her parents had provided her with a secure and serene emotional atmosphere, with their planning and activities geared to Marilyn's needs and abilities. Mrs. Anderson sometimes questioned whether or not she had spoiled Marilyn, but this did not appear to have affected their relationship.

When we consider the very limited opportunities for social contact that she had before admission to Lakeville, it is not surprising that Marilyn's initial adjustment at Lakeville was rather difficult. In addition to normal dependency and attention needs, leaving home for a girl of this age was understandably a traumatic experience. Once she had gained security in this new setting, she was able to respond and to make a good adjustment.

Mr. and Mrs. Anderson feel that Marilyn profited a great

deal from her experience at Lakeville, especially in the first few months, in such areas as speech and generally improved competency. The apparent plateau, in terms of her physical progress, and homesickness, were the reasons given by the parents for their instigation of discharge planning. Yet, they feel that Marilyn's physical progress while at Lakeville was marked, and served as the groundwork on which she was able to build and to make continued progress.

It is rather unlikely that Marilyn would have the physical, social, and emotional capacity for nearly normal living that she now has, without having had the opportunity to benefit from a program of total care.

#### Case No. 5 - Joanne Abbott

Joanne, now eight years old, is the older of two children of middle-aged parents. The degree of physical involvement is great, with a diagnosis of cerebro-spastic palsy, quadriplegia, with athetosis.

She was born at the end of a full-term pregnancy. Labor was two weeks late in starting, and when induced, lasted for eighteen hours. Manual rotation and forceps were necessary for delivery. After birth, she required oxygen, and for the first four days, was in a state of coma.

At the age of one, when her parents became concerned about her development, Joanne was admitted to a children's hospital, where a diagnosis of mental retardation, due to birth injury, was made. At that time, she had just begun to sit up and hold her head erect with difficulty. She was seen again at the age of two, when the diagnosis of cerebral palsy was made. It was then noted that she had learned to sit up on her own, there had been improvement in her speech efforts, and there seemed to be improvement in her general emotional status. Physically, however, there was a generalized lack of purposeful

carrying out of coordinated and associated movements and marked facial grimacing.

At the age of three, she was placed in a hospital-school, but was removed by her parents when the hoped for program of physical therapy was not provided.

Joanne first became known to the S.C.C. clinic when she was four years old. At this time, the only contracture was in her heel cords, with most of her difficulty being due to spasticity. It was felt that muscle training to the legs and upper extremities might lead to improvement, since she was considered to be of normal intelligence. She was not able to walk or feed herself, but was very responsive. Mrs. Abbott had requested care under the clinic program because of local confidence in the clinic consultant.

It was felt that Mrs. Abbott, a registered nurse, had had difficulty in accepting her daughter's limitations. Both parents directed all their efforts to helping Joanne utilize those capacities that they believed she possessed. Naturally, they were eager to cooperate with medical recommendations. They seemed intelligent and resourceful, and it was felt at this time that their outlook was somewhat more realistic. However, the physical therapist and the medical social worker seeing the family in the home, recognized that Mrs. Abbott needed a great deal of encouragement. She became depressed easily, especially when she felt that she could not adequately carry through on the physical therapy program outlined for her.

In 1949, Mrs. Abbott became pregnant again, and found that caring for Joanne, now four, was becoming increasingly burdensome, as she demanded so much physical care and attention. Psychological study revealed that Joanne was an excellent candidate for nursery school despite her serious motor handicap. In this setting she was responsive, pleasant, conscientious, and eager to do well. As a result of this experience, it was felt that she had normal intelligence.

Following this, it was felt by her parents that Joanne could profit from an institutional placement. The family doctor had informed the parents that it would be increasingly difficult to provide care for her in the home, and that Joanne, because of her speech and motor involvement, would never be accepted by a group of normal children. Around this time, the Abbotts had legal diffi-

culties around a housing situation, and Mrs. Abbott became extremely antagonistic. Her feelings were revealed when she said to the medical social worker, "I'm not going to take Joanne back to clinic and have people just look at her," and she was completely frustrated about future planning for her. She felt that no one was really interested in Joanne, and that people were critical of her, who, as a nurse, should have been able to do everything for her daughter, whereas she actually felt quite helpless. She had no outside activities or interests, developed a case of hives, and for a while it was necessary for Mr. Abbott to assume responsibility.

When the clinic consultant indicated that Joanne was a good candidate for Lakeville, her parents readily accepted this plan. Mrs. Abbott's attitudes towards Lakeville were completely favorable. Both parents were anxious for her to have this opportunity, understanding that it was on a trial basis, but that it would continue as long as she continued to benefit from treatment.

Joanne was admitted to Lakeville in January, 1950, at the age of five, and discharged in December, of the same year, at the age of six, for a total of 343 days of care. At the time of admission, her only real means of locomotion was crawling about on the floor with extremities outstretched. During her stay at Lakeville, she was subjected to attacks of upper respiratory infections, but except for these periods, was in a play pen and later in a walker or wheel chair "ad lib". She was given an intensive program of physical, occupational, and speech therapy, and participated in the school program.

In both physical and occupational therapy, there was but minor improvement, though various measures were used. Braces for the lower extremities were in the process of being made, but were not completed when Mrs. Abbott had Joanne discharged. She still required help in eating and drinking, could not dress, or use the toilet without help. Despite so little progress, her response to these programs was excellent. In speech therapy there was some improvement that carried over into regular speech.

She started in the school program in September, doing first grade work. She showed interest, and learned to read on the primary level, but could not do written work. Her attention span was good, but because of the severity of her condition, progress was not marked.

Joanne's general adjustment at Lakeville was good.



Not only did she respond favorably to the therapy programs, but her adjustment on the ward and her ability to relate to other patients and staff personnel was good. She appeared perfectly happy and contented during her stay, and had a remarkable sense of humor for a girl of her age.

During her stay at Lakeville, her parents visited frequently. Mrs. Abbott wrote to and talked with the doctors, indicating that she felt treatment should be of this or that nature. She was pleased with the care that had been given, but in terms of treatment, felt that there had been little progress, and even regression. Finally, at the request of the parents, she was discharged against medical advice.

After discharge, Joanne returned to her home. Arrangements were made by the parents to have her admitted to a private hospital-school, and in the 2 years, 4 months she has been out of Lakeville, there has been no further contact with the S.C.C. program. In this setting, the program of therapy is similar to that which she received while at Lakeville. She is now learning to walk with the use of crutches, but a walker is still her primary sense of locomotion. Her speech has improved, and she has learned to dress and feed herself.

According to her mother, Joanne is doing second grade work, and doing it well. She participates regularly in a recreational program and enjoys attendance at this institution, particularly her contacts with other patients of her own age.

During the winter, Joanne is home one week-end per month, and during the summer, two week-ends per month. At home, she relates very well to other members of the family, and seems to enjoy these visits. According to the parents, she is always in good spirits.

#### Interpretation

Considering all factors, it can be seen that parental attitudes were not favorable. Outwardly, Mrs. Abbott showed much love for Joanne, but her feelings of helplessness, increased by the fact that she was a nurse, led to partial re-

jection, probably based on resentment and guilt feelings. Mr. Abbott was able to take real initiative and assume an aggressive role only when Mrs. Abbott's own condition prevented her from assuming responsibility. Yet, in spite of these factors, it would seem that Joanne had been able to make a fairly good adjustment before admission to Lakeville. Her speech was but slightly understandable, she was faced with the problem of seeing her baby brother learn to do those things which she was physically unable to do, but still was a responsive, interested little girl. With this in mind then, it would almost seem to follow that she had the potentialities for making a good adjustment at Lakeville, and for making a favorable response to this program, emotionally if not physically.

Fortunately, the nature of the discharge probably had but little effect on Joanne, though if she had remained in the home, the results might very well have been different. It would have been difficult, if not impossible, for Mrs. Abbott to conceal her real feelings.

Mrs. Abbott, who is now quite active in community affairs, especially those concerned with cerebral palsy, has an above average intellectual understanding of this condition. However, she does lack insight into her own feelings and emotions. While Joanne was at Lakeville, Mrs. Abbott wanted her up and about more, and despite the efforts of the doctors and the

medical social worker, she could not accept the fact that the exercises and treatment Joanne was receiving had to be on a very gradual basis, and that unlimited activity or pressure could have a negative effect. At that time, it was not Lakeville's policy to allow children home for Christmas vacations, which frustrated Mrs. Abbott, and was probably the final factor precipitating Joanne's discharge against medical recommendations. Mrs. Abbott's relationship, both with the medical social worker at Lakeville and in the District Office, was good during this period, but because of her own anxieties, she could not see the manner in which her own feelings were affecting her planning for Joanne.

Even now, she cannot see that the basis for improvement that has taken place more recently, was partially due to preliminary work done at Lakeville, and despite her pleasure with this recent progress, her attitude, openly verbalized, is one of "what's the use in it all". It is perhaps fortunate that Joanne is in another medical care setting, instead of in her own home, where she can be away from such unfavorable attitudes, and permitted to develop her potentialities to the fullest possible extent.

Case No. 6 - Joan Martin

Joan, now eight years old, is the second of three daughters born to parents now in their thirties. A diagnosis of cerebro-spastic palsy has been made, but its most obvious manifestation is a severe speech defect.

Joan was born at the end of a full-term pregnancy, but there was a threatened miscarriage at six months, and the entire pregnancy was complicated by vaginal bleeding. Instruments had to be used for delivery, but apparently, breathing was begun without difficulty.

Her general rate of development was very slow, but not so slow as to alarm Mr. and Mrs. Martin excessively. They first became concerned when Joan, at the age of three, could say "mom-mom" and nothing else. Sphincter control was not achieved until the age of four.

Mr. and Mrs. Martin had Joan examined at a general hospital at the age of four, because of their concern with her speech. At this time, there appeared to be a fine tremor of both hands, but this disappeared with their use. Except for the absence of speech, no other difficulties were detected. Joan was attending kindergarten, and apparently was fitting into this program quite well. Her parents were advised to have her continue in this and to encourage such activities as singing and reading aloud to help stimulate speech development.

She was admitted to S.C.C. clinic in December, 1950, and the only real difficulty noted at this time was in the area of speech. Joan, attending first grade at the time, was reported by the parents to be having many difficulties. The clinic's speech therapist, recognizing the need, suggested psychological evaluation. Also, neurological evaluation was recommended by the clinic consultant.

Evaluation revealed that Joan attempted to use words, but was only able to babble. She showed nervousness and trembled under strain. It was felt that she enjoyed herself, despite her inability to be understood. It appeared that she understood everything that was said to her, responded within her limits, and was diligent and patient in most tasks. She was very friendly, eager to please, and to show her abilities, which, along with comprehension, were considered to be close to average. The neurologist noted a certain clumsiness in certain

activities, such as in playing ball. Many of her reactions were slow, and her gait was somewhat awkward. Defect in motor performance was involved, particularly in the muscles of the face and of speech. It was felt that there was little evidence of intellectual impairment. However, because of the severity of the speech difficulty, it was recognized that she should be protected, insofar as possible, from the ridicule and cruelty of her peers, which had been encountered earlier in the public schools.

The clinic's medical social worker found the public school teachers very interested in Joan, but puzzled by the way in which they could best plan for her. She had related well to the teachers, but experienced difficulties in her social relationships with other children. The parents felt that the teachers were most cooperative and understanding, but they were concerned, fearing that Joan would be completely out of step with her school group. In view of psychological and neurological evaluation, the severe speech involvement, and difficulties she had experienced in her relationships with other children, it was felt that Lakeville would be a good placement for her, and that such an experience might be very beneficial, with speech training the principal goal. This plan was readily accepted and agreed to by her parents, who admittedly could not have accepted it a year or two earlier, and before every effort had been made to help Joan through local community resources.

She was admitted to Lakeville in December, 1951, at the age of six, and discharged in May, 1952, at the age of seven, for a total of 172 days of care. During her stay at Lakeville, Joan was up and about "ad lib". There was no physical therapy, as the need for such was not indicated. However, considerable attention was given to her school work, and an intensive program of speech therapy was initiated. Occupational therapy was also given.

A psychological evaluation made at Lakeville, about two months after admission, revealed that Joan seemed to act somewhat older than her age. She was helpful and sociable on the ward, but seemed to prefer the company of older patients. However, the specific demands of the testing showed her to be quite immature and lacking in the ability to give attention or to form abstract concepts. It was felt that her personality was a great asset, but that her place as "baby" in the Cerebral Palsy Unit did not afford the opportunities for development that perhaps would have been realized if contact was with

children more nearly her own age. Her I.Q. was considered to be in the upper sixties.

On admission to Lakeville, Joan entered the first grade. However, after a period of instruction at this level, no progress was made. She had learned to copy letters for example, but could not recognize them. Instruction was discontinued when it was learned that she was not yet ready. To make demands more closely within her abilities, she was transferred to the pre-primary group. Even at this level, there was no remarkable progress, and at discharge the recommendation was made that she receive home instruction.

Initially, the concensus was that Joan would do extremely well in speech therapy. She responded very well to this program, and though progress was extremely slow and fluctuating, there was some improvement. It was recognized however, that speech therapy would have to be continued after discharge, as regression, on a physical basis, could take place very easily.

In occupational therapy, there was improvement in the dexterity of the upper extremities.

Generally speaking, her adjustment to the ward group, the over-all program, and therapy provided, was good. She related well to other patients and to staff members, was described as a "good little worker", cooperated fully within her limits, and tried to gain as much as possible from this experience.

After her discharge from Lakeville, Joan returned to her home, and in the year that she has been out at Lakeville, it would seem that a good adjustment has been maintained. Clearly, one of her major problems is lack of association with girls of her own age. Presently, there are no adequate resources for speech training, with the result that speech improvement realized at Lakeville has been lost. Consequently, she is not able to attend public school, and unfortunately, there are no special class programs geared to meet the needs of girls of her age. Joan has been receiving home instruction, has related well to her teachers, and is doing work commensurate with her abilities. Her relationship with her parents and two sisters is good, and seems to have improved since her discharge from Lakeville.

### Interpretation

Considering the demands made on Joan, by severe speech involvement, her adjustment before her admission to Lakeville was good, which was maintained during her stay at Lakeville, and after discharge to her home. Of course, one factor behind this has been favorable parental attitudes. The interests of Mr. and Mrs. Martin definitely center in the home and around their children. They are interested and cooperative in any planning or recommendations made for Joan. Both are ambitious, hard-working individuals, who have done much to make their home pleasant and secure for Joan and her sisters. They have been intelligent in their care for Joan, and seem to have provided her with adequate opportunity for emotional growth and development.

In a case of this sort, it is possible to see the effect of severe speech involvement, even when other manifestations of cerebral palsy are not obvious. Joan had, and still has, the potentialities for relating favorably and in a positive manner, not only to various members of the family, but also to youngsters of her own age. However, because of the nature of the involvement, other children will not accept her, making her the brunt of their ridicule,

Mr. and Mrs. Martin feel that Joan profited a great deal from her experience at Lakeville, and both seem to have a good understanding of her limitations and needs. They talk

freely in front of Joan about her physical condition, which is probably not detrimental to her emotional state, and also about her mental limitations. One could readily question the effect that this might possibly have on her in the future.

Both parents are very active in community efforts aimed towards providing resources locally, that will give to Joan and other cerebral palsied children, a program based on their educational, speech, and emotional needs. When such is available, it would seem certain that Joan would be able to respond to and benefit from it.

CHAPTER VI  
CASE STUDIES OF INDIVIDUALS  
WHO HAVE MADE A FAIR ADJUSTMENT

In this chapter, two cases are presented which, from evidence available, appear to be making a fair adjustment since their discharge from Lakeville. Both of these youngsters are now in their own homes. There are positive aspects in adjustment that is now being made by each, but there are areas in which they are still experiencing difficulties.

Case No. 7 - Donald Bates

Donald, now seventeen years old, is the youngest child of middle-aged parents, with two sisters and a brother. The degree of physical involvement is great, with a diagnosis of cerebro-spastic palsy, quadriplegia, athetoid.

Donald was born at the end of a full-term pregnancy by breech delivery, following fourteen hours of labor. Breathing had to be initiated by the use of a respirator, which had to be continued for several hours. Except for the fact that he was very weak and tired during his first few days, no neo-natal difficulties are known. He was not able to nurse however, and had to be given a prepared formula.

When he was nine months old, his parents became alarmed at his quietness and inactivity, and took him to a children's hospital. He was unable to sit up or hold his head erect; spasticity was quite pronounced. Muscle training was given regularly on an out-patient basis.

At the age of four, he was hospitalized for a period of three weeks. During his first few days on the ward, he cried almost incessantly and appeared to be unwilling to do anything for himself. He could sit with maximum support, but could neither stand nor walk without considerable help. His speech was inarticulate and he attempted to speak only infrequently. His only happiness seemed to be derived from being cuddled by those attend-

ing him. It was during this hospitalization that a diagnosis of cerebral palsy was made. These three weeks of intensive training effected considerable improvement, to the extent that he was able to feed himself, as well as perform other simple duties. A change of attitude and expansion of ambition was noted.

Subsequently, treatment on an out-patient basis was given at rather infrequent intervals, with the result that there was some increase in deformity. Because of the distance from his home to the hospital, Donald was admitted to the S.C.C. clinic at the age of eight. Initially it was felt, from the neuro-muscular point of view, that he would do quite well if mental deficiency was not too great.

Mrs. Bates was regarded as a very understanding woman, who had accepted his handicap, and who had stood up quite well under the strain of caring for him, considering the fact that he was almost completely helpless.

At the age of ten, he was started on the use of crutches, and after training, he improved to the extent that he was able to walk alone with their support only. Rather suddenly, he lost this ability and regressed to crawling or walking, with much assistance needed. There seemed to be no physical basis for this regression, and the clinic consultant felt that it was only a temporary loss. Mrs. Bates was very disturbed by this regression, and it was necessary for the medical social worker to interpret to her, give reassurance, and assist her in accepting his slow rate of development. Though the parents were very understanding and recognized the nature of Donald's handicap, they did need this case work support.

Before this regression, Donald had been receiving home instruction from a very capable and personally interested teacher, and had been doing very well, considering the nature of his handicap. It was recognized that he was more alert mentally than previously thought. Later, he began attending school on a half-day session basis. Though he did quite well, it required much from him physically, and it was felt that this might have been the basis for the regression. As a result, home teaching was again initiated.

Following this, there was some improvement in his walking and speech. Neurological evaluation, when he was ten years old, revealed that he was making good use

of his limited physical assets. Mentally and emotionally, his status was considered good. A psychologist who examined him at the same age, described him as "a boy who would be responsive, a good citizen, appreciative of the opportunities provided him, despite probable slow educational progress and discouraging vocational prospects". He showed dull-normal intelligence, with an I.Q. of 69. A hospital-school placement had been considered, but this was not advised because of the questionable progress that could be expected.

It was felt by the medical social worker and home teacher, that Donald needed, and might be able to profit by a group experience. It was recognized however, that the break from a protective situation would be difficult, not only for him, but for his mother as well. A four week placement at a camp for crippled children was arranged, with the cooperation of both parents. The medical social worker visited him at camp during the end of his stay. Apparently, he had fitted fairly well into the camp program, and the director felt that he had gained a great deal from contact with other children and a degree of competition with boys of his own age. Donald was very homesick at first, but the director felt that Mrs. Bates was at least partially responsible for this. She wept when it was time to leave him at the camp and showed excessive concern, fearing that he would never be able to get around on his tricycle, which, during this period, was his principal means of locomotion.

After returning home, Donald revealed that he did not want to go to camp again. One of the main reasons for this seemed to stem from his reaction to certain sex information and display of sex curiosities observed in relationship with other boys at camp. Perhaps it was pressure of this sort that encouraged him to learn to urinate alone, where previously, he had always relied on his mother for assistance.

Improvement in speech and walking, as witnessed in regular clinic visits, continued to be very slow, and the home teacher felt that Donald had received the maximum benefit from home teaching. During the early months of 1949, he became increasingly indifferent towards his school work. He became excessively concerned about his physical handicap, and was very sensitive to the limitations it imposed. He did not want to go out among people, even with his parents, and reached the point where he almost refused to leave the home during the daytime.

An earlier interest in radio and disc-jockeying became more pronounced. He followed professional broadcasting closely, and patterned his own "radio station" and "program". The parents, feeling that this was a wholesome outlet, cooperated with him to make it successful. According to the speech therapist, the microphone he had connected to the radio did help in speech training.

Both Donald and his parents became interested in the possibility of a specialized placement, and when Lakeville was recommended, they responded favorably, and readily accepted this plan. He was admitted in February, 1950, at the age of fourteen, and discharged in April, 1952, at the age of sixteen, for a total of 800 days of care.

At the time of his admission to Lakeville, Donald was barely able to take a few steps, and for all practical purposes, his only means of locomotion was the tricycle. An intensive program of physical, speech, and occupational therapy was initiated. His response to these was good, and the benefits derived quite marked.

Considerable improvement was noted in the area of speech. However, Donald's speech goals were extremely high, and practically beyond reach. He had no concept of what his limitations were. He developed aspirations of becoming a professional disc-jockey, and before he became obsessed with the idea, this was used as a motivating force. Working with him in speech became difficult, in that he expected much encouragement in terms of his radio aspirations, and when this encouragement was not given, he became difficult to handle. Along with the interplay of other factors, which will be discussed subsequently, there was some lessening of this type of behavior. There seemed to be the gradual development of an interest in speech for its own sake, and he was very pleased with his progress and ability to communicate clearly.

Progress in his school work was very slow. It was generally on the third to fifth grade special class level. He was interested in his school work, and appeared anxious to get ahead. His work in arithmetic was good, but in reading and other subjects, it was quite poor, and a great deal of individualization was needed. According to the teacher, he was inclined to be lazy at times. He tried to talk in a very mature manner and gave the impression of being brighter than he actually was.

GRAPH VI

Fluctuations in Developmental Progress While in Cerebral Palsy Unit at Lakeville State Sanatorium

**DONALD BATES**

(PATIENT'S NAME)

DATE

| AREA RATED            | RATING   | 2/20/50 | 6/5/50 | 9/1/50 | 11/10/50 | 1/10/51 | 6/1/51 | 9/19/51 | 12/6/51 |   |   |   |   |   |   |   |   |   |   |
|-----------------------|--|---------|--------|--------|----------|---------|--------|---------|---------|---|---|---|---|---|---|---|---|---|---|
| Is Child:             | Excited  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Quiet  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Subject to tantrums  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Speech:               | Articulate   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Inarticulate   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Lisp   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Stutter  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Can Eat:              | Unaided  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | With Help  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Must be fed  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Difficulty in swallowing                                   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Can Drink:            | Unaided  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | With help  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Hold glass   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Use tube   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Drools:               | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Occasionally   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | All the time   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Can dress:            | Unaided  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | With help  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Entirely dependent   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Can button clothes:   | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Can tie shoes:        | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Can use toilet:       | Alone  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | With help  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Bed pan only   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Incontinent  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Is able to walk:      | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | In walker or chair   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | With braces  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Gait:                 | <b>A waddling, shuffling type which steadily improved.</b> |         |        |        |          |         |        |         |         |   |   |   |   |   |   |   |   |   |   |
| Can Sit:              | In bed only  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | In chair   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Is child:             | Shy  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Cooperative  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Uncooperative  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Play activity:        | Constructive   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Destructive  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Group participation:  | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Dexterity Right:      | Good   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Poor   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | None   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Dexterity Left:       | Good   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | Poor   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | None   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Rec'd reg. schooling: | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Grade equiv.:         | 1  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Write:                | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Read:                 | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Spell:                | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Arith.:               | Yes  | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                       | No   | 1       | 1      | 1      | 1        | 1       | 1      | 1       | 1       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

1 Special class, third to fifth grade level.

Psychological evaluation towards the end of his stay at Lakeville, revealed that his mentality, in various areas, was on a nine to fourteen year level. Much of his thinking seemed to lack specificity and he appeared over-ambitious to the point where his appreciation of reality was questioned, which probably stemmed from a real lack of contact with the outside world. Also, it was felt that some of his fantasies interfered with the efficient use of the mental capacity he did have.

In the areas of occupational and physical therapy, there was considerable improvement. He learned to dress himself, tie his shoes, take care of his personal needs, and in most respects, became quite independent. There was constant improvement in his ability to walk and in stair climbing. While home on Christmas vacation in 1951, he walked alone, and without difficulty, to the corner store for his mother. This represented quite an achievement for him.

Surgical procedure on his right forearm resulted in considerable improvement in dexterity. He was also fitted to low oxford shoes, which, after wearing orthopedic boots all his life, did much to remove the stigma of his handicap.

Donald's social adjustment at Lakeville was rather poor. He was extremely shy and quiet at first, though he did respond to any attention that was given to him. After a three months' trial period he wanted to go home, but the medical social worker and his mother persuaded him to remain so that he could benefit from the care and treatment offered.

He remained aloof from the other patients, and was not interested in their games or conversations. Later, he was transferred from the Cerebral Palsy Unit to another ward, in an attempt to have him achieve a more realistic attitude and a healthier recognition of his handicap through the stimulation provided with boys of his own age. This was not to Donald's liking, and he could not tolerate the rough ways of the other patients or the language they used. He classified them as "rowdies" and completely ignored them.

Through the combined efforts of the medical social worker and other staff personnel, it did seem however, that Donald had benefited from the combined efforts to help him reach a more realistic understanding of his

limitations. Discharge plans were completed when it was felt that he had received maximum benefits from the treatment program. This was accepted realistically and without complications by both Donald and his parents.

After his discharge from Lakeville, Donald returned to his home. During the year in which he has been out of Lakeville, it would seem that he has continued to maintain a fair adjustment.

In his school work, he has been doing quite well. Immediately upon returning home, he started receiving home instruction by his former teacher. After several months, he started to attend special class three mornings a week, and during the afternoons of the same days, sat in with the regular seventh grade class as an observer. More recently, he has been attending the regular seventh grade class daily, for the entire day, participating in the program to the fullest possible extent, with special attention from the regular teacher and his former home teacher. He seems to enjoy the contact with normal children, and feels that it is far superior to home teaching.

Donald's interest in professional radio work increased when he returned home. He appeared as a guest on several radio programs, and was allowed to introduce a few records over the air. His temper flared when his teacher tried to bring him back to reality.

According to his parents, Donald wants to be "king of the roost". He often tells them they are no good which upsets Mrs. Bates but apparently does not affect Donald in the slightest. These incidents are precipitated whenever things do not go his way, or when he is not allowed to do the things that he wants to do. He was very resentful of his older brother, who finally enlisted in the Navy shortly after Donald's return home.

#### Interpretation

As can be seen, Donald's adjustment before his admission to Lakeville was fair, especially in the area of social contacts. Undoubtedly, many of the difficulties he encountered were based on severe physical involvement, but this does not

seem to explain it wholly. Even with physical improvement the nature of his adjustment seemed to be difficult. It was during this period that his interest in radio and disc-jockeying became pronounced.

Mrs. Bates was intelligent and capable in his care, and was aware of the involvement of her own emotions in planning for him. She recognized that she had been overprotective, and found it difficult to insist that Donald develop on his own to the fullest possible extent. She knew that Donald had to learn to do things for himself, and that a parent could do too much for a handicapped child.

When we examine his adjustment at Lakeville, it is interesting to note that he made a very favorable response to the therapy programs, but a very poor social adjustment. One reason for this might have been the fact that Donald, with the exception of two or three others whose physical involvement was greater, was older than the rest of the patients in the Cerebral Palsy Unit. However, even when this situation was remedied, he could not relate to other patients. In spite of the physical progress that was being made, he was still a very insecure boy.

Now, Donald and his parents feel that Lakeville is the "best thing that ever happened". Donald himself admits that he was lazy, and that the training he received helped him to overcome this by encouraging him to do things for himself.

Physically, the changes resulting from this experience are really quite remarkable. Yet, he still has very unrealistic ambitions in terms of his radio aspirations. Much of this probably stems from the encouragement he has had in this direction, for the purpose of providing stimulation for speech training. Then too, Donald is now at the age where he is considering his vocational future. Until there is the security that comes from knowing that he will be able to do something vocationally, after proper training, disc-jockeying is the only goal that he sees within his reach. Something of a more realistic nature has to be provided before this source of security is removed, even partially.

In terms of his relationship with his parents and brother, it would seem that Donald is now trying to test their love for him. His brother, more so than his sisters, is a source of competition. Besides his handicap, Donald faces the normal adolescent problems of independence and vocation. Being away from home for two years, in spite of knowing that it was for his own good, seems to have been regarded as rejection and proof that he wasn't loved. Now, home again, he wants to be shown, through complete acceptance, regardless of what he says or does, that he is wanted and does have a place in the family group.

Case No. 8 - Claire Strong

Claire, now seventeen years old, is the second of three children of middle-aged parents. The degree of physical involvement is great, with a diagnosis of cerebro-spastic palsy, quadriplegia, athetoid.

Claire was born at the end of a full-term pregnancy. Delivery was of an easy nature, and as far as is known, there was a normal neo-natal course and an absence of serious childhood diseases.

Mr. and Mrs. Strong did not notice anything abnormal or unusual about Claire's development or progress until she was six or eight months old. She had not learned to sit up or to do those things that her brother had been able to do at the same age. A private physician informed Mr. and Mrs. Strong that Claire, at the age of two, had rickets. At this age she was still unable to sit up without support. Her parents had her examined at a children's hospital, but their contact was of a very brief nature. With the exception of these contacts, and consultation at another hospital, Claire had no regular medical supervision before being admitted to S.C.C. clinic in April, 1950, when she was almost fourteen years old.

By that time, she had learned to walk by herself in the house, but only with great difficulty. Outdoors, she would not walk without a cane, as she feared falling backwards. She had been riding a tricycle since the age of five, and this was still one of her primary means of locomotion. She had learned to use the toilet by herself, had been trying to feed herself, but could dress only with a great deal of assistance. There was grimacing movement of the face and athetoid movement of the arms and legs. She was sensitive to noise and jumped frequently from noises in the clinic. Her speech was quite inarticulate.

Claire had been receiving home teaching since the age of six, and when she first came to clinic, was doing eighth grade work at home. She had learned to do her homework by striking the keys of a typewriter with the eraser end of a pencil.

Unfortunately, the attitude of her parents and siblings was such that it fostered her dependent nature. They readily recognized this, but as Mrs. Strong herself said, it was easier and quicker to feed Claire than it

was to teach her to feed herself and have to clean up after her. As a result, they felt that Claire was not doing all that she was actually capable of doing. It was recognized that she had a need for more positive relationships with children of her own age. Her parents had considered a camp placement as a possible means by which this could be achieved.

In her contacts with the clinic social worker, Mrs. Strong showed that she was aware of the fact that she and her husband, as parents, had delayed in seeking medical care for Claire. Ostensibly, they had accepted the idea that little could be done for her, and that she was their responsibility to care for. Mrs. Strong only casually mentioned the fact that she and the family were members of the Christian Science Faith. A neurological consultant, through his contact with Mrs. Strong, felt that she didn't think much of doctors and drugs. The possible use of drug therapy was suggested, but Mrs. Strong would have no "experimentation" on her child.

On the basis of psychological and neurological evaluation, it was felt that Claire's school work on the eighth grade level was due, largely, to the optimism and enthusiasm of the home teacher. The advisability of a program of total care had been discussed with Mr. and Mrs. Strong, who felt that such a plan would be best, if she could benefit by it. Through the evaluation, it was felt that Claire was a fairly alert and responsive girl, who understood quite well, and who would be able to function much more independently within the limits of her physical and mental ability, if she were away from the maternal apprehensiveness and overprotection in the home setting. This resulted in the recommendation that Claire be given the opportunity to benefit from the program of total care offered at Lakeville. Insofar as possible, she was prepared for, and accepting of this program of total care for a trial period, and even seemed to be looking forward to going to Lakeville.

Claire was admitted to Lakeville in August, 1950, at the age of fourteen, and discharged in July, 1951, at the age of fifteen, for a total of 334 days of care. She was started on an intensive program of speech, occupational, and physical therapy. She also participated in the school program. During her entire stay at Lakeville, she was up and about "ad lib".

In physical therapy, there was some improvement. Under supervision, she learned to walk without support

GRAPH VII

Fluctuations in Developmental Progress While in Cerebral Palsy Unit at Lakeville State Sanatorium

| CLAIRES STRONG        |  | DATE   |         |        |        |
|-----------------------|--|--------|---------|--------|--------|
| (PATIENT'S NAME)      |  | 8/1/50 | 11/1/50 | 2/1/51 | 5/1/51 |
| AREA RATED            | RATING   |        |         |        |        |
| Is Child:             | Excited  | 1      | 2       | 1      | 1      |
|                       | Quiet  | 2      | 1       | 2      | 2      |
| Speech:               | Subject to tantrums  | 1      | 1       | 1      | 1      |
|                       | Articulate   | 1      | 1       | 1      | 1      |
|                       | Inarticulate   | 2      | 2       | 2      | 2      |
|                       | Lisp   | 1      | 1       | 1      | 1      |
|                       | Stutter  | 1      | 1       | 1      | 1      |
| Can Eat:              | Mute   | 1      | 1       | 1      | 1      |
|                       | Unaided  | 1      | 1       | 1      | 1      |
|                       | With Help  | 2      | 2       | 2      | 2      |
|                       | Must be fed  | 1      | 1       | 1      | 1      |
| Can Drink:            | Difficulty in swallowing                                     | 1      | 1       | 1      | 1      |
|                       | Unaided  | 1      | 1       | 1      | 1      |
|                       | With help  | 2      | 2       | 2      | 2      |
|                       | Hold glass   | 1      | 1       | 1      | 1      |
| Drools:               | Use tube   | 1      | 1       | 1      | 1      |
|                       | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |
|                       | Occasionally   | 1      | 1       | 1      | 1      |
| Can dress:            | All the time   | 1      | 1       | 1      | 1      |
|                       | Unaided  | 1      | 1       | 1      | 1      |
|                       | With help  | 2      | 2       | 2      | 2      |
| Can button clothes:   | Entirely dependent   | 1      | 1       | 1      | 1      |
|                       | Yes  | 1      | 1       | 1      | 1      |
| Can tie shoes:        | No   | 2      | 2       | 2      | 2      |
|                       | Yes  | 1      | 1       | 1      | 1      |
| Can use toilet:       | No   | 1      | 1       | 1      | 1      |
|                       | With help  | 2      | 2       | 2      | 2      |
|                       | Bed pan only   | 1      | 1       | 1      | 1      |
|                       | Incontinent  | 1      | 1       | 1      | 1      |
| Is able to walk:      | No   | 1      | 1       | 1      | 1      |
|                       | In walker or chair   | 2      | 2       | 2      | 2      |
|                       | With braces  | 1      | 1       | 1      | 1      |
| Gait:                 | <b>Scissors, with assistance, and later with cane alone.</b> |        |         |        |        |
| Can Sit:              | In bed only  | 1      | 1       | 1      | 1      |
|                       | In chair   | 2      | 2       | 2      | 2      |
| Is child:             | Shy  | 1      | 1       | 1      | 1      |
|                       | Cooperative  | 2      | 2       | 2      | 2      |
|                       | Uncooperative  | 1      | 1       | 1      | 1      |
| Play activity:        | Constructive   | 1      | 1       | 1      | 1      |
|                       | Destructive  | 2      | 2       | 2      | 2      |
| Group participation:  | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |
| Dexterity Right:      | Good   | 1      | 1       | 1      | 1      |
|                       | Poor   | 2      | 2       | 2      | 2      |
|                       | None   | 1      | 1       | 1      | 1      |
| Dexterity Left:       | Good   | 1      | 1       | 1      | 1      |
|                       | Poor   | 2      | 2       | 2      | 2      |
|                       | None   | 1      | 1       | 1      | 1      |
| Rec'd reg. schooling: | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |
| Grade equiv.:         | 1  | 1      | 1       | 1      |        |
| Write:                | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |
| Read:                 | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |
| Spell:                | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |
| Arith.:               | Yes  | 1      | 1       | 1      | 1      |
|                       | No   | 2      | 2       | 2      | 2      |

1 Special class, sixth and seventh grade level.

in a more relaxed and confident manner, through such measures as daily walking practice. In occupational therapy, there was some improvement in reaching and grasping, with her dexterity improving to the extent that she learned to dress herself with much less assistance than was formerly required. In speech therapy, the net gain was excellent, though the actual degree of improvement was not marked. She did learn to speak somewhat more clearly, but it was felt that this ability would soon be lost if there was not continued supervision after she was discharged.

In her school work, it was found that Claire was sixth grade special class material. She was promoted to the seventh grade special class, but her improvement was of a very slow and gradual nature, and there was a great need for individual attention.

Claire's initial adjustment at Lakeville was very poor. For the first several days she screamed almost incessantly, and it was practically impossible to do anything with her. She had to be removed from the Cerebral Palsy Unit, and placed in a private room. It was largely through the efforts of the medical social worker that she was prepared to return to the Cerebral Palsy Unit and take part in the over-all program.

However, her adjustment from that point on continued to be rather poor. The screaming stopped, but she appeared very lonesome throughout her stay. She seemed to lack determination, with her response to the therapies offered not of a too positive nature. She lacked interest in learning to improve her walking, did not try to improve by herself, and needed constant supervision and prodding. The medical social worker felt that she was frustrated by her condition, especially in making other people understand her, which required much effort on her part.

In June, 1951, Mrs. Strong talked with the medical social worker and informed her that they wanted to take Claire home when the school program ended in the latter part of the same month. They were satisfied with the care and treatment that she had been receiving, but were convinced that nothing further could be accomplished. The doctors felt that no marked changes could be anticipated in the near future, and therefore, Mrs. Strong's request for discharge was granted.

After discharge, Claire returned to her home.

Continued supervision at S.C.C. clinic had been recommended. The District Office medical social worker wrote to the family in regard to this, but there was no response, with the result that Claire has not been seen in clinic in the 21 months she has been out of Lakeville.

Presently, Claire is very involved physically. Her speech is very inarticulate, and though she is able to walk around the house without support, it is only with the greatest of difficulty. Occasionally, she will walk out-of-doors for exercise, but only with the support of a cane. In the presence of others, she is very self-conscious about her condition.

The relationship between Claire and the other members of the family seems to be quite close. Many activities of a recreational nature are carried on by the family, and as often as possible, Claire is included in these activities. She has no close friends, but does hope to be able to attend camp this coming summer.

She is receiving home teaching two hours per week, likes her teacher, and is doing tenth grade work satisfactorily. She is also receiving individual and group speech therapy, one hour per week for each. However, she does not enjoy the group experience at all.

It is obvious that she has many unrealistic ambitions and goals. She wants to do typing professionally, and baby-sitting, both of which, for the present at least, are quite beyond her reach. She does not appear to have any real interests of her own, with the possible exception of simple weaving.

#### Interpretation

Clearly, there were positive factors in terms of Claire's general adjustment before admission to Lakeville. She was fairly alert and responsive, had fairly good work habits, showed attention and interest, and tried to do certain things for herself. Yet, her role in the family was based largely on almost complete dependence, both physically and emotionally. However, in trying to evaluate the reasons for such a role,

it is readily seen that its source was derived, in part at least, from the dependent role imposed by her parents, particularly her mother, and by her siblings. Recognition of this by the parents, in itself, was not sufficient to change the situation.

When we stop to consider the trauma experienced by the break from such a dependent role, in a completely secure setting, it is not surprising that her adjustment at Lakeville was rather difficult and poor.

It seems logical to suppose that the degree of physical improvement might have been greater, had it not been for the difficulties, in terms of adjustment, that she experienced, and her rather poor response to therapy programs offered. Interestingly enough, however, Claire and her parents feel that Lakeville helped a great deal, especially in the areas of walking, eating, dressing, et cetera.

Considering all factors, one must seriously question the extent to which religious beliefs, particularly of the parents, have entered into the situation. Mrs. Strong has never been able to discuss this fully, or to see that their beliefs may have affected their planning for Claire.

Claire is now at the age where she is beginning to think about her vocational future, and has expressed concern over this. Under the circumstances, it would seem that her somewhat unrealistic goals and ambitions perhaps derive their

source from anxieties she now feels around this problem.

It is unfortunate that she has not been able to make a favorable response to the group experience in speech therapy. Not only is she more involved physically than the other youngsters in this program, which presents realistic difficulties, but she is once again in a very dependent and protective type of setting, in which she has learned to experience the greatest degree of security.

## CHAPTER VII

CASE STUDIES OF INDIVIDUALS  
WHO HAVE MADE A POOR ADJUSTMENT

In this chapter, two cases are presented which, from evidence available, appear to be making a poor adjustment since their discharge from Lakeville. Both of these youngsters are now in their own homes.

Case No. 9 - James Jackson

James, now eleven years old, is the fourth of five children of middle-aged parents. The degree of physical involvement is great, with a diagnosis of cerebro-spastic palsy, quadriplegia.

James was born at the end of a full-term pregnancy, with a normal delivery. However, some discoloration in the facial region was noted shortly after birth. Other than this, there were no other known neo-natal complications.

By the time James had reached the age of one and a half years, his parents had become concerned with his slowness of development. His parents had him seen by a private physician, who assured them that James' only difficulty was flat feet, and that eventually, his development would be more normal.

He was seen again by this doctor, but Mrs. Jackson, not satisfied with the progress that was being made, had him admitted to a children's hospital at the age of three. At the time of admission, it was noted that his development in all areas had been generally slow. He could not sit up without support, but was able to hold his head up and creep. There was incoordination of all his movements, and weakness of all the muscle groups of the lower extremities. It was at this time that a diagnosis of cerebral palsy was made. He was followed on an out-patient basis at rather infrequent intervals, and was readmitted to the orthopedic service in 1949 for more intensive therapy. He was still able to sit only with support. He was beginning to talk and seemingly had a fair comprehension of conversation, and fair

ability to make his thoughts known. There was marked spasticity in all extremities, and marked incoordination of gross movements.

Prior to the initial S.C.C. clinic visit, when he was seven years old, James' admission to a hospital-school had been requested by his parents. They felt that such a setting had something to offer which they could not hope to duplicate in the home setting. However, this plan was considered inadvisable by the clinic consultant on the basis of a psychological evaluation that had been made, which indicated that considerable individual attention would have to be given.

While under the supervision of the S.C.C. clinic, James was regarded as a quiet, friendly child, who, from all appearances, had had a very secure and contented role in the family. He responded well, and cooperated fully, as did Mrs. Jackson, with the physical therapy program being given in the home by a member of the clinic team. He wore no apparatus, but learned to get about quite well with the use of a walker. He was able to take care of many of his personal needs with assistance.

For about two months, he received home teaching, but this program was not successful. According to his teacher, James was gaining nothing, and she questioned whether or not benefits could ever be derived from such. One very obvious factor behind his poor response to this program, was the schedule of the teacher. Rather than calling at the home in the morning, or early afternoon, when James was at his best, her visits were in the late afternoon or early evening, when he was ready for bed.

Lakeville was recommended by the clinic consultant as a setting that might be able to offer James the type of treatment that would benefit him most. The advisability of such a placement was easily recognized and accepted by the parents.

James was admitted to Lakeville in February, 1950, at the age of eight, and discharged in October, 1951, at the age of ten, for a total of 600 days of care.

When admitted to Lakeville, he was able to talk some, but needed considerable help in dressing, personal care, eating, et cetera. A walker was still used as his primary means of locomotion. He was started on an intensive program of physical therapy, including sitting practice, daily leg stretching exercises, and general

muscle training. During the first several months, James showed considerable improvement in muscular strength. He learned to sit erect and to get in and out of a wheel chair with but little help. He was able to hold his head up much better, his balance improved, and he was able to pull himself up and down while in bed by use of an overhead bar.

While at Lakeville, surgical recession of the calf muscle of both the right and left legs was performed. Though spasticity was still a problem, he learned to stand, but was unable to walk. When walking was attempted, there was a marked scissors gait.

James showed some improvement in speech, but it was of a very slow and gradual nature, with fluctuations in progress due, in part, to operative procedures that had been performed. Towards the end of his stay, there seemed to be some regression in articulation. At times he did not attempt to talk, and frequently responded to questions or comments with only a smile.

On the basis of psychological evaluation, it was felt that he was not ready for school work on the first grade level. Occupational therapy on the pre-primary or kindergarten level was begun to prepare him for grade one work. The need for individual attention was recognized and met in this program. He entered the first grade for a trial period, but after two months, he was returned to the pre-primary group. He was not able to do work on a higher level, and was able to accomplish little. His attention span was very short, he was easily distracted, and though there seemed to be some interest, his progress, even on the pre-primary level, was extremely slow.

Mrs. Jackson was upset by his return to the earlier level of instruction. She felt that all that was needed was more attention and prodding. She thought that James might be lazy, but that he was mentally capable of doing work on the first grade level. She informed the medical social worker that she wanted him placed in that grade, but would not give the worker the opportunity to discuss the situation more fully with her, or perhaps help her to see how her own anxiety was affecting her perspective. Mrs. Jackson stated that she would take James home within a few days if her wishes were not granted.

Attention was given by the staff to ways in which this problem could be solved, and there was correspond-

GRAPH VIII

Fluctuations in Developmental Progress While in Cerebral Palsy Unit at Lakeville State Sanatorium

**JAMES JACKSON**

(PATIENT'S NAME)

DATE

| AREA RATED            | RATING   | 2/2/50 | 4/9/50 | 4/1/50 | 11/1/50 | 1/12/51 | 6/1/51 | 9/1/51 |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--------|--------|--------|---------|---------|--------|--------|--|--|--|--|--|--|--|--|--|--|--|--|
| Is Child:             | Excited  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Quiet  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Subject to tantrums  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Speech:               | Articulate   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Inarticulate   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Lisp   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Stutter  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Mute   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can Eat:              | Unaided  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With Help  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Must be fed  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Difficulty in swallowing   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can Drink:            | Unaided  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With help  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Hold glass   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Use tube   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Drools:               | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Occasionally   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | All the time   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can dress:            | Unaided  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With help  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Entirely dependent   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can button clothes:   | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can tie shoes:        | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can use toilet:       | Alone  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With help  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Bed pan only   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Incontinent  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Is able to walk:      | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | In walker or chair   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | With braces  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Gait:                 | <u>Marked scissors, improved with crutches and better balance.</u> |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Can Sit:              | In bed only  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | In chair   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Is child:             | Shy  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Cooperative  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Uncooperative  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Play activity:        | Constructive   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Destructive  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Group participation:  | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Dexterity Right:      | Good   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Poor   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | None   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Dexterity Left:       | Good   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | Poor   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | None   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Rec'd reg. schooling: | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade equiv.:         | 1  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Write:                | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Read:                 | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Spell:                | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
| Arith.:               | Yes  |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | No   |        |        |        |         |         |        |        |  |  |  |  |  |  |  |  |  |  |  |  |

1 First grade on trial and later pre-primary level.

ence with the parents to this effect. Before any course of action could be decided upon, and within a very few days, Mrs. Jackson had him discharged, not against medical recommendations as such, but before discharge planning had been contemplated.

James' social adjustment while at Lakeville was poor. He was inclined to stay by himself, did not respond to the over-all program, and did not relate well to other patients or to staff members. He was very lonesome and homesick, very quiet, tried to say little, and appeared very sad most of the time. Improvement in these areas towards the end of his stay, when noted, were so slight as to be almost insignificant.

After his discharge from Lakeville, he returned immediately to his home. In the little over a year in which he has been out of Lakeville, he has continued under the supervision of the S.C.C. clinic program. In the physical therapy program being given in the home, James is at a complete standstill, and there has been no measurable progress since his discharge.

James has recently started receiving home instruction again, but it is still too early to determine the results of this program. That such should be attempted again was not based on his mental ability per se, but on the assumption that it seemed to be the only possible plan that might contribute something. The psychological evaluation showed that he was very unresponsive. He did show a reasonable amount of comprehension, but became quickly fatigued and vague. Generally, his mental capacities are on the six year level, which seems to represent his present level of functioning.

#### Interpretation

Before his admission to Lakeville, it would seem that James' adjustment had been good, and that he had been able to respond fully within the physical limits of his handicap, to that which was offered to him. His relationship with his parents and siblings was good, and his approach to situations confronting him seemed to be of a quite positive nature.

From all evidence available, it seems as though he had utilized to the fullest, those physical assets that he did possess. From what is known of the parents at that time, they seem to have been devoted in their care of him. They seemed to accept him fully, understand the implications of this condition, and cooperate fully with medical recommendations.

It is difficult to understand completely the change that was evidenced during his stay at Lakeville. Leaving home and being in a strange situation may have been partially responsible. However, this does not seem to be the whole answer, especially when the nature of his present adjustment is examined.

Of course, the degree of physical involvement is great, but beyond this, there is a complete lack of initiative. The clinic consultant, feeling that he was physically ready for crutch walking, recommended the same. His response to this has been negativistic. For reasons not clearly understood, he is extremely apprehensive, and frankly admits that he would rather sit than attempt to use his crutches. His response to physical therapy procedures is characterized by an "I can't" attitude, when actually he can, in some areas at least.

Much of this seems to be due to the parents' attitudes. Mrs. Jackson, in particular, feels that he regressed considerably at Lakeville. She has much resentment and hostility

towards the institution, feels that James was neglected, and that no one was really interested in him. This is discussed freely in front of James, which is of course, a very unhealthy situation. Mrs. Jackson, without real awareness, is helping to keep him in a dependent role. Even James' older brother has tried to help her see this, but Mrs. Jackson, perhaps because of guilt she feels over his admission to Lakeville, is not able to recognize this.

James seems to live in a world all his own, in which he sees himself as a normal boy, capable of doing the things that normal boys do, and the things that they, as normal men, will be able to do.

While spasticity, at present, involves mainly the legs, with only mild contractures, James is, for all practical purposes, completely incapacitated physically. At the age of eleven, his physical or emotional progress does not appear too hopeful.

#### Case No. 10 - Patricia Conway

Patricia, now twelve years old, is the sixth in a family of seven children of middle-aged parents, with five older sisters and a younger brother. The degree of physical involvement is not too great, with a diagnosis of cerebro-spastic palsy, hemiplegia.

Patricia was born at the end of a full-term, normal pregnancy. Delivery was thought to have been uncomplicated at the time, and the only difficulty in the neonatal period was rapid breathing. No involvement of the extremities was noted.

When Patricia was four months old, Mrs. Conway

realized that she was not using her left extremities as much as the right extremities. With the exception of a few contacts at a children's hospital, where the diagnosis of cerebral palsy, the result of head injury sustained at birth, was made. Patricia had no regular medical supervision until she was admitted to the clinic in 1942, at the age of two.

While under the supervision of this clinic, physical improvement was not marked, though there was some improvement in her gait and in the use and dexterity of her left extremities. Improvement would probably have been greater if the environmental situation had been different.

Mr. Conway was devoted to Patricia and her siblings, but apparently, didn't play too active a role in the family. Mrs. Conway was extremely obese, had an allergic dermatological condition, and for one or another reasons, required rather frequent hospitalization. The home was usually extremely dirty and disorderly. Mrs. Conway seemed to be unaware of the way in which she neglected her own health and of her inefficiencies. She was unable to avail herself of the many services that members of the clinic staff attempted to provide her, that would have been beneficial, regardless of her physical condition or other factors in the situation.

At times, it was felt that the relationship between the parents was quite strained. Economically, the family situation was quite difficult. Work opportunities were rather poor, there were frequent periods of unemployment, low wages, et cetera, though Mr. Conway did make every attempt to provide as adequately as possible for his family.

With the exception of being kept back for one year in the first grade, she progressed steadily in her school work, and from all appearances got along fairly well. She was rather quiet and shy, but had a number of outside interests, adjusted well to other children of her own age, and to a three week camping experience that had been arranged for her through the interest of the staff physical therapist and medical social worker.

When admission to Lakeville, for more intensive physical therapy and concentrated effort in gait training and use of the left arm, was recommended by the clinic consultant, this plan was accepted readily by Mr. and Mrs. Conway. Mrs. Conway seemed to have developed some



awareness of her own inability to carry out an exercise program in the home. Patricia had thoroughly enjoyed her earlier camping experience, and though it was felt that the prospect of prolonged separation from the home might be upsetting to her, she herself was quite optimistic about going to Lakeville.

She was admitted to Lakeville in January, 1951, at the age of ten, and discharged in April, 1951, at the age of ten, for a total of 112 days of care. During her entire stay, she was up and about "ad lib", receiving an intensive program of physical therapy, occupational therapy, and schooling. In physical therapy, she received daily stretching to the left heel cord, walking practice, and muscle training. Under this treatment, there was an improvement in muscular strength and in walking ability. In occupational therapy, there was improvement in the use and dexterity of the left arm and hand. In her school work at Lakeville, which was on the fourth grade level, she showed improvement, and was able to receive a considerable amount of individual attention.

Generally, it would seem that Patricia's over-all adjustment at Lakeville was good. She responded favorably to the therapy programs offered, and as she became acquainted with the other patients, joined freely in their activities. However, she was inclined to be somewhat untidy about her physical appearance and daily habits, and had to be reminded frequently to walk properly. She was quite active in the Girl Scout program at Lakeville.

Discharge was recommended when it was felt that maximum benefits had been realized from the treatment program offered.

In the two years that she has been out of Lakeville, Patricia has been doing quite well physically under the continued supervision of the S.C.C. clinic. Recently, she had an operation for heel cord lengthening on the left leg, which helped to improve her gait. However, she is very self-conscious of the deformity of her left leg and arm, but does not make any effort to exercise her hand or improve her walking.

She is attending the sixth grade in public school, and though her work has been of a satisfactory nature, she does not like school, her teacher, or the other pupils. Apparently, she has no real friends of her own.

She has little or no interest in activities outside or inside the home, with reading seemingly the only pleasurable activity in which she engages.

#### Interpretation

From what is known of Patricia before her admission to Lakeville, it would seem that her adjustment had been good, despite parental attitudes and environmental factors that had not been wholly favorable. Her laxity in certain areas, during her stay at Lakeville, seems quite natural when consideration is given to her earlier experiences.

Both Patricia and her parents feel that she gained a great deal from her experience at Lakeville, especially in the use of her arm and in walking, as well as from the rather brief school program.

It is rather difficult to understand the basis for Patricia's present adjustment; undoubtedly, many factors, both external and internal, are involved. However, the condition of the home and Mrs. Conway's appearance seem to be very upsetting to Patricia, probably as the result of new standards and experiences she enjoyed at Lakeville. It would seem that many of Patricia's difficulties stem from the fact that she is now much more critical about the condition of her home and the appearance of her mother.

## CHAPTER VIII

### SUMMARY AND CONCLUSIONS

In this study, the writer examined all ten cases of children who were referred through the Northeastern District Office of the Massachusetts Department of Public Health to Lakeville State Sanatorium. The primary purpose of this study was to determine the contribution of a program of total care to the adjustments of the children involved, and to find answers to the questions raised in Chapter I. Consequently, the case presentations were divided into three chapters: those in which the adjustment was good, those in which the adjustment was fair, and lastly, those in which the adjustment was poor.

In all the cases studied, there were fluctuations and changes of tempo in physical progress during the child's stay at Lakeville, regardless of the adjustment made, or the response to therapy programs offered. In the record material and analysis of the graphs that appear in the case presentations, it was not possible to see how or what external factors might have been responsible for these fluctuations. This was discussed with staff personnel at Lakeville to secure additional information that might shed light on this problem. It was found that fluctuations in progress could sometimes be attributed to external factors. The child who had faced social or emotional trauma was prone to regression, usually of a temporary nature.

More often however, there was no observable basis for this phenomenon. Rather, it seems that the nature of the condition, with all its complexities and manifestations, in itself implies that there will be such fluctuations, even when the individual is participating in a program of total care.

In the cases studied, there were differences in the degree of physical involvement, some of the children being severely handicapped, while others were only moderately or even slightly handicapped. The degree of physical involvement did not seem to be the paramount factor in determining the nature of the adjustment that was made. In those making a good adjustment, there were two cases in which the degree of physical involvement was great; in the other four cases, the degree of physical involvement was moderate. In the two cases making a fair adjustment, both showed a great deal of physical involvement, while in the two cases making a poor adjustment, one showed a great deal of physical involvement, while the other showed moderate of slight physical involvement.

Of the ten cases studied, seven individuals were discharged when it was felt that the maximum benefits from the total program offered had been realized. This was the situation in four of the six cases in which a good adjustment was made.

In two cases, discharge planning was instigated by the

parents, but with medical opinion to the effect that maximum benefits had been realized, temporarily at least, or when there were no indications that progress could be expected in the near future. In one of these cases, the child continued to make a good adjustment after discharge, but in the other, a poor adjustment was made after discharge, due in no small way, to the attitude of the parents, with their feeling that nothing had been accomplished as the result of this experience.

In the one case in which discharge was made against medical recommendations, the child is making a good adjustment, but this is probably due to the fact that the child was placed in another institution offering a program of total care after her discharge from Lakeville; she is still in this institutional setting.

In eight of the ten cases studied, the parents and/or the child felt that considerable benefit had been realized as a result of the program of care and treatment offered at Lakeville. In the remaining two cases, the anxiety and lack of insight of the parents prevented them from seeing or understanding what was being attempted in this program, or what their attitude could mean, in terms of affecting the child's adjustment.

In the process of studying these ten cases, it became clear that parental attitudes were not completely favorable in any of the situations. However, in five of the six cases

in which a good adjustment was made, it would seem that parental attitudes had improved as a result of the child's experience in this program of care. In three of the four cases in which the adjustment was rated fair or poor, parental attitudes remained largely unchanged, or, as in one case, were of the nature that helped to affect adversely the child's adjustment. In all the cases, parental attitudes, perhaps more so than any other single factor, seemed to be the determining force in the child's adjustment.

When consideration is given to the emotional problems that go hand in hand with cerebral palsy, and the many adjustments and readjustments it necessitates, it is interesting to note that in the ten cases studied, six children made good adjustments. Many factors contribute to this. However, one important consideration that cannot be overlooked, is the availability of professional services, both to the child and the parents, at Lakeville State Sanatorium and in the District through S.C.C. clinic personnel. Though it was not possible to pin-point it in each case presentation, the social workers, both at Lakeville and in the District, played an important role, and this, along with the combined services made available through Lakeville's staff and the District staff, helped the child and/or the parents to resolve many difficulties.

If a larger number of cases had been involved in this

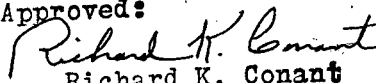
study, it would have been necessary to give more attention to such factors as the child's present age, age at admission, age at discharge, and the duration of residence in such a setting as the Cerebral Palsy Unit, to determine more specifically whether or not these factors significant in relation to the present adjustment being made by the child. The individual differences in these areas can be seen more clearly in the following table.

TABLE I

DIFFERENCES IN AGES AT ADMISSION, DISCHARGE, AND PRESENT, AND DAYS OF RESIDENCE AT LAKEVILLE

| Name             | Present Age | Age at Admission | Age at Discharge | Duration of Residence |
|------------------|-------------|------------------|------------------|-----------------------|
| Marjorie Carter  | 19          | 16               | 18               | 645 days              |
| Joseph Dorne     | 10          | 6                | 10               | 901 days              |
| Fred Stearns     | 15          | 12               | 13               | 256 days              |
| Marilyn Anderson | 9           | 6                | 7                | 304 days              |
| Joanne Abbott    | 8           | 5                | 6                | 343 days              |
| Joan Martin      | 8           | 6                | 7                | 172 days              |
| Donald Bates     | 17          | 14               | 16               | 800 days              |
| Claire Strong    | 17          | 14               | 15               | 334 days              |
| James Jackson    | 11          | 8                | 10               | 600 days              |
| Patricia Conway  | 12          | 10               | 10               | 112 days              |

Approved:



Richard K. Conant

Dean

Appendix I  
SCHEDULE

Name \_\_\_\_\_ Date of Birth \_\_\_\_\_ Religion \_\_\_\_\_

Family Constellation \_\_\_\_\_

Age at Admission to Lakeville \_\_\_\_\_ Date of Admission \_\_\_\_\_

Age at Discharge from Lakeville \_\_\_\_\_ Date of Discharge \_\_\_\_\_

Total Number Days of Care \_\_\_\_\_

Medical Diagnosis \_\_\_\_\_

General Data: Medical and Social History Preceding Admission:

General Adjustment Before Admission, to Friends, Family,  
Condition Itself, Etc.

Other Significant Factors in Operation Before Admission:  
Family Attitudes, Degree of Acceptance, Cultural Factors, Etc.

Description of Medical and Therapy Progress While at Lakeville:

Tempo of Progress, Fluctuations, Etc.: \_\_\_\_\_

Medical Reason for Discharge: \_\_\_\_\_

Medical Condition on Discharge: \_\_\_\_\_

Emotional and Social Adjustment While at Lakeville: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

General Adjustment After Discharge: How is it Related to Adjustment at Lakeville?

\_\_\_\_\_

\_\_\_\_\_

Did Circumstances of Discharge seem to have any affect on Adjustment after Discharge?

\_\_\_\_\_

\_\_\_\_\_

Contribution of Case Work Services Rendered at Lakeville and its affect on Child's Adjustment:

\_\_\_\_\_

\_\_\_\_\_

Description of Present Situation: \_\_\_\_\_

\_\_\_\_\_

Child's Present Adjustment and Responsible Factors: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Appendix II  
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