"THIS IS A PROGRAM WE WANTED TO START PROBABLY WITH PTS BEING TRANSFERRED AND BUILDINGS BEING RE-EVALUATED WE COULD CONSIDER THIS PROGRAM IN THE FUTURE."

F. Wangeness R.N."

HEADED \textquote[TRAINING PROGRAM FOR CEREBRAL PALSYED RESIDENTS]
TRAINING PROGRAM FOR CEREBRAL PALSYED RESIDENTS

I. Problems

There are approximately 2 to 300 patients in residence at Faribault State Hospital who are physically handicapped and who, because of their handicap have been without a physical, social, or academic program. Most of these patients have gone beyond the now prescribed school age with little or no school participation.

The age range of patients who could benefit from one or more training areas is 17 to 35. The I. Q. range is from 91 to not-testable. The range of physical movement goes from ambulant and unsteady to totally non-ambulant with little motor coordination in arms or legs. The patients go from ability in total self care to total care needed. Their academic skills range from ability to read to no academic skills. Their communication skills run from good speech ability and verbalization to no communication skills. The common factor is participation in very limited programs or no program at all.

Up to this point there has been no provision of a common building where equipment and teaching aids could be utilized. Most of the patients have not been able to attend our school because of mobility problems. There is no physical equipment available in the buildings where these patients reside. There are not enough teachers to provide home-bound teaching.

II. Goals

The areas in which programming would be provided will vary
from patient to patient. In a small scale study of fourteen of these it was found that there was such a wide variation, many would be starting at the low end of physical training, whereas others would be starting at a higher point. This follows through with social and academic training. Even starting with a number as low as ten patients, the program would run at various intervals to meet the needs of the individual patients. The areas of work are outlined in the following program.

III. Program

A. Communication

1. Develop and encourage desire and need for communication among one another.

2. Develop techniques (for some) other than speech for communication.

3. Work with speech therapist—possibly flash cards.

B. Physical Development

1. Use of adaptive equipment to stabilize severely spastic patients.

2. Exercise program and devices for gaining mobility, for strengthening muscles in arms, legs, head, back.

3. Developing use of hands—fine coordination for some.

4. Include handicraft items, etc.

C. Self Care

1. Encourage and develop desire and need for self care—use visual aids, group discussion, actual experience, self care project, such as, health scrapbook, ect.

2. Care of body—teeth, face, hair, bathing, mouthwash, deoderant, ect. ect. ect.

3. Care of clothing—shoe care, use clothing they are
able to handle, such as tape openings instead of zippers. Care of clothing such as wool, cotton. Each patient would have own ward robe. Make use of visual aids.

4. Manners - at the table, courtesy for others, group manners - use visual aids and actual living experience.

D. Academic and Vocational

1. Learn about community - safety, how to contact resources, what in reality might be available to some of them in the community. Preparation.

2. Use of money - value - prices - uses of - saving.

3. Reading and writing for some.

4. Discussion of current events for some.

5. Workshop training - preparation possible for sheltered workshop or Cerebral Palsy foundation workshop.

6. Instill feeling of usefulness and dependability and responsibility.

E. Social Development

1. Learn about other people - strive toward thinking about someone else. Learn to care.

2. How to talk and socialize with opposite sex.

3. Learn how to get along in a group - how to give and take.

4. Recreational activities - how to participate - what is available.

IV. Method

A. Who Will Do What

1. Two full time teachers (or part-time) for academic skills and self care training.

2. One fulltime maintenance man to build, measure and repair equipment.

3. One occupational or physical therapist and assistant (or use special school counselor) for handicraft, physical therapy and help with recreational ideas.

4. Two special schools counselors - aid in self care training, check wardrobes, help in special recreational or educational events!

B. Where - In one half of one building especially adapted for
this program and set up to accommodate five girls, five boys, with toilet and bathing facilities, workroom space, and space for physical equipment. Our pilot project would start with only ten participants.

C. When - Eight hour day - five day week program, perhaps with special school counselor working on weekend. Time for each activity would be set up by personnel and be subject to change after the program is started.

D. What Equipment and Supplies and Special Techniques. (Physical Development Program for physically handicapped adults)

PHYSICAL DEVELOPMENT PROGRAM

Physically Handicapped Adults

I. Prevent and reduce the development of contractures:
   a. Passive range of motion, avoiding the stretch reflex.
   b. In selective cases, consider the use of night splints and corrective braces.
   c. Select furniture and equipment to maintain the child in the best posture for activities, using materials as cut-out tables at elbow heights, foot fixation boards, and sandbags.
   d. Avoid being static and position which encourage the development of contractures.

II. Develop or improve conscious relaxation.
   a. Use of reflex inhibiting postures.
   b. Use of unlocking reflexes.
   c. Homo and contra-lateral patterning.
   d. Carry over of relaxation into motor patterns.

III. Develop and maintain balance skills through activation of righting and equilibrium reactions.

General principles:
   a. Use of balance positions near child's level of maturation and accomplished with some difficulty.
   b. Consider evaluation for visual defects.
c. Initially use wide base of support, weighted bases, lower levels of gravity.

Develop:

a. Neck righting reactions
b. Body righting reactions
c. Labyrinth righting reactions
d. Protective extension of the arms
e. Balance reactions

The support or leaning on the hands to assist balance, as well as the automatic reaching out with the arms to break a fall, should be developed. The patient would be assisted to acquire the equilibrium reactions associated with being pushed sideways, backwards and forwards. Passive stimulation may be needed for the spastic patient with incomplete use of extremities.

IV. Develop and maintain gross physical maturation and development:

a. Head Control

1. Motivate child to look at persons or objects to the side, above and below him in lying, prone, sitting and crawling positions.

2. In prone lying place hands flat on each side of the shoulder so patient can raise head, push up on open hands.

3. Rhythmically patting patients forehead to stimulate head extension.

b. Reciprocal Leg Motion

1. Passive motion, assistive and resistive motion.

2. Motion conditioned to song.

3. Use of equipment as tricycles or stationary bikes.

c. Rolling

1. En Masse rolling from back to stomach and vice versa by placing patient in large blanket or holding head and ankles.

2. Use of head movement to initiate rolling.

3. Voluntary rolling from back to stomach, stomach to back, continuous.

d. Sitting

1. Tailor or side sitting selecting the position most appropriate for the child's physical condition.

2. Posture and balance training.

3. Selection of chairs to meet the needs of the patient. For example, the sides of the chair should be elbow level or eliminated when the child can achieve good sitting balance.
e. Crawling

1. Learn to hold the crawling position when placed into position by the therapist.

2. Learn to sit back on his heels and return to four point kneeling.

3. Attempt to lift each extremity off the floor separately without the loss of balance.

4. Suspend the patient over a canvas sling or other device and manually assist the patient to crawl.

5. During the development of crawling, encourage reciprocal motion, head control and opening of the hands.

f. Kneeling

1. Learn to pull up to kneeling by holding on to a support.

2. Balance begun in stride kneeling and progressed to kneeling with knees together.

g. Half-Kneeling

1. Kneel sit on small stool, with support from therapist to bend one knee and have the other foot on the ground.

2. Kneeling on one knee and moving the other one sideways, forwards or backwards.


h. Standing

1. Teach the patient to come to the standing position from the floor.

2. With graded amounts of support, practiced in a standing table, ski, crutches, parallel bars and other appropriate devices.

i. Walking

1. Manual assistance

2. Use of parallel bars and foot placement ladders.

3. Development of walking with appropriate ambulation aids.

V. Develop perceptual-motor skills.

a. Eye-hand coordination through the development of;

1. Reach-grasp and release abilities: hand fisted, reach with open hand, reach and crude grasp, reach grasp and release.

2. Thumb and finger grasp: thumb and all fingers, thumb, index and middle fingers, thumb and index fingers with tiny objects.

3. Finger use: ability to use all fingers, individual finger use,
coordinated thumb use.

4. Use of the arms together: both arms reaching, both arms holding large objects, one hand holding and one manipulating, two hands performing separate functions.

5. Hand-coordination tasks specifically: arm placement, object into large area, small object in small area, exact placement of tiny objects.

b. Perception of spatial relationships;

1. Use of color as an early aid to train in visual patterns.

2. Perception of directional relationships of objects outside of self.

3. Perception of directional relationships of objects and spatial distances.

4. Perception of spatial relationships of shapes without any structuring element.

5. Perception of directional relationships of top and bottom, left and rights, and so on.

VI. Anticipated results:

Our anticipated results will be individualized just as the areas of treatment. For many we will anticipate independent ambulation, for others, ability to tolerate an upright wheelchair position and use of hands and arms in gross or fine motor coordination. For most of the patients we will anticipate further knowledge of self care skills and utilization of this knowledge in many cases. We will anticipate an attitude change from dependency to relative independence. We also anticipate a change in their total life picture, particularly in enabling them to entertain themselves and enlarge by new experiences the world they live in. We hope to make these patients more satisfied and happy individuals whether in or out of the institutional setting.

VII. Evaluation:

An evaluation would be done every three months. This evaluation would include a Performance Test and perhaps a rating scale. It would also include an area report by each of the employees working with the individual patients. We hope to demonstrate by these evaluations that motivation is important in the learning process and that intensive programming in conjunction with use of adaptive equipment can be of benefit to our cerebral palsied retarded residents.
Program for physically handicapped young adults–Green Acres Unit

J.A. Preston Corporation
71 Fifth Avenue
New York, New York

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>PC 1409A</td>
<td>Walking Parallel Bars-16&quot; adjustable height and width, all ages</td>
<td>$494.50</td>
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<tr>
<td>PC 1560</td>
<td>Exercise staircase-straight type</td>
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<td>PC 1610</td>
<td>Posture Training Mirror</td>
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<td>PC 2084A</td>
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<td>PC 2200</td>
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<td>PC 4501</td>
<td>Adult institution model relaxation chair</td>
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<td>PC 4513D</td>
<td>Adult Clinic stand-in table</td>
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<td>PC 7081</td>
<td>Combination adjustable work table</td>
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<td>PC 2161</td>
<td>Bicycle exerciser</td>
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<td></td>
<td><strong>Dressing aids, Feeding aids, Activity aids</strong></td>
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<tr>
<td>PC 7381</td>
<td>Soap holding long handle bath sponge</td>
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<td>PC 7384</td>
<td>Adjustable long handle comb</td>
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<td>Elastic shoe laces</td>
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<td>PC 7528E</td>
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<td>PC 7750</td>
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<tr>
<td>PC 7784</td>
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Also needed will be numerous supplies, including craft materials, visual-motor training materials, educational games.

In addition, each patient should be provided with the piece of ambulation equipment designed to meet his needs whether it be wheelchair, crutches, etc.