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[TIRR] New Options Grant Application and Reports [1976-1978] [2]

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OMB Approval No. 29-R0218

FEDERAL ASSISTANCE

2. APPLICANT'S APPLICATION	a. NUMBER	3. STATE APPLICATION IDENTIFIER	a. NUMBER
	b. DATE Year month day 19		b. DATE ASSIGNED Year month day 19

1. TYPE OF ACTION (Mark appropriate box)
- ☐ PREAPPLICATION
- ☒ APPLICATION
- ☐ NOTIFICATION OF INTENT (Opt.)
- ☐ REPORT OF FEDERAL ACTION

Leave Blank

SECTION I—APPLICANT/RECIPIENT DATA

4. LEGAL APPLICANT/RECIPIENT

a. Applicant Name: Texas Institute for Rehabilitation and Research
b. Organization Unit:
c. Street/P.O. Box: 1333 Moursund Avenue
d. City: Houston
e. County: Harris
f. State: Texas
g. ZIP Code: 77030
h. Contact Person (Name & telephone No.): Jean A. Cole, Ph.D. 797-1440 ext. 504

5. FEDERAL EMPLOYER IDENTIFICATION NO.: 74-1334678

6. PROGRAM (From Federal Catalog)
a. NUMBER
b. TITLE: Rehabilitation Research and Demonstration

7. TITLE AND DESCRIPTION OF APPLICANT'S PROJECT

Transitional Living: A Model for the Severely Physically Handicapped

This live-in transitional training program prepares handicapped individuals for active community involvement including independent living, vocational or educational planning, & increased social participation.

8. TYPE OF APPLICANT/RECIPIENT
A-State; B-Interstate; C-Substate District; D-County; E-City; F-School District; G-Special Purpose District; H-Community Action Agency; I-Higher Educational Institution; J-Indian Tribe; K-Other (Specify): non-profit rehabilitation center
Enter appropriate letter: K

9. TYPE OF ASSISTANCE
A-Basic Grant; B-Supplemental Grant; C-Loan; D-Insurance; E-Other
Enter appropriate letter(s): A

10. AREA OF PROJECT IMPACT (Names of cities, counties, States, etc.): national

11. ESTIMATED NUMBER OF PERSONS BENEFITING: 250

12. TYPE OF APPLICATION
A-New; B-Renewal; C-Revision; D-Continuation; E-Augmentation
Enter appropriate letter: D

13. PROPOSED FUNDING

a. FEDERAL	$ 144,155 .00
b. APPLICANT	7,208 .00
c. STATE	.00
d. LOCAL	.00
e. OTHER	.00
f. TOTAL	$ 151,363 .00

14. CONGRESSIONAL DISTRICTS OF:
a. APPLICANT: 22
b. PROJECT: 22

16. PROJECT START DATE Year month day: 1977 10/1

17. PROJECT DURATION: 30-60 Months

18. ESTIMATED DATE TO BE SUBMITTED TO FEDERAL AGENCY ▶ Year month day: 1977 8 1

15. TYPE OF CHANGE (For 12c or 12e)
A-Increase Dollars; B-Decrease Dollars; C-Increase Duration; D-Decrease Duration; E-Cancellation; F-Other (Specify):
Enter appropriate letter(s):

19. EXISTING FEDERAL IDENTIFICATION NUMBER: RSA 13P57889/6-01

20. FEDERAL AGENCY TO RECEIVE REQUEST (Name, City, State, ZIP code): Rehabilitation Services Administration; 330C Street SW; Wash., D.C.

21. REMARKS ADDED ☐ Yes ☐ No

SECTION II—CERTIFICATION

22. THE APPLICANT CERTIFIES THAT ▶

a. To the best of my knowledge and belief, data in this preapplication/application are true and correct, the document has been duly authorized by the governing body of the applicant and the applicant will comply with the attached assurances if the assistance is approved.

b. If required by OMB Circular A-95 this application was submitted, pursuant to instructions therein, to appropriate clearinghouses and all responses are attached:

	No response	Response attached
(1) NA	☐	☐
(2)	☐	☐
(3)	☐	☐

23. CERTIFYING REPRESENTATIVE
a. TYPED NAME AND TITLE: William A. Spencer, M.D. President
b. SIGNATURE: William A. Spencer
c. DATE SIGNED Year month day: 19 77 7 29

SECTION III—FEDERAL AGENCY ACTION

24. AGENCY NAME

25. APPLICATION RECEIVED Year month day: 19

26. ORGANIZATIONAL UNIT

27. ADMINISTRATIVE OFFICE

28. FEDERAL APPLICATION IDENTIFICATION

29. ADDRESS

30. FEDERAL GRANT IDENTIFICATION

31. ACTION TAKEN
- ☐ a. AWARDED
- ☐ b. REJECTED
- ☐ c. RETURNED FOR AMENDMENT
- ☐ d. DEFERRED
- ☐ e. WITHDRAWN

32. FUNDING

a. FEDERAL	$ .00
b. APPLICANT	.00
c. STATE	.00
d. LOCAL	.00
e. OTHER	.00
f. TOTAL	$ .00

33. ACTION DATE ▶ Year month day: 19

34. STARTING DATE Year month day: 19

35. CONTACT FOR ADDITIONAL INFORMATION (Name and telephone number)

36. ENDING DATE Year month day: 19

37. REMARKS ADDED ☐ Yes ☐ No

38. FEDERAL AGENCY A-95 ACTION

a. In taking above action, any comments received from clearinghouses were considered. If agency response is due under provisions of Part 1, OMB Circular A-95, it has been or is being made.

b. FEDERAL AGENCY A-95 OFFICIAL (Name and telephone no.)

OMB NO. 80-RO 186

PART II

PROJECT APPROVAL INFORMATION

Item 1.
Does this assistance request require State, local, regional, or other priority rating?
_____ Yes __X__ No

Name of Governing Body _____
Priority Rating _____

Item 2.
Does this assistance request require State, or local advisory, educational or health clearances?
_____ Yes __X__ No

Name of Agency or Board _____
(Attach Documentation)

Item 3.
Does this assistance request require clearinghouse review in accordance with OMB Circular A-95?
_____ Yes __X__ No

(Attach Comments)

Item 4.
Does this assistance request require State, local, regional or other planning approval?
_____ Yes __X__ No

Name of Approving Agency _____
Date _____

Item 5.
Is the proposed project covered by an approved comprehensive plan?
_____ Yes __X__ No

Check one: State ☐ Local ☐ Regional ☐
Location of Plan _____

Item 6.
Will the assistance requested serve a Federal installation?
_____ Yes __X__ No

Name of Federal Installation _____
Federal Population benefiting from Project _____

Item 7.
Will the assistance requested be on Federal land or installation?
_____ Yes __X__ No

Name of Federal Installation _____
Location of Federal Land _____
Percent of Project _____

Item 8.
Will the assistance requested have an impact or effect on the environment?
_____ Yes __X__ No

See instructions for additional information to be provided.

Item 9.
Will the assistance requested cause the displacement of individuals, families, businesses, or farms?
_____ Yes __X__ No

Number of:
Individuals _____
Families _____
Businesses _____
Farms _____

Item 10.
Is there other related assistance on this project previous, pending, or anticipated?
_____ Yes __X__ No

See instructions for additional information to be provided.

OMB NO. 80-R0186

PART III – BUDGET INFORMATION

SECTION A – BUDGET SUMMARY

Grant Program, Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Rehab. R&D	13.627	$ -0-	$ -0-	$ 144,155	$ 7,208	$151,363
2.						
3.						
4.						
5. TOTALS		$	$	$ 144,155	$ 7,208	$151,363

SECTION B – BUDGET CATEGORIES

6. Object Class Categories	– Grant Program, Function or Activity (1)	(2)	(3)	(4)	Total (5)
a. Personnel	$ 80,115	$	$	$	$
b. Fringe Benefits					
c. Travel	2,500				
d. Equipment	12,500				
e. Supplies	500				
f. Contractual	10,000				
g. Construction					
h. Other	10,500				
i. Total Direct Charges	116,115				
j. Indirect Charges	28,040				
k. TOTALS	$ 144,155	$	$	$	$
7. Program Income est.	$ 100,000	$	$	$	$

OMB NO. 80-R0186

SECTION C – NON-FEDERAL RESOURCES

(a) Grant Program	(b) APPLICANT	(c) STATE	(d) OTHER SOURCES	(e) TOTALS
8. Rehabilitation R&D	$ 7,208	$	$	$ 7,208
9.				
10.				
11.				
12. TOTALS	$ 7,208	$	$	$ 7,208

SECTION D – FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 144,155	$ 45,039	$ 33,039	$ 33,039	$ 33,038
14. Non-Federal	7,208	1,802	1,802	1,802	1,802
15. TOTAL	$ 151,363	$ 46,841	$ 34,841	$ 34,841	$ 34,840

SECTION E – BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) FIRST	(c) SECOND	(d) THIRD	(e) FOURTH
16. Rehabilitation R&D	$ 144,155	$ 158,300	$ 151,550	$ 139,000
17.				
18.				
19.				
20. TOTALS	$ 144,155	$ 158,300	$ 151,550	$ 139,000

SECTION F – OTHER BUDGET INFORMATION

(Attach additional Sheets If Necessary)

21. Direct Charges:

(please see attached sheets)

22. Indirect Charges:

23. Remarks:

PART IV PROGRAM NARRATIVE (Attach per instruction)

SECTION F OTHER BUDGET INFORMATION

21. Direct Charges

PERSONNEL	project director (50%) *	10,500
	research director (15%) *	4,000
	functional skills adviser	16,000
	social worker	15,000
	vocational counselor (30%)	4,800
	follow-up specialist (50%)	7,500
	research assistant	8,000
	coordinator of staff associates (50%)	3,815
	attendant manager	8,000
	care attendants**	2,500
		80,115
TRAVEL	travel for staff to disseminate materials on project	2,500
EQUIPMENT	van to transport project participants on fieldtrips	12,500
SUPPLIES	office supplies	500
CONTRACTUAL	production of audio-visual materials for use by handicapped persons	10,000
OTHER	audio-visual consultation	2,000
	consultation from handicapped staff associates	5,000
	duplicating expense	3,000
	computer time for research data	500
TOTAL DIRECT COSTS		116,115

* Remaining portion of these salaries to be paid by RT-4 funds.

** Remaining portion of these salaries to be paid by per diem revenue.

22. Indirect Charges

35% of salaries and wages	28,040
TOTALS	144,155

PART V

ASSURANCES

The Applicant hereby assures and certifies that he will comply with the regulations, policies, guidelines, and requirements including OMB Circulars Nos. A-87, A-95, and A-102, as they relate to the application, acceptance and use of Federal funds for this Federally assisted project. Also the Applicant assures and certifies with respect to the grant that:

1. It possesses legal authority to apply for the grant; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.
2. It will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and in accordance with Title VI of that Act, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement.
3. It will comply with Title VI of the Civil Rights Act of 1964 (42 USC 2000d) prohibiting employment discrimination where (1) the primary purpose of a grant is to provide employment or (2) discriminatory employment practices will result in unequal treatment of persons who are or should be benefiting from the grant-aided activity.
4. It will comply with requirements of the provisions of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced as a result of Federal and federally assisted programs.
5. It will comply with the provisions of the Hatch Act which limit the political activity of employees.
6. It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act, as they apply to hospital and educational institution employees of State and local governments.
7. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.
8. It will give the grantor agency or the Comptroller General through any authorized representative the access to and the right to examine all records, books, papers, or documents related to the grant.
9. It will comply with all requirements imposed by the Federal grantor agency concerning special requirements of law, program requirements, and other administrative requirements approved in accordance with Office of Management and Budget Circular No. A-102.

PROJECT NARRATIVE

A. TITLE

Transitional Living: A Model for the Severely Physically Handicapped

B. PROGRESS REPORT

1. Changes in Plan

The New Options Transitional Living Project opened in June of 1976 with seed money from Rehabilitation Research and Training Center 4 (RT-4). In October of 1976 an R&D grant was funded for which continuation is sought in this request. The R&D funding has substantially increased the project capability to conduct service demonstrations and evaluation research. (Residential costs for each participant in the project are sponsored on a per diem basis by the Texas Rehabilitation Commission.)

Implementation of the New Options project has departed very little from the model as set forth in the original grant request submitted in April of 1975. A few minor changes are summarized below.

Length of Stay for Each Participant

It was originally intended that each participant would live in the project for a period that was individually determined, up to a maximum stay of six months. The average period of stay was estimated to be four months. In planning implementation of the project with the Texas Rehabilitation Commission, this agency agreed to sponsor each client for a maximum stay of six weeks, with the understanding that at the end of a year the policy on length of stay would be re-examined. As a result of this agreement with TRC, the project has operated to date on the basis of a six-week program cycle. Plans for experimenting with other lengths of stay are outlined in Section C-2 (proposed changes).

Use of a Nurse Clinician

Initial planning specified that New Options would share the time of a nurse clinician with other programs of the Texas Institute for Rehabilitation and Research. The role of this part-time staff member included consultation with participants about their medical status and implementation of a training module on medical needs. Because of a shortage of nursing personnel, this plan was not feasible. Instead, medical consultation with participants has been donated to the project by TIRR physicians, particularly by Dr. William A. Spencer, Director

of the Institute. Staff physicians and other medical personnel of TIRR have also contributed their time to provide a weekly medical training module.

Use of Practice Apartment

The original grant request specified that a practice apartment would be established by the project so that participants could experiment with living in this community setting. To date, a practice apartment has not been logistically feasible. The project is currently considering a possible move of the entire program to a community apartment location. Issues surrounding the exploration of this alternative are discussed in Section C-2 (proposed changes).

Follow-Up Services

To date follow-up services have not been extensively developed in New Options, though some assistance to former participants has been provided. This is due to a great extent to the fact that a larger proportion of participants than expected have returned to locations at some distance from Houston. Exploration of follow-up needs and capabilities is a major objective for the second grant year (see Section C-1, work plan for the next grant period).

There are several areas in which the project is ahead of schedule as originally set forth in the timetable (see Appendix A). These are summarized below.

Task 11 Diversify Participant Population

The project began in cycle 5 (January, 1977) to include a few participants with disabilities other than spinal cord injury. To date, the participant population has included one person with polio residuals, one with muscular dystrophy, two with head injuries, and four with cerebral palsy. Information is being collected on particular needs of various disability groups. The effects of this diversity are discussed in Section B-2 (progress during current grant period).

Task 12 Diversify Program Content

Efforts have begun to diversify program content in order to accomodate differences in needs of various types of participants. These developments are also discussed in Section B-2.

Task 14 Develop Modules for Replication

Work has begun on the production of written program materials and videotapes. Materials produced to date are listed in Section C3 (research utilization plan). Expansion in this area will be a major objective in the second and subsequent program years.

2. Progress During Current Grant Period

During the project's first year, major tasks were planning program content, assembling a staff, putting the basic transitional program into operation, and planning and implementing research procedures. In planning the project, core staff members traced the experiences of residents of the previous Cooperative Living Project and talked with them about how they initiated changes in their lives. There seem to be several important prerequisites for becoming actively involved in the community. One of these is having information about what opportunities are available and the knowledge of how to get needed information. The second prerequisite is the possession of certain personal skills that are needed in order to take advantage of available opportunities. These skills may include social assertiveness, diplomacy, an ability to budget energy well, or an ability to manage financial affairs. A third important prerequisite is a more general skill that may be termed problem-solving capability. This involves the ability to analyze a situation, to obtain new information, to make decisions, and to formulate sequential plans. It involves being able to anticipate consequences and to take action before crises develop. New Options is intended to assist handicapped individuals in each of these areas.

a. Accomplishments and Findings

Objectives of the first grant year as stated in the initial grant request are as follows:

(1) to define a system of services required to meet the needs of severely physically handicapped persons engaging in a transitional living experience

(2) to refine criteria for selection of persons who can benefit from a transitional living program

(3) to develop basic transitional program content

(4) to develop a research design to evaluate the program and pre-test research methodology

(5) to develop a practice apartment that will allow individuals to gain experience in independent living in a protected environment

(6) to establish functional training programs that prepare the individual to maximize his functional abilities in non-institutional environments

Objectives 1,2,3,5, and 6 which relate to the development of a service delivery demonstration will be reviewed below in this section. Objective 4 which deals with research aspects of the program will be reviewed in section b which follows on Research Developments and Problems Encountered.

Objective 1: Development of a Service System

The New Options project is housed in TIRR's Maximum Independence Center, a dormitory-style building located four miles from the main Institute building in the Texas Medical Center. Each project participant has a private room. Meals, transportation, and non-professional attendant assistance are provided on a shared basis. This residential system using shared supportive services has been borrowed directly from TIRR's earlier Cooperative Living residential project (SRS R&D 13-P-55487/6-01). Experience has shown that living for six weeks in a dormitory-style setting with a non-professional attendant staff is an important element at New Options. Participants frequently interact with each other informally on a one-to-one basis, and there seem to be some important effects of this close interaction with peers. Many participants have never been away from this personal care of family members or a nursing staff, and learning to manage the interaction with attendants and direct their own care is an important skill to be acquired.

The New Options program staff includes a project director (anthropologist), a research director (psychologist), a social worker, a functional skills adviser with a background in physical therapy, and a part-time vocational counselor. In addition to organizing group activities, each of these persons is involved in goal-setting and problem-solving with participants on a one-to-one basis. The purpose of this counseling is to help the individual learn to solve problems on his own. This approach often involves departures from traditional professional roles in which staff members tend to solve problems for clients rather than letting them devise their own solutions. Many outside resource persons are also involved, including physicians, agency personnel, and other persons encountered by handicapped persons in the community. The staff also includes a category of individuals called staff associates. These are handicapped persons who are actively involved in the community and who are paid to provide extensive information to participants and serve as behavior models. The staff has tried to choose a variety of associates who represent differing lifestyles and diverse values and viewpoints. The extensive use of staff associates is based on observation of the importance of modeling in the previous residential project. To date the project has had a total of 66 associates who meet with participants an average of 39 times in each six-week program cycle.

In general, the staffing planned for the project has been effective, though some changes have been made. The most difficult role to define and fill has been that of personal counselor which is held by a social worker. It has been hard to achieve a good balance between therapy on the one hand and more concrete planning and problem-solving with individuals on the other. The staff has also learned that more time is needed from the part-time vocational counselor, and this position has been changed from 20% to 30% time effort. A new part-time staff position has been created for a Coordinator of Staff Associates. This individual is responsible for making logistical arrangements and for supervising the active handicapped persons from the community who conduct various program activities.

Objective 2: Refinement of Selection Criteria

Staff members and the project DVR courtesy counselor largely agree on the following characteristics as important traits in persons who seem to have benefitted most from the project: readiness to face life as a severely disabled individual; desire to make changes in lifestyle; willingness to set and work on goals; willingness to risk experimenting with new ways of doing things and new kinds of behaviors; average intellectual capacity (comprehension of verbal input, no major memory deficits, reasonable attention span); ability to read; ability to speak well enough to be generally understood; ability to hear; no severe emotional pathology; and physical endurance for program (sitting tolerance, bowel control that is predictable, suitable urinary management).

Experience has demonstrated that the program seems to be most effective when participants in a given cycle do not differ too widely in intellectual level. The program can be altered to accomodate persons at different intellectual levels from cycle to cycle, but it is an advantage if persons within any one group are relatively similar in this respect. Other types of diversity such as differences in rural or urban background, length of time since onset of disability, and general direction of future plans, can frequently be utilized to advantage in promoting group interaction.

One of the most significant problems in choosing participants is assessing the individual's degree of medical stability through reports from referring DVR counselors and physicians. Professionals who have not worked previously with severely physically disabled individuals may provide misleading information. In some cases participants have needed more medical care than the project was designed to provide.

A few project participants and referring DVR counselors seem to have held unreasonable expectations of what the program can provide, and it has proven important to be aware of possible problems in this area when selecting participants. Such expectations are attached not only to the New Options project but to the notion of moving to Houston in general. Many persons

hold an exaggerated view of the number of residential facilities, jobs, and supportive services available in the city. The staff has made an effort to define reasonable expectations and to communicate these before individuals enter the project. The following list represents the views of project staff and of the DVR courtesy counselor about what participants can expect to accomplish in New Options: gaining information on what opportunities are available in the community (living arrangements, educational training programs, vocational availability, transportation availability); learning the skills to go about getting information; learning to manage financial affairs; learning to relate with attendants to get needs taken care of; learning to budget energy; learning to adapt oneself to new environment; learning to be more comfortable in public (being visible, asking for help); learning to examine how individuals interact with other persons and ways this might be changed; having the opportunity to be among other handicapped persons and learning how they cope with problems; examining feelings about issues important to each individual (their identity, family relationships, sexuality, ability to control their life course); learning to define goals and directions; becoming more comfortable in experimenting with alternative ways of doing things; learning how to solve problems and having actual experiences where such learning can be practiced; learning sequential planning; and learning to anticipate problems and make plans on how to handle them before a crisis develops.

Objective 3: Development of Program Content

Previous research and experience have indicated a number of subject areas that are important for handicapped individuals who are beginning active involvement in the community. A series of training modules has been developed to address these areas. The modules include:

independent living arrangements
vocational and educational opportunities
financial management
consumer affairs
mobility
functional skills
attendant management
problem-solving
social skills
sexuality
leisure time
medical needs

Outlines of the content of each module can be found in Appendix C. Teaching methods used include classroom instruction, group discussions, and numerous fieldtrips into the community. The modules are usually co-lead by a regular staff member and a staff associate. Each module

meets one time per week, and a typical week includes about 30 hours of planned program activities. Time is also built into the schedule for participants to work on individual projects such as drivers training. A sample weekly calendar can be found in Appendix C . Locations typically visited on fieldtrips during each cycle include three apartment clusters with shared supportive services, five or six individual living arrangements, several employment locations, the University of Houston, county court, a shopping center, the airport, train station, and bus station, and a wheelchair repair shop. The project has developed various resource materials in conjunction with modules. These include written materials for participants to take home in an individual notebook. Some modules have also been videotaped, and much more of this activity is planned. Major program materials are listed in Section C3 on dissemination of findings.

In addition to these program areas for participants, the project has also sponsored a family day during most cycles to facilitate discussion and exploration among family members of the changes participants are seeking to make. In some cases the project staff has felt that more extensive work with family members would be desirable, but this is often difficult to arrange because many families live a substantial distance from Houston.

For the most part the planned program content has proven to be appropriate and useful from the viewpoint of both staff members and participants. A few changes have been made in the original set of modules.

A new module has been added on the use of leisure time. The module on problem-solving has been difficult to teach effectively. It has received several revisions and much of its content has been incorporated into other modules. The social skills module has varied from cycle to cycle depending on the competancies and needs of particular groups of participants. An early module on home-making skills has been incorporated into the living arrangements module. In addition to core program areas for the participants as a group, time has also been set aside for 'electives'. These are experiences in the community arranged for one individual participant with special interests in areas such as cooking, gardening from a wheelchair, or exploring the feasibility of doing upholstery work.

Methods used to convey program content have evolved with experience to include more fieldtrips, more contact with a greater variety of staff associates, and the use of new media such as videotaping.

Objective 4: Development of Research Methodology
See section b below.

Objective 5: Establishment of a Practice Apartment
The project has not yet established a practice apartment. Major reasons for this decision have been (a) the difficulties of finding an apartment where supportive services could be effectively arranged, (b) an emphasis on other priorities in program development, and (c) consideration of moving the entire project to an apartment location in the community which would make practice apartment redundant. Exploring the possibility of moving the entire project will be a major issue during the second grant year as discussed in section C-2 below.

Objective 6: Development of Functional Skills Training
When a participant enters the New Options Transitional Project an initial evaluation is held with the Functional Skills Adviser to establish that individual's level of physical functioning. Included in the evaluation session are the techniques and equipment the individual utilizes in activities of daily living including mobility, transfers, dressing, grooming, sitting, pressure relief, eating, driving, bathroom activities, etc. An effort is made to determine how the individual functions in his home environment and what barriers may be present which interfere.

No attempt is made to establish new goals for the participant but if the person expresses a desire to investigate new ways of doing things, asks to be exposed to new types of equipment, requests assistance with a functional problem, or states functional goals upon entering the project, he is provided with the resources to meet these needs. Representative goals in functional skills include driver simulator evaluation or driver training; pressure pad evaluation for wheelchair cushion; learning how to load a wheelchair into a car independently; wheelchair repairs or new wheelchair ordering; receiving information on vans, lifts, hand controls; or referral to OT, PT, orthotics, etc. Goals continue to be established throughout the project cycle at weekly individual meetings with the Functional Skills Adviser.

In addition to individual meetings, all participants attend a module on functional skills. The content of this module generally reflects the functional needs of the cycle's participants. Typically one meeting includes an Occupational Therapist who discusses the variety of adaptive equipment available and positive and negative aspects of relying on equipment for functional assistance. One meeting focuses on vehicles and equipment utilized for transportation and the discussion includes vans, automobiles, lifts, conventional hand controls, special driving controls for the physically disabled and pros and cons of each piece of equipment presented. Another meeting within this module includes a panel discussion by two quadriplegics - one of whom has established total independence as a priority

and one who has chosen to trade off physical independence in order to conserve energy and time for a full time job. A field trip is made to the home of a quadriplegic who has creatively dealt with the requirement of attendant care in a non-conventional manner. Other meetings of this module may include a discussion on architectural barriers and adaptations, home or room planning, homemaking skills, demonstration of transfers, or rearranging the physical environment to improve function.

Again, no attempt is made to convince the participant that there is one particula r way he should function or that he requires one particular piece of equipment. Instead the module provides exposure to what is available, provides support for experimentation, and is accepting of the outcome if the participant is satisfied.

SUMMARY OF MAJOR DEVELOPMENTS

June

admission of first participants
development of basic program content

July

August

addition of functional skills adviser

September

October

first out-of-state participant
first follow-up data collected
hiring of new attendant manager

November

employment of second social worker
presentations on project at ACRM, San Diego

December

January

admission of first participants with disabilities other than spinal cord injury
addition of staff associate coordinator
printing of brochures

February

addition of research assistant
initiation of rest time monitors
first decision by a participant to leave the project

March

two-day seminar for DVR couselors
began first videotaping

April

sub-study of financial management module

May

hiring of new vocational counselor

June

hiring of third social worker
fieldtrip by air to San Antonio

b. Research Findings and Progress to Date:

Specific aim 5 for the first year grant period as described in the original grant proposal relates to developing a research design and pre-testing research methodologies. Significant progress towards achieving this goal has been made during the past year. Data collection and analysis relating to both program process and outcome is well underway.

Two primary types of research are conducted in the transitional living project. The first examines the development and evolution of the project from a holistic anthropological perspective. It is intended to provide a description of internal processes of development, to trace the changing relationships of the project to its host rehabilitation hospital and to the state vocational rehabilitation agency, and to provide background information on the program as a context for viewing outcome data. A major goal of this portion of the study is to provide a structured overview of the transitional living program to facilitate replication. The second type of research employs a longitudinal multimeasure design with control groups to evaluate the effects of the program on participants' behavior, attitudes, and information base. The hypothesis being tested in this portion of the study is that the TIRR transitional living program presents certain information, skills, and experiences which facilitate the behavioral adaptation and personal adjustment of individuals to severe physical disabilities. These two portions of the study are discussed separately below.

Sub-study I: An Anthropological Study of Program Development

OBJECTIVE (S):

1. To trace internal processes of development in the transitional living program, focusing on changes in goals, methods of planning, program content, and in other areas.

2. To analyze the project as a social system, examining roles, interpersonal relationships, and patterns of interaction among staff members and participants.

3. To examine external relationships between the transitional living project and other organizations with particular emphasis on relationships with host rehabilitation hospital and the state vocational rehabilitation agency.

METHODOLOGY:

Respondents in this portion of the study include project participants, members of the attendant staff, professional staff members, and personnel of other organizations who interact regularly with the project. Participants in the transitional living program include severely physically handicapped persons completing rehabilitation programs at the Texas Institute for Rehabilitation and

Research as well as handicapped individuals living in nursing homes or family homes where integration into the mainstream of society has been hindered. All participants must be medically stable and must meet the criteria defining persons as individuals with most severe handicaps (IMSH). The Institute and the Texas Rehabilitation Commission are important sources of referrals. Initially the participants have been single persons with spinal cord injuries who are between the ages of 18 and 50, though the population will be systematically diversified as the project progresses. The live-in project provides a program of transitional training and experience for 8 persons at a time with the program lasting 6 weeks for each participant. It is expected that a total of approximately 150 persons will participate in the transitional program during three years of operation.

Previous research that provides an overview of an entire therapeutic environment can be found in the literature on the concept of the therapeutic community (see for example Caudill,1958; cumming & Cumming, 1962; Rapoport, 1960). Literature on the development of community-based programs in the area of emotional or psychiatric disability is relevant to this study also (Fairweather et al., 1969; Rausch & Rausch, 1968; Moos, 1974). Some methods of data collection have been borrowed from these studies.

The major method of data collection is participant observation made by the project director from an anthropological perspective and recorded in the form of field notes (Pelto,1970). These observations are directed toward the objectives listed above as well as toward other areas that emerge as significant during the evolution of the project. They focus on informal day-to-day interaction, on planned program activities, on organizational activities such as staff meetings, and on interaction between personnel of the project and outside organizations.

Observational data are supplemented by other types of information. A comprehensive record of project activities is maintained using detailed weekly calendars and logs kept by the attendants and driver. Some participants are asked to keep diaries during their stay to record their activities and their feelings and responses to experiences.

Interviews are conducted periodically with participants, staff members, and persons from outside organizations who interact with the project to explore their feelings about various aspects of the program. At the end of each six-week cycle, participants are asked to complete a questionnaire evaluating the training modules, staff, and other aspects of the program. In the future, additional information on personal perceptions of the transitional program will be gathered. Professional staff members will record brief summary assessments of their daily activities in staff diaries on a time sample basis. Once during each six-to-eight week program cycle, staff members and participants will record their views of the program environment using a measure developed

by Moos (1974) in studying community-based programs for persons with psychiatric disabilities (Community Oriented Program Evaluation Scale). If time and resources permit, a projective format similar to the Thematic Apperception Test using pictures of typical project situations may also be employed to elicit views of the project (Caudill, 1958).

Descriptive reports produced in this anthropological study are intended to convey a general view of the evolution of the transitional project over time and to analyze processes of development. This portion of the project research documents the nature of the program itself and thus serves as a measure of the independent variable (program) in the portion of the research dealing with program effects and outcomes.

Sub-study II: A Study of Program Effects and Outcomes

OBJECTIVE (S):

1. To determine the behavioral effects of the transitional program.

2. To determine the informational effects of the transitional program.

3. To determine the attitudinal effects of the transitional program.

4. To determine what specific effects the program will have on certain types of individuals and to develop a means of predicting relative outcomes.

METHODOLOGY:

Design: A longitudinal multimeasure design with control groups is being employed in this study. A series of indicated measures is systematically being made before, during, and after the subject participates in the program to determine the effect of the independent variable (program) on the subjects' behavior, attitudes, and information base.

Subjects: Each participant in the New Options transitional living program is coincidentally a subject in this study. Other severely disabled individuals may also be asked to participate as control subjects in this study. (See description of participant in preceding section.)

Control Groups: Since subjects are rotated through the program on a continuous basis, those individuals who are just coming into the program serve as a control group for those who are leaving (see Campbell & Stanley, 1963, Institutional Cycle Design). In order to insure comparable control groups, the program is kept as stable as possible with planned changes occurring only on even cycles. In the future, subjects from the complete pool of applicants will be matched and paired on the basis of intake and referral data. Individuals from each pair will then be randomly

assigned to consecutive treatment or program cycles. Additionally, depending upon available resources, it may be possible to obtain control data from matched individuals who for various reasons never enter the program.

MEASURES:

1. Independent Variables: The primary independent variable (program) is being constantly monitored and documented with staff and subject diaries and checklists. The anthropological study of program development is a major source of this information. Subject variables related to objective 4 are discovered by intake documents (medical and personal histories) and referral forms.

2. Dependent Variables: The dependent variable related to objective 1 (behavioral effects) is being measured regularly by several instruments. These instruments include wheelchair odometers and rest time monitors (Halstead, Cooperative Rehabilitation Engineering Center, TIRR, BCM, and TAMU), and functional activity and performance scales (Tufts Long Range Evaluation Summary, RT-7). Additional instruments which are presently under development to measure behavioral effects of the program include behavioral logs (Willems, RT-4, Project R-136), a goal oriented behavioral check list, and a survey of critical incidents.

The dependent variable related to objective 2 (information effects) will be measured by a series of quizzes. These quizzes are presently being designed and relate to the informational content of specific training modules and seminars. These quizzes are under construction at the present time and should be used throughout the forthcoming project reporting period.

The dependent variable related to objective 3 (attitudinal effects) is being measured by a questionnaire developed by the project staff. Other standarized instruments such as the Siller Semantic Differential, Yuker Attitudes Toward Disabled Persons Test, Tennessee Self Concept Scale, etc., will be introduced periodically in order to validate and supplement the data obtained with this instrument.

The dependent variable related to objective 4 (outcome) is being measured by some of the instruments described above as well as others. Follow-up questionnaires are routinely mailed to subjects approximately four months after they participate in the program. These questionnaires include module ratings, program ratings, application information, follow-up questions, a goal completion survey, and the functional activity and performance scale mentioned above. Follow-up questionnaires are also sent to those counselors who refer clients to the program. Plans are being made for a staff person to do follow-up in the field, thus providing an opportunity to do follow-up interviews and direct observations.

Since many of the findings of the descriptive process oriented portion of this research (An Anthropological Study of Program Development) are reported and discussed in Section a above, they will not be repeated here. Instead, the remainder of this section will focus on significant findings obtained from that portion of the research related directly to program effects and individual outcomes. Most of this research to date has involved the construction of a data base to be used for future comparisons. Results of preliminary follow-up data available at this time are reported in Section 5 below.

As of July 25, 1977, forty-nine individuals have been admitted to the New Options transitional project. Forty-three of these individuals were male and six were female. Thirty-eight New Options participants were single and eleven were married, divorced, or separated. Forty-one of the forty-nine individuals were spinal cord injured and the others were severely disabled as a result of cerebral palsy, muscular dystrophy, polio, brain damage, and ataxia. Most of the individuals in the program were from 20-25 years old. The exact age range was from 17-53 years.

One variable which may prove to be critical in determining who can benefit most from the New Options program is time since onset of disability. Thirty-three percent of the participants in the program had been disabled less than two years when they entered New Options. The most recent time since onset of disability was eight months. Another thirty-three percent of the program participants had been disabled two to five years before they came to New Options. Finally, thirty-three percent had been disabled more than five years before they participated in the program. The longest period from onset of disability to admission in New Options was twenty-four years.

Another critical variable which may later be tied to potential to benefit from this program is the individuals pre-admission living arrangements. Approximately half of the participants came from rural communities, and the other half were from metropolitan areas. Perhaps more importantly, eighty-two percent of the New Options participants were living with their family before they came to the program and the remainder came from institutionalized settings such as junior college, hospitals, and nursing homes. With respect to transportation, all but two of the forty-nine participants were dependent on someone else to drive them. Seventy-five percent of these individuals depended directly on family members or close friends.

With the exception of one individual, each of the individuals in the program used either an electric or manual wheelchair for mobility. All of the participants had special bowel care needs, and eighty-six percent depended on an assistive urinary device of some sort. Two-thirds of the individuals in the program needed help transferring from their bed to their wheelchair or from their wheelchair to their bed. Most of

them needed physical assistance dressing and bathing. Some needed assistance feeding and writing. Most of their physical assistance before they came to New Options was provided by family members or by individuals in the institution where they lived. Only five of the participants were physically independent from a functional viewpoint.

Another key variable to which much attention has been directed is that of income or economic level. More than two-thirds of the individuals in the program had an income below $200 per month before they came to New Options. Only two of the thirty-five had incomes of more than $500 per month and one of these two supports a family of thirteen.

Fifty percent of the participants had some kind of comprehensive medical rehabilitation before they came to the program. Thirty percent had limited medical or vocational rehabilitation, and twenty percent had no previous rehabilitation. About fifty percent of the New Options participants had been in school before they were disabled. The remaining fifty percent had been working. Most of these individuals had been doing manual mechanical labor such as construction work, mechanics work, and agricultural work. Since the onset of their disability and before participating in New Options, about half of the individuals had tried to attend school. The other half had tried a variety of activities including reading, painting, mechanical work, stamp collecting, traveling, fishing, and "just getting by".

Since previous research suggests that gross behavioral activity levels in naturalistic settings may be better indicators of personal independence and behavioral adjustment than standardized muscle and function tests, several unobstrusive monitoring techniques including the Rest Time Monitor and Wheelchair Odometer are being used to continuously measure gross activity levels of New Options participants.

The Rest Time Monitor is an electronic device designed to monitor time out of bed. It consists of a series of pressure-sensitive ribbon switches located under the mattress of the study subject, and a slow-speed strip chart recorder placed in a remote location. When in bed, the subject's weight closes one or more of the switches completing an electrical circuit which produces a deflection of the recording stylus. The size of the deflection is proportional to the number of switches closed which is determined by the subject's position in bed. Subject movements result in amplitude changes on the recording paper which make it possible to identify artifacts and minimize measurement error. With continuous operation, the Rest Time Monitor provides a simple, inexpensive method of obtaining an objective, permanent record of the number of times and duration the subject is in or out of bed for each 24 hour period. Daily assessment of the Rest Time Monitor over the past 18 months has indicated that the measurements are highly accurate and reliable (Halstead, 1976).

In view of the fact that Rest Time Monitors have only recently been installed in the facility occupied by New Options participants, experience with this measurement method has been limited. Complete data is only available for fourteen New Options participants. However, these preliminary data promise some interesting findings. The average daily out of bed time for fourteen New Options participants over three entire program cycles of six weeks duration each, was 11.2 hours per day. This compares to the daily best week average of 8.5 hours per day reported by Halstead, (1976) for fourteen paraplegics and quadriplegics who were in comprehensive rehabilitation programs at TIRR. These preliminary data support the assumption that severely disabled individuals continue to gain stamina and improve sitting tolerance after they complete a concentrated program of comprehensive rehabilitation. Further data will be carefully analyzed to determine what minimum sitting tolerance may be required for a severely physically disabled person to function in an independent living situation, a full time course load at school, or a full time job. Data from this Rest Time Monitor study may also be helpful in examining the likelihood of skin breakdown as a function of time out of bed. Finally, it appears as if data from the Rest Time Monitors will compliment that obtained from the Wheelchair Odometers.

The Wheelchair Odometer is a mechanical device which may be attached between the spokes of a wheelchair wheel near the hub, and used to count the number of revolutions made by that wheel. The Wheelchair Odometer consists of four basic parts: a rotary ratchet counter, a weight attached to the counter arm, "stops" to limit the counter-arm excursion, and a clamp to attach the odometer to the wheelchair spokes. The odometer works on a simple, mechanical principle. Operationally, a combination of gravity and the motion of the wheel create a pendular movement of the counter arm. The pendular movement is achieved as the counter, which is fixed to the wheel, turns, and the counter arm, which is allowed to swing free, either lags behind or falls forward due to the pull of gravity. The counter adds one count with each complete rotation of its shaft, or with each full turn of the wheel. With a rotary ratchet mechanism, counts are added whether the chair is moving forward or backward (Halstead, 1976).

In the present study, a Wheelchair Odometer is attached to one wheel of each of the wheelchairs used by the New Options participants. Each odometer is read during the noon hour every day, and cumulative counts are recorded and listed by individual participants. For each individual, the number of revolutions per day is determined by subtracting the number of counts recorded on one day from that of the following day. The actual distance traveled

per day for each individual is determined by multiplying the number of revolutions logged by that individual times the circumference of the wheel on his or her chair.

At this point, useable data has been collected on forty-three New Options participants through eight full cycles of the program. Data on six other participants has been dropped for various reasons. Daily distance records for individuals appear to vary considerably from one day to the next. However, records of weekly distance traveled by individuals appear to be more constant and thus are more useful indicators of gross behavioral activity trends. Figures 1 and 2 are graphic representations of individual weekly distances traveled by New Options participants in their wheelchairs during the first two cycles of the transitional living program. Individual's mileage per week for the entire forty-three subject sample ranged from 1.1 to 35.8 miles. The average weekly mileage per individual across the entire sample was 7.3 miles, or approximately one mile per day average per individual. Figure 3 indicates the average number of miles per week across one entire group of New Options participants for a complete program cycle. The vertical bars in this figure indicate the number of field trips, or occasions when the entire group traveled away from the annex on a planned outing. In all but three of twenty-one possible cases thus far, the odometer readings co-vary with the number of planned outings for the week, reflecting the direction of change and relative magnitude of the gross behavioral activity level of the group.

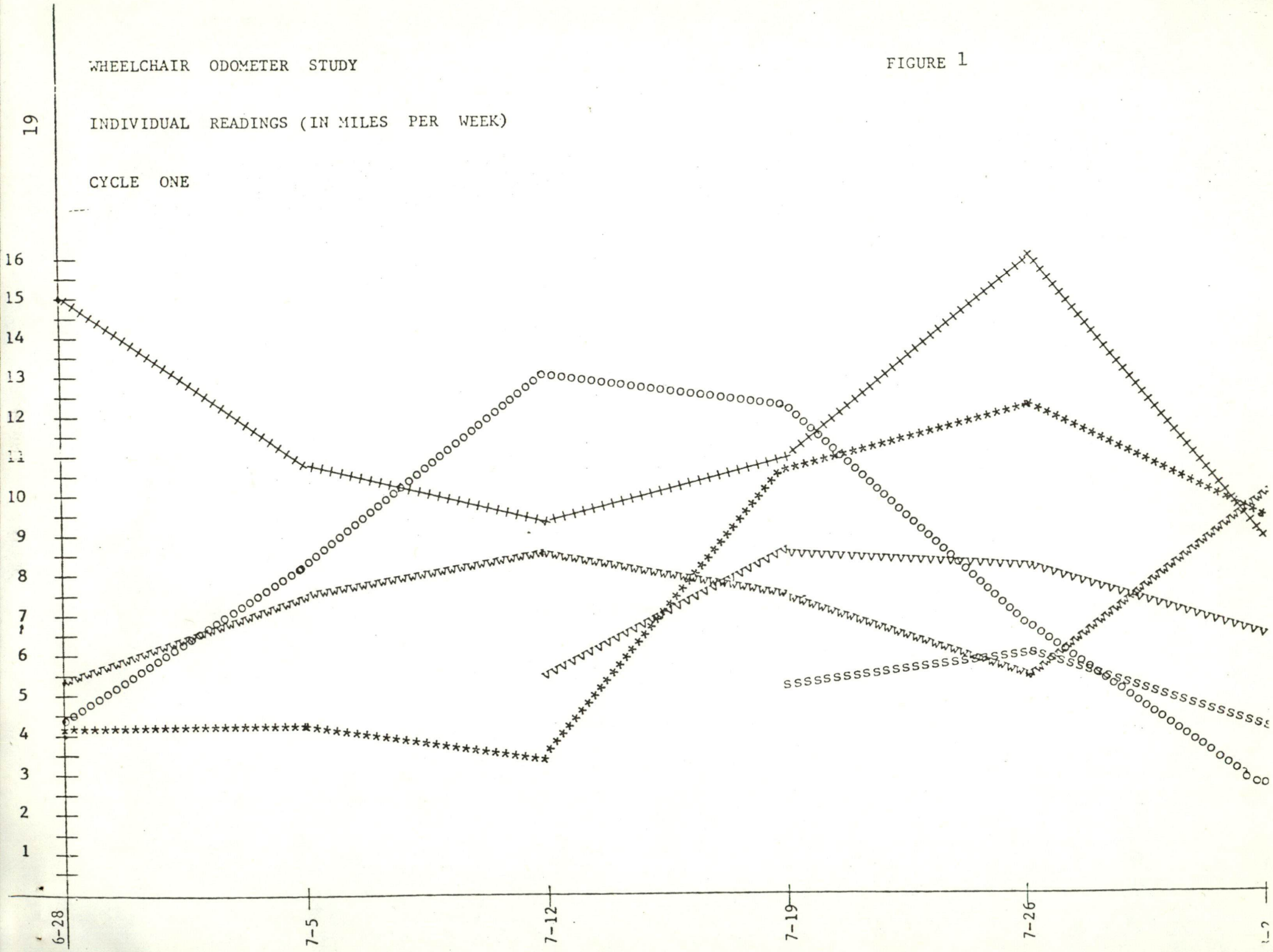
Odometer data have been analyzed to determine whether there are any significant differences in wheelchair activity between those individuals who use electric wheelchairs and those who use manual wheelchairs, or between those individuals who are more severely impaired and those who are less so. No significant differences in wheelchair mobility are apparent in either case. However, differences are very apparent when mileage records for those individuals with reported medical complications such as pressure sores and urinary tract infections are compared with records of the same individuals from weeks when no health problems were reported. Careful analysis reveals that more than eighty percent of the medical problems or complications mentioned in the physician's report during the first two program cycles, are reflected in the individual's mileage record by a decrease in average mileage from the preceding week. In fact, nearly forty percent of all mileage decreases from the preceding week for individuals in these two groups appear to be the result of medical problems or complications.

WHEELCHAIR ODOMETER STUDY

FIGURE 1

INDIVIDUAL READINGS (IN MILES PER WEEK)

CYCLE ONE



WHEELCHAIR ODOMETER STUDY

FIGURE 2

INDIVIDUAL READINGS (IN MILES PER WEEK)

CYCLE TWO

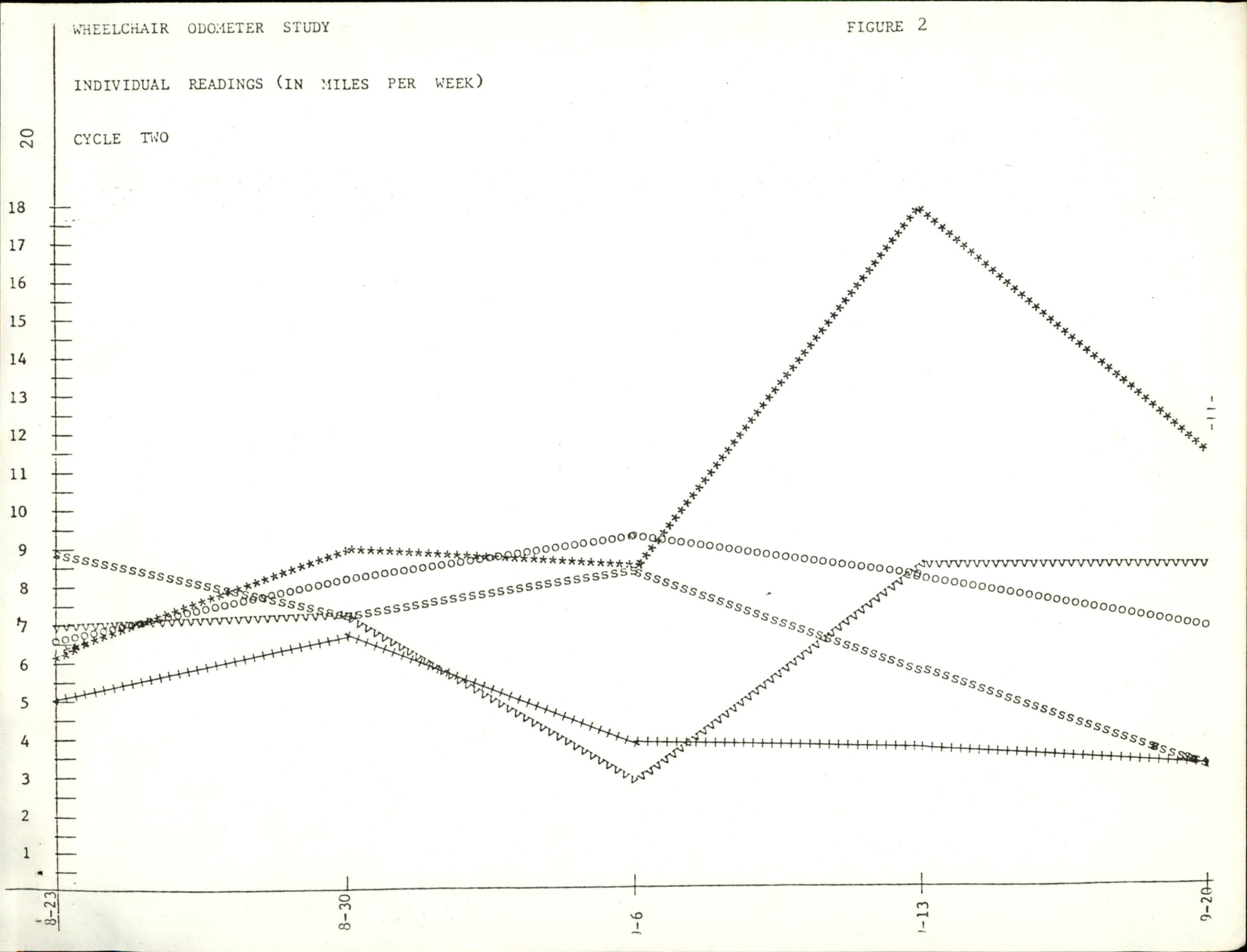
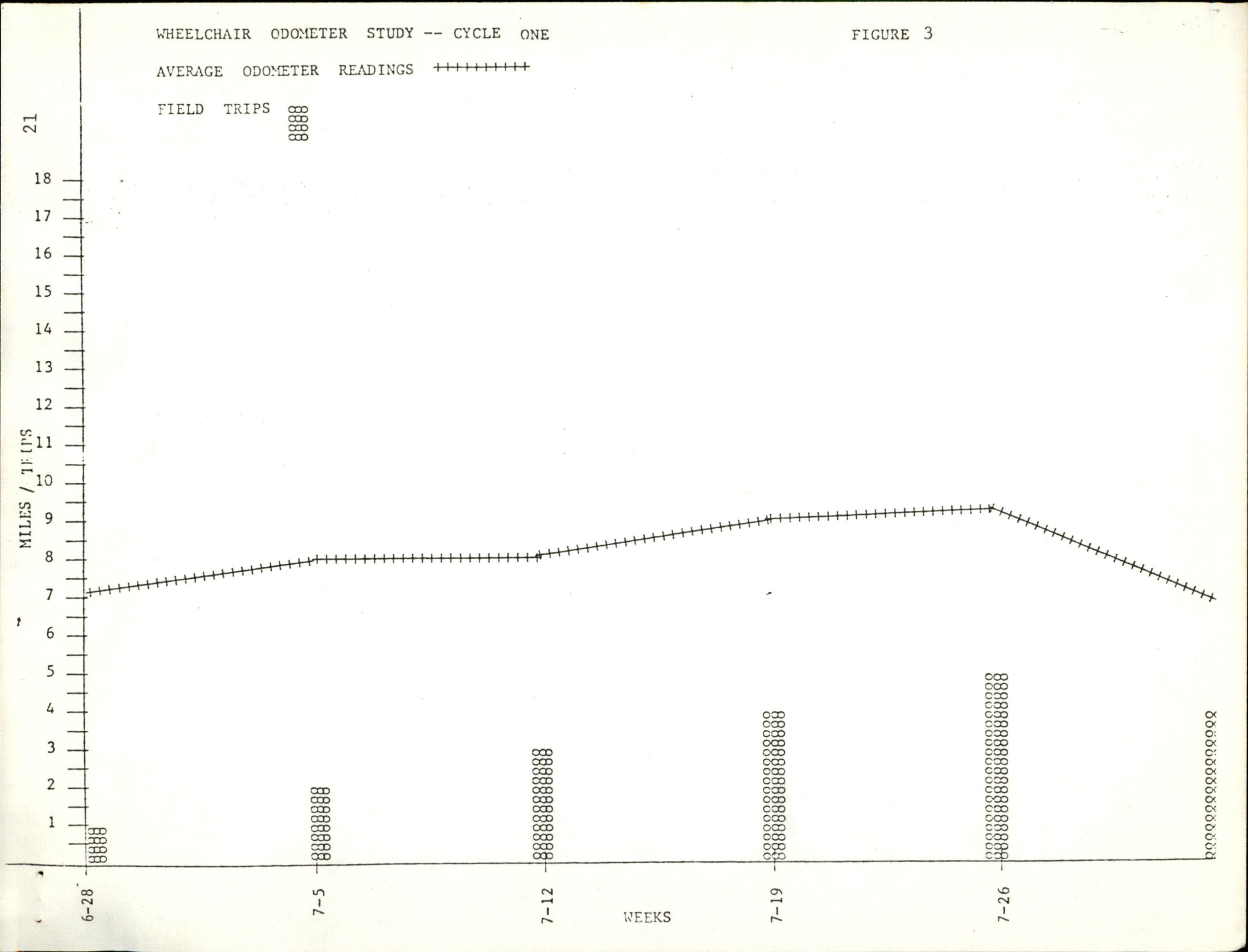


FIGURE 3


WHEELCHAIR ODOMETER STUDY -- CYCLE ONE
AVERAGE ODOMETER READINGS
FIELD TRIPS
MILES / TRIPS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
6-28
7-5
7-12
7-19
7-26
WEEKS

The results of the Wheelchair Odometer study suggest that the average number of miles per week traveled by a person in a wheelchair may be a function of gross behavioral activity of the individual. The degree to which gross behavioral activity levels predict personal independence remains to be explored. The results do indicate, however, that there is a bottom mileage limit which an individual must exceed in order to perform independently all of the necessary and routine activities of daily life. Casual observations of the data and the behavior of the individuals also indicate that there may be a maximum level of efficiency, or average number of miles per week, which when exceeded, indicates that the individual is "spinning ones wheels" or "going in circles". It appears as though an individual must travel at least five miles per week and not more than 15 miles per week in order to maintain an efficient schedule of independent behavioral activities. In other words, activity levels below 5 miles per week may indicate severe behavioral dependence and those above 15 miles per week may signal the probability of future breakdowns, ultimately resulting in behavioral dependence. This hypothesis will be tested in the future by employing systematic behavioral observations of the individuals in the New Options transitional program, and comparing data from these observations with that obtained from the Wheelchair Odometers. Also, predictive validity of the Wheelchair Odometer study will be tested in the future by using follow-up interviews and questionnaires with the subjects to determine their routine daily activities and personal independence.

3. Staff Changes

Staff members who have joined the project since the original grant request include a social worker, functional skills adviser, part-time vocational counselor, and part-time coordinator of staff associates. Biographical information on these persons is provided in Appendix B.

4. Inventions and Copyrights

No inventions have been conceived or reduced to practice in this project.

It is expected that copyrights will be sought on audio-visual materials produced in the project. This has not been done to date.

5. Anticipated Project Benefits

The New Options project is intended to develop and evaluate transitional programming designed to make community integration and an active lifestyle feasible goals for severely physically individuals. In an effort to document the individual effects of the program on New Options participants, follow-up is routinely done three to four months after each participant leaves the program. Several significant changes in living arrangements may be noted for those individuals on whom follow-up data are complete. About half of the former participants are now living comparably more independently than they were before their participation in New Options. Additionally, nearly three fourths of the former participants are now in school, or have part time or full time jobs.

When asked three months after they had left the program what they got from New Options, most of the individuals replied that they were more independent, more self-confident, or more self-sufficient. Several individuals mentioned specific kinds of information that they received while they were in the program which they felt was particularly helpful to them. This information involved such subjects as living arrangements, financial affairs, budgeting, attendant management, and vocational educational opportunities (see letter from former participant Appendix D).

Self reports by former participants are substantiated and validated by follow-up information and feedback received from counselors who sponsored individuals in the program. Most counselors agreed with their clients by saying that they seemed to be more self-sufficient, more self-confident, or more independent after they participated in New Options. Several counselors reported that they noticed a better outlook, a better attitude, or more motivation on the part of their client following participation in the program. Other counselors claimed that their clients were more goal oriented than they were before. Most comments from counselors who sponsored clients in the program were typified by the statement that "my client realized that he is ultimately responsible for meeting his own needs".

Additional follow-up will be done in order to determine whether or not the effects of the program are long lasting, and to determine whether or not some individuals require longer than three or four months to make changes in their lives after they participate in the program.

In addition to the benefits for individuals who participate in this program and others modeled after it, the results of this project may have profound consequences to the field of rehabilitation generally. If New Options is able to demonstrate conclusively that the acquisition of independent living skills and disability related information like that taught in the program is prerequisite to the optimal adaptation to severe disability, educational programs of this sort will almost certainly be demanded by vocational rehabilitation agencies and their clients, and provided by service, training, and treatment facilities across the country. Also, the man-environment approach applied here may be applied throughout

rehabilitation - from early treatment through vocational placement and follow-up.

The results of this project may justify a shift of emphasis by public welfare and vocational rehabilitation agencies from treatment, training, and vocational placement to treatment, training, and socio-environmental placement. Specifically, this means that traditionally conservative state departments of public welfare may realize that independent living is ultimately a viable and cost-effective alternative to institutionalization for severely disabled individuals. This project may emphasize the need to treat chronically disabled individuals as a part of the total environment rather than as patients with problems that require narrowly focused attention.

C. Proposed Activities

1. Work Plan for Next Grant Period

Several areas identified in the original project plan will receive major emphasis as objectives for the second grant year. These are summarized below:

(a) to produce audio visual materials so that training resources developed in New Options can be used in other contexts.

Work on this objective began during the first grant year, and the staff has gained experience in the use of several media including videotaping. The program content has now been refined well enough by experience of the first year to permit expanded production of training materials in future years.

Consultation has indicated that different media will be appropriate for various types of content. A major emphasis will probably be placed on slide-sound programs, to be complemented by printed materials and by videotapes. Efforts have also been made to establish linkages with appropriate sources of consultation and production expertise.

(b) to strengthen project capability to provide follow-up services to former participants.

To date the project has not been substantially involved in providing follow-up services directly, though some individuals have received this type of assistance. (It is important to note that recommendations for types of follow-up supportthat are needed are an important aspect of reports sent to home DVR counselors on each individual participant.) As the number of former participants grows, however, more individuals will be located in the Houston area where it is feasible to provide direct follow-up support.

During the second grant year a staff member will be hired to begin involvement with participants while they are living in the project and then to provide follow-up consultation after they leave. This individual will function as a source of support as participants establish linkages with community service systems and resources. S/he may also refer former participants for meetings with regular project staff to provide on-going consultation and support as needed.

(c) to expand research efforts

In order to make judgements about the effects of the program on individual participants more valid, research efforts during year two of the project grant period will be expanded so that data comparable to that obtained from program participants will be obtained from a matched group of non-participants who are eligible but unable to participate in the program. Analysis of this data should indicate what changes in participants may have occurred naturally if they had not attended New Options. Also, analysis of this data may help refine program content by indicating substantive gaps and defining program strengths and weaknesses more clearly. This objective relates to aim 5 of the original grant proposal, and to tasks #7 and #10 from the original schedule of project activities.

(d) to further cooperation with community resources

Several efforts to develop more relationships with community resources will be undertaken during the forthcoming grant period (see task #8, original schedule of project activities). These efforts result from the development of several new independent living programs in the Houston area:

- Gulf Home Health Services of Houston is developing a community wide attendant service for severely physically persons who are not necessarily associated with the cooperative living residential programs already established in the community.

- The Texas State Department of Public Welfare is about to initiate a major demonstration project designed to facilitate independent living for severely disabled individuals in Houston who before this time have been restricted to nursing homes.

- The Texas Rehabilitation Commission is presently negotiating for the purchase of a 100/200 unit apartment complex in Houston to be used as an extended rehabilitation facility.

New Options has been asked to consult and cooperate in the developement and operation of each of these projects. In addition to providing an opportunity for testing the applicability of independent living designs and methodologies to other programs, New Options hopes that these developments will benefit participants by giving them more opportunities to practice and apply the skills they learned during the program after they leave the program.

(e) to improve transportation capability

During the forthcoming grant period, New Options will purchase and outfit a van to augment that transportation which is now available in the project (see aim 1 and task#2 from the original schedule of project activities). The present vehicle being used by the project has been used daily for the past four years. It is in a bad state of repair, and several project activities have recently been cancelled on this account. Furthermore, the present vehicle is only capable of transporting seven persons in wheelchairs at a time, and therefore prevents the project from accepting more than seven applicants in each cycle. The new van will be used to transport participants to and from program activities, on field trips, and on recreational and educational activities which they plan for themselves. The project will continue to maintain the old vehicle for backup and supplementary service. The expanded service capabilities afforded by the availability of two vehicles at one time will allow program participants more flexibility in planning individual excursions and practice activities in the community.

(f) to seek additional sources of client referral and sponsorship

To date almost all participants in the project have been sponsored by the Texas Rehabilitation Commission. The state of Arkansas has agreed to sponsor a client, but this individual was unable to enter the project as planned because of medical complications.

Preliminary contacts have been made with other potential sponsors including DVR agencies in Michigan, Oklahoma, Massachusetts, Montana, and Minnesota, several workman's compensation insurance carriers, and the Veterans Administration. A major goal of the second grant period will be to foster relationships with these organizations so that the referral and sponsorship base of the project will be more diverse.

2. Proposed Changes in Project

Two potential changes in the project will be explored in some depth during the second grant period. One is the length of stay in the project for each participant, and the second is the project location.

Length of Stay

As discussed above in section A, the original plan to have individually variable lengths of stay was modified to become a standard six-week program experience for all participants.

The project staff has now made plans to vary the length of stay in specified ways and to evaluate the effects of this change on individual outcomes and on program operation. The proposed change would involve possible program extensions of one to four weeks to permit individuals to complete plans they initiated while in the project. In most cases these plans would be the establishment of an independent living situation or beginning vocational training or work which could not be consumated in a short six-week period. Any extension of stay would have to be 'earned' by the individual and would be intended to achieve specified objectives. It is expected that this will permit some individuals to complete the logistics of a transitional process that now can only be planned during an initial six-week stay.

If these proposed changes are approved by the Texas Rehabilitation Commission and seem useful in practice, further exploration may be done to evaluate the effects of various modifications in length of stay.

Project Location

Another project objective which may be added to those tasks in the original proposal will be to explore the effects of setting on the project. Experience during the first year of the project indicates that the setting in which the program is placed may have significant bearing on the effectiveness of the program. The semi-institutional nature of the present program setting may have bad effects on participants who realize that the protective nature of the present setting is contrary to the risk filled environment to which they are expected to adjust. On the other hand, a less institutionalized setting may interfere with the effectiveness of the program by distracting participants from program activities and focusing their energies on negotiating their immediate environment.

During the second year of the project grant period, a variety of settings other than the one presently being used by the project will be explored and evaluated by project staff to determine the practicality of physically relocating the project. Additionally, a series of hypotheses about changes

which may be expected if the project moves will be developed. These hypotheses may eventually be tested by actually moving the project during year three of the grant period.

3. Research Utilization and Dissemination

The production of audio-visual and written materials on the content of the transitional project has been defined as a major objective since the project began. As the content of various modules has been developed and tested through experience, efforts have begun to present this content using various media. Written information has been developed and is being tested and refined in each of the content areas of the program. The staff has also begun to videotape various modules, starting with medical needs, living arrangements, and functional skills. The production of such materials will increase substantially in the second and third years of program operation.

Information on the project as a whole has been disseminated through formal presentations as listed below. Staff members have also disseminated information on the project through personal contacts at conventions, meetings of advisory committees, and other visits to various agencies or facilities. In addition, the project has received and answered many written requests for information from handicapped individuals and also from representatives of agencies interested in transitional programming.

Papers and Presentations:

Cole, J.A. Independent Living and the New Options Transitional Project. Presented at Rehabilitation Counseling Department, University of Minnesota, February 3, 1977.

Cole, J.A., Frieden, L.F., Sperry, J.C., and Lavinson, L.J. New Options TRC Training Workshop, TIRR, March 22-23, 1977.

Cole, J.A., Holden, B.L., and Frieden, L.F. The New Options Project: A Live-In Program to Foster Social Adaptive Skills. Presented at the Annual Meeting of the American Congress of Rehabilitation Medicine, San Diego, November 12, 1977.

Frieden, L.F. Independent Living by Severely Disabled Individuals. Presented at the Annual Conference of the Oklahoma Rehabilitation Association, Tulsa, Oklahoma, August 16, 1976.

Frieden, L.F. New Options: Transition to Independence. Presented at the Annual Meeting of the American Psychological Association, Washington, D.C., September 4, 1976.

Frieden, L.F. Independent Living. Presented at the Oklahoma Conference for People with Mobility Handicaps, Tulsa, Oklahoma, April 2, 1977.

Frieden, L.F., Cole, J.A., and Sperry, J.C. New Options Transitional Project. Presented at a meeting of the Cooperative Rehabilitation Engineering Center, Houston, Texas, January 28, 1977.

Frieden, L.F. and Halstead, L.S. Application of Unobstrusive Longitudinal Monitoring Techniques to Assess Gross Behavioral Activity in a Non-Institutional Setting. Presented at the Annual Meeting of the American Congress of Rehabilitation Medicine, San Diego, California, November 11, 1976.

In addition to these formal presentations, in-service training programs were given by the New Options staff in the departments of social service, physical therapy, occupational therapy, and nursing at TIRR.

Written Materials and Videotapes:

Carter, R.E. and Nelson, J.A. Mechanisms of Spinal Cord Injury. Texas Institute for Rehabilitation and Research, March 1977. (videotape)

Cole, J.A., Sperry, J.C., and Frieden, L.F. New Options Participants' Guide. Texas Institute for Rehabilitation and Research, March 1976.

Frieden, L.F. Choosing a Living Arrangement. Texas Institute for Rehabilitation and Research, May 1977. (videotape)

Frieden, L.F. Programs to Aid Handicapped Individuals. Texas Institute for Rehabilitation and Research, September, 1976.

Rogers, J. and Nelson, J.A. Tissue Trauma, Texas Institute for Rehabilitation and Research, April, 1977. (videotape)

Spencer, W.A. and Nelson, J.A. Respiratory Complications in Physical Disability. Texas Institute for Rehabilitation and Research, May, 1977. (videotape)

Sperry, J.C., Cole, J.A., and Frieden, L.F. New Options Brochure. Texas Institute for Rehabilitation and Research, January, 1977.

Many of the products of this project may be utilized by severely disabled individuals and service providers. Research findings and information about sitting tolerances and stamina requirements with respect to functional independence is presently in demand. More than sixteen written requests for preliminary findings in this area have already been answered by the project. Representatives from agencies and organizations such as the Paralyzed Veterans of America, National Paraplegia Foundation, Center for Independent Living, United Cerebral Palsy, and Veterans Administration have already inquired about the possibility of making audio-visual training material developed by this project available to their members and clients.

APPENDICES

A. GANTT CHART FROM ORIGINAL GRANT REQUEST

B. CURRICULUM VITAE OF NEW STAFF MEMBERS

C. PROGRAM CONTENT
   - MODULE OUTLINES
   - SAMPLE PROGRAM CALENDAR
   - SAMPLE MODULE HAND-OUTS

D. LETTER CONCERNING BENEFITS OF PROGRAM

E. DISSEMINATION MATERIALS
   - BROCHURE
   - PROGRAM FROM SEMINAR FOR DVR COUNSELORS

MASTER KEY

TEXAS INSTITUTE FOR REHABILITATION AND RESEARCH

NEW OPTIONS TRANSITIONAL PROJECT

TUFTS RESEARCH FORM

Mode of Evaluation:

New Options Participant ( )

By staff personnel ( )

Tele. with _____( )G77

Rehab. Home visit ( )G74

T.I.R.R. Patient ( )

Today's date:_____(X)G52

Research number: _____(X)G58

Name:_____(X)G53

Date of Birth: __/___/____( )G59

Address: Town_____

State_____( )G55

Major Handicapping condition:

_____L33 ( )

Barthel Possible 100 physical ability

Onset of Disability:

_____/ _____/ _____L48 ( )

Social, Environmental, and Psychological possible 36 barriers self image

Male: ( )G64

Female: ( )G65

Divorced:( )G69

Separated:( )G70

Single: ( )G66

Married:( )G67

Widowed:( )G68

Household Constellation:

Alone: ( )K17

Spouse:( )K18

Friends:( )K23

Children: ( )K19

Parents: ( )K21

Institution: ( )K24

Spouse& Child ( )K20

Other relatives( )K22

Other: ( )K25

Support from Household or family unit:

( )J43 Intact- The family unit consists of at least one member beside the person related by marriage, kinship or else a close personal companion; as a unit the family is sufficiently competent physically and mentally to provide adequate support to the person at home at this time and under foreseeable circumstances.

( )J44 Limited- The family unit is as above but under particular conditions of stress may not be able to support the person either physically or mentally or else particular circumstances such as a job require a crucial family member to be away from the home part of the day.

( )J45 Helper- Another person other than a regular family member is needed to provide some service to the person or family.

( )J46 Null- The family is unable to cope with the person or else the person lives (d) alone.

DATA BASE--ADEQUACY OF SUPPORT FROM FAMILY UNIT (present and potential) ---a) number, relationship and ages of members of household, b) state of health (physical and mental) of members, c) interpersonal relationships, d) adequacy of living quarters, e) monitoring of family group and its sense of adaptation to the patient's handicap, f) identification of needs to support appropriate discharge planning.

Architectural Barriers:

( )J51 Absent- Has access into and out of home, to all levels if multi-story, and to all rooms without safety hazard or requiring assistance.

( )J52 Minor- Has access into and out of home and to all essential levels if multi-story and to all rooms essential to well-being and participation in family activities. Some non-essential rooms may not be accessible or else inconvenience may be imposed by threshold, narrow passages or awkward arrangement of furniture. However, able to manage without assistance.

( )J53 Major- Not able to manage without assistance in getting into or out of home or in gaining access to rooms essential to well-being and/or participation in family activities.

( )J54 Describe if present.

Ability in Home:

( )J47 Intact- Able in self care and mobility and able to fulfill the customary and usual role(s) and perform customary and usual chores.
( )J48 Limited- Able in self care and mobility but limited in ability to fulfill the customary and usual roles or limited in ability to perform customary and usual chores.
( )J49 Helper - Assistance needed in self care or mobility due to structural barriers; or cannot be left alone due to severe communication or mental problems; or else assistance is needed from outside the home to perform household tasks, if a homemaker.
( )J50 Null- Would be totally dependent at home.

DATA BASE--ADEQUACY OF ABILITY AT HOME (present and potential) -- a) ability to resume usual role(s), b) availability of other supporting agencies, c) need for and willingness of family to accept outside assistance, d) architectural barriers in living quarters.

Primary Transportation:

( ) drive own car

( ) drive own van with special adaptative equipment

( ) someone else drives personal vehicle

( ) use private transportation service (cab)

( ) use public transportation service (city bus)

( ) no satisfactory transportation

( ) other

Transportation Barriers:

( ) Absent- can get anywhere at anytime with little or no inconvience.
( ) Minor- can get to and from work and other necessary destinations with assistance.
( ) Major- unable to travel without considerable difficulty

Highest Level of education completed:

( ) elementary school

( ) high school

( ) college

( ) graduate school

Vocational Status:

( )R46 Homemaker
( )R47 Student
( )R48 Competitive employment
( )R49 Non-competitive employment (sheltered workshop, etc.)
( )R50 Unemployed, but employable and unable to find work
( )R51 Retired due to age
( )R52 Too disabled to work, or be a homemaker, or be a student, or else retired for disability.

Rate according to one of the following descriptions: WORK/SCHOOL STATUS

R96( )Educational and vocational levels are compatible. There are no work or educational restrictions. The individual is working full-time in the free job market or as a full-time student. Time lost from work does not exceed one day per month on the average. If retired, the indivual fulfills usual and customary tasks and roles in the household and/or the community.

R97( )The individual desires more education or training or work but it may not be readily available. If working or attending school there may be some modification such as part-time, light work, etc. Time lost from work/school averages no more than 2 to 5 days per month. If retired, the individual fulfills the usual and customary tasks and roles in the household and/or the community in a limited way.

R98( )The individual works or attends school in a special facility adapted for the handicapped or else loses more than an average of one week per month at a full-time or part-time job.

R99( )The individual is too disabled for employment or schooling or, if retired, is not able to fulfill usual and customary roles and tasks in the household or the community.

R75( ) REMARKS:

Living Unit Income:

the average annual income of the people or family I live with--

( ) is less than $5000.

( ) is between $5 - 10,000.

( ) is between $10 - 20,000.

( ) is between $20 - 50,000.

( ) is greater than $50,000.

Source of Personal income:

( )K38 Self/family

( )K39 Insurance plan (BC/BS, etc.)

( )K40 Workers compensation

( )K41 State Voc. Agency

( )K42 Welfare/Medicaid

( )K43 Medicare

( )K44 Assoc/Fund

( )K45 Other _____

Financial Ability:

( )J59 Intact- The family is able to absorb the costs of the disability without increased indebtedness.

( )J60 Limited- The family is required to incur debts to handle costs of the disability.

( )J61 Helper- The family requires some form of public assistance to cover medically related costs. (Medicaid)

( )J62 Null- The family requires public assistance to cover medical and subsistence costs (Welfare or SSI)

DATA BASE --ADEQUACY OF FINANCES (present or potential)---a)method of payment for hospital services, b)method of payment for additional needed services or equipment, c)method of payment for continuing care, d)whether receiving state assistance for medical expenses and/or subsistence.

Rate according to one of the following descriptions: OUTLOOK (Intellectual and Emotional)

L92( )The individual functions independently without impairment in the following areas: problem-solving, regard for other, perceptual-motor ability, judgment-reliability, and self-esteem. The individual feels very satisfied with life today or else feels able to make decisions easily.

L93( )The individual functions independently with mild impairment in some area(s) mentioned above or else is fairly well satisfied with life today or else has moderate difficulty making decisions.

L94( )The individual is observed to function appreciably better with assistance, supervision, cueing coaxing or a structured environment due to one or more of the problems mentioned above or else has a feeling of more satisfaction than dissatisfaction with life today or else has great difficulty making decisions.

L95( )The individual is not particularly benefitted by assistance with problems mentioned above or else he is not satisfied with life today or else actually makes very few, if any, decisions.

Problem-Solving

.50( ) Intact--Able to comprehend meaning, retain instructions and follow through a sequence of steps particularly in a novel situation. Makes use of proviously learned information. Able to self correct if errors are made. Sustains attention until task is completed.

.51( ) Limited--Minimal limitations in problem-solving; modification of environment may be required.

.52( ) Helper--Limitations in problem-solving require a structured environment and/or another person is involved for supervision, cueing, coaxing, or assistance.

.53( ) Null--Unable to function appropriately due to limitation despite assistance.

Emotional Stability / Regard for Others

.54( ) Intact--Able to remain coooperative without being demanding or overly dependent upon others. Evidence of satisfying interactions with staff, other patients and family members.

.55( ) Limited--Minimal limitations in emotional stability; modification of environment may be required.

.56( ) Helper--Anti-social behavior requires a structured envioronment; and/or another person is involved for assistance, supervision, cueing, or coaxing.

.57( ) Null--Anti-social behavior severely limits function despite assistance.

Perceptual-Motor Ability / Gnosis-Praxis

.58( ) Intact--Able to discriminate between differences in the environment by hearing, sight, touch and visuo-spatial orientation. Able to reproduce a requested motion or activity.

.59( ) Limited--Limitation in perceptual-motor minimal; modification of environment may be required.

.60( ) Helper--Another person is involved for assistance, supervision, cueing, coaxing; and/or a structured environment is required for adequate function.

.61( ) Null--Unable to function due to limitations despite assistance.

Judgment-Reliability / Insight (Realism)

.62( ) Intact--Aware of and understands limitations or disability problems. Able to plan, work out, or incorporate compensations or substitutions, or else asks for appropriate assistance while working towards solutions and while using sound judgment.

.63( ) Limited--Minimal limitations in insight; may require environmental modification.

.64( ) Helper--Poor insight, judgment or reliability require a structured setting and/or another person involved for assistance, supervision, cueing, or coaxing.

.65( ) Null--Insight, judgment, or reliability are not appreciaby helped by assistance.

Self-Esteem / Regard for Self (Hopefulness)

.66( ) Intact--Able to feel hopeful about situation with sense of purpose and worthwhileness preserved. No evidence of inappropriate discouragement or anxiety, hypochondriasis, misuse of drugs or alcohol. Able to go through grief reation to real loss without undue denial, indifference or hysteria.

.67( ) Limited--Minimal limitations in self-esteem; a modified environment may be required.

.68( ) Helper--Manifest depression requires another person to be involved for assistance, supervision or cueing. A structured environment is required.

.69( ) Null--Manifest depression severely limits function despite assistance.

Communication:

Verbal	Hearing	Vision	
( )168	( )172	( )176	Intact- no language barrier; no difficulty in reading, writing or verbal communication.
( )169	( )173	( )177	Limited- slight to moderate limitation in communication due to a language barrier or else due to reading, writing or verbal communication disorder.
( )170	( )174	( )178	Helper- a structured setting or interpreter is needed in order to facilitate communication.
( )171	( )175	( )179	Null- communication not consistently feasible even in a structured setting.

Active Motion of Limbs:

Good - All muscle groups of the limb complete full range of motion of the joints against moderate or greater resistance. No limitation due to contracture, pain, spasticity, diminished sensibility, etc.

Fair - All muscle groups of the limb complete available range of motion against gravity. Any limitation due to contracture, pain, spasticity, etc. still permits ordinary use of the limb.

Poor - Some active motion in the limb or it is used as a helper, includes amputation with functional prosthesis.

Null - no motion and/or usefulness, includes amputation without functional prosthesis.

LIMBS	GOOD	FAIR	POOR	NULL
R upper	( )G80	( )G81	( )G82	( )G83
L upper	( )G84	( )G85	( )G86	( )G87
R lower	( )G88	( )G89	( )G90	( )G91
L lower	( )G92	( )G93	( )G94	( )G95

Barthel

Self - Care (see definitions below) 53

Intact	Limited	Helper	Null			
( )H18	( )H19	( )H20	( )H21	4	0	Drink/cup
( )H22	( )H23	( )H24	( )H25	6	0	Feed/dish
( )H26	( )H27	( )H28	( )H29	5	3	Dress upper
( )H30	( )H31	( )H32	( )H33	7	4	Dress lower
( )H34	( )H35	( )H36	( )None	0	-2	Brace/pros
( )H37	( )H38	( )H39	( )H40	5	0	Groom
( )H41	( )H42	( )H43	( )H44	6	0	Wash/bathe
( )H45	( )H46	( )H47	( )H48	10	5	Bladder
( )H49	( )H50	( )H51	( )H52	10	5	Bowel
~~( )H53~~	~~( )H54~~	~~( )H55~~	~~( )H56~~			Perimeum 0
~~( )H57~~	~~( )H58~~	~~( )H59~~	~~( )H60~~			Hand skills 0

( )H61 Remarks:

Intact- Activity completed under ordinary circumstances, without modification, and within reasonable time.

Limited - Activity completed with prior preparation or under special or modified circumstances, or with assistive devices or aids, or beyond a reasonable time.

Helper - Activity completed only with partial help or assistance or under supervision for safety or by cuing. ANOTHER HUMAN IS INVOLVED IN ACTIVITY.

Null - Person unable to assist, or totally dependent, or activity is not performed.

Mobility: (see definitions above) 47

Intact	Limited	Helper	Null			
( )H62	( )H63	( )H64	( )H65	15	7	Transfer/chair
( )H66	( )H67	( )H68	( )H69	6	3	Transfer/toilet
( )H70	( )H71	( )H72	( )H73	1	0	Transfer/tub-shower
~~( )H74~~	~~( )H75~~	~~( )H76~~	~~( )H77~~			Transfer/automobile 0
( )H78	( )H79	( )H80	( )H81	15	10	Walk 50 yd.
( )H82	( )H83	( )H84	( )H85	10	5	Stairs 1 floor
~~( )H86~~	~~( )H87~~	~~( )H88~~	~~( )H89~~			Outdoors 0
( )H90	( )H91	( )H92	( )None	5	0	Wheelchair

( )H93 Remarks:

NEW OPTIONS PARTICIPANT EVALUATION SUMMARY
FORM # 2

CYCLE # 1 thru 11

DATE January 30, 1978

NUMBER OF PARTICIPANTS IN CYCLE 61

NEW OPTIONS PROGRAM GENERAL COMPONENT RATINGS:

	SCORE FROM GENERAL RATING SCALE (average)*	EXTREME VARIENCE/ INDIVIDUAL DIFFERENCES (X)	PROBLEM INDICATED (X)
group leaders	4.7		
associates	4.4		
others	---		
attendants	4.0		
attendant system	3.7		
transportation system	3.8		
field trips	4.3		
individual counseling	4.0		
modules	4.3		
recreation	3.5		

* possible score of 0-5

LF/asm
9/77

NEW OPTIONS PARTICIPANT EVALUATION SUMMARY
FORM #1

CYCLE # 1 thru 11

NUMBER OF PARTICIPANTS IN CYCLE 61

DATE January 30, 1978

NEW OPTIONS MODULE RATINGS:

MODULE	SCORE FROM GENERAL RATING SCALE (average)	RANK	TABULATED SCORE SPECIFIC RESPONSE SCALE (average)	RANK	PROBLEM INDICATED (X)
social skills	3.9	6	8.1	4	
consumer affairs	3.9	6	7.6	8	
financial management	4.2	4	7.7	7	
attendant management	4.0	5	7.4	9	
living arrangements	4.3	3	7.8	6	
medical needs	4.4	2	8.5	3	
mobility	4.2	4	7.9	5	
sexuality	4.6	1	8.9	1	
functional skills	4.3	3	8.7	2	
vocational/ educational	4.2	4	7.3	10	

NEW OPTIONS PARTICIPANT EVALUATION SUMMARY
FORM # 2

CYCLE # 1 thru 11

DATE January 30, 1978

NUMBER OF PARTICIPANTS IN CYCLE 61

NEW OPTIONS PROGRAM GENERAL COMPONENT RATINGS:

	SCORE FROM GENERAL RATING SCALE (average)*	EXTREME VARIENCE/ INDIVIDUAL DIFFERENCES (X)	PROBLEM INDICATED (X)
group leaders	4.7		
associates	4.4		
others	---		
attendants	4.0		
attendant system	3.7		
transportation system	3.8		
field trips	4.3		
individual counseling	4.0		
modules	4.3		
recreation	3.5		

* possible score of 0-5

LF/asm
9/77

NEW OPTIONS PARTICIPANT EVALUATION SUMMARY
FORM #1

CYCLE # _____

NUMBER OF PARTICIPANTS IN CYCLE 61

DATE January 30, 1978

NEW OPTIONS MODULE RATINGS:

MODULE	SCORE FROM GENERAL RATING SCALE (average)	RANK	TABULATED SCORE SPECIFIC RESPONSE SCALE (average)	RANK	PROBLEM INDICATED (X)
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consumer affairs	3.9	6	7.6	8	
financial management	4.2	4	7.7	7	
attendant management	4.0	5	7.4	9	
living arrangements	4.3	3	7.8	6	
medical needs	4.4	2	8.5	3	
mobility	4.2	4	7.9	5	
sexuality	4.6	1	8.9	1	
functional skills	4.3	3	8.7	2	
vocational/ educational	4.2	4	7.3	10	

dual; desire to make changes in lifestyle; willingness to set and work on some goals; willingness to risk experimenting with new ways of doing things and new kinds of behaviors; average intellectual capacity (comprehension of verbal input, no major memory deficits, reasonable attention span); ability to read; ability to speak well enough to be generally understood; ability to hear; no severe emotional pathology; and physical endurance for program (sitting tolerance, bowel control that is predictable, suitable urinary management).

The preceeding summary of research at New Options is intended to answer some questions and to raise others. Efforts are presently under way to determine whether reports of improved motivation are based on observations of verbal assertiveness or behavioral achievement. We want to find out more about how independence is related to learned skills and behaviors and to self image or motivation. We want to know how the New Options program might be improved, and we want to know how portions of this program might be utilized to benefit more traditional rehabilitation programs. It is hoped that further research at New Options will help answer many of these and other questions.

it be large or small. Some people in wheelchairs are better off than some able bodied people."; "It is very hard for some people to adjust to being in a wheelchair. It is easier for some than for others, but it can be done."; "New Options opened my eyes and my mind to what a fulfilling life I could have in spite of my handicap."; "I cannot tell you how much self confidence I acquired in those few weeks - I got over being ashamed that I was in a wheelchair.".

Self reports by former participants are substantiated and validated by follow-up information and feedback received from counselors who sponsored individuals in the program. Most counselors agreed with their clients by saying that they seemed to be more self-sufficient, more self-confident, or more independent after they participated in New Options. Several counselors reported that they noticed a better outlook, a better attitude, or more motivation on the part of their client following participation in the program. Other counselors claimed that their clients were more goal oriented than they were before. Most comments from counselors who sponsored clients in the program were typified by the statement that "my client realized that he is ultimately responsible for meeting his own needs".

Staff members and the project Department of Vocational Rehabilitation courtesy counselor largely agree on the following characteristics as important traits in persons who seem to have benefitted from the project: readiness to face life as a severely disabled indivi-

In an effort to document the individual effects of the program on New Options participants, follow-up is routinely done three to four months after each participant leaves the transitional program. Several significant changes in living arrangements may be noted for those individuals on whom follow-up data are complete. About half of the former participants are now living comparably more independently than they were before their participation in New Options. Many of them have moved from nursing homes or their parents homes into apartments, houses, and dormitories - both individually and in shared group living arrangements. Additionally, nearly two-thirds of the former participants are now in school, or have part time or full time jobs.

Observations made during the transition from protected settings such as nursing homes and parents homes to less well protected or more independent settings such as apartment units and college dormitories may lead to valuable insights regarding the psychological adjustment and adaptation of individual's to severe physical disabilities. The number and variety of references to changing self images or self concepts made by former participants is striking. For example, participants have said: "It is really hard to believe what can and is being done from wheelchairs. There are some very intelligent people in wheelchairs."; "Being in a wheelchair puts you in a minority but it doesn't stop you from living a normal life."; "Most people just don't realize that people in wheelchairs are normal too, they just have some kind of handicap. Everyone has a handicap of some sort, whether

as construction work, mechanics work, and agricultural work.

Since the onset of their disability and before participating in New Options, about half of the individuals had tried to attend school. The other half had tried a variety of activities including reading, painting, mechanical work, stamp collecting, traveling, fishing, and "just getting by".

Several unobstrusive monitoring techniques including the Rest Time Monitor and Wheelchair Odometer are being used to continuously measure gross activity levels of New Options participants. The average daily out of bed time for New Options participants was thirteen hours per day. This compares to a daily best week average of around 8.5 hours per day for paraplegics and quadriplegics who were in comprehensive rehabilitation programs at TIRR. Individual's mileage per week for the entire sample ranged from 1.1 to 35.8 miles. The average weekly mileage per individual across the entire sample was 9.1 miles, or approximately 1.3 miles per day average per individual.

Approximately five hours of each participants time per day is spent doing activities scheduled by the project. As a result, participants are able and encouraged to use most of their time in self initiated and self managed activities. There are approximately ten planned modules each week, an average of three planned fieldtrips per week and pre-arranged meetings with about six associates-active handicapped individuals from the community.

With the exception of three individuals, each of the participants in the program used either an electric or manual wheelchair for mobility. All of the participants had special bowel care needs, and eighty-six percent depended on an assistive urinary device of some sort. Two-thirds of the individuals in the program needed help transferring from their bed to their wheelchair or from their wheelchair to their bed. Most of them needed physical assistance dressing and bathing. Some needed assistance with eating and writing. Most of their physical assistance before they came to New Options was provided by family members or by individuals in the institution where they lived. Only seven of the participants were physically independent from a functional viewpoint.

Another key variable to which much attention has been directed is that of income or economic level. More than two-thirds of the individuals in the program had an income below $200 per month before they came to New Options. Only three of the sixty-six had incomes of more than $500 per month and one of these two supports a family of thirteen.

Fifty percent of the participants had some kind of comprehensive medical rehabilitation before they came to the program. Thirty percent had limited medical or vocational rehabilitation, and twenty percent had no previous rehabilitation. About fifty per cent of the New Options participants had been in school before they were disabled. The remaining fifty percent had been working. Most of these individuals had been doing mechanical labor such

from twenty thru thirty years old. The exact age range was from 17-53 years. Twenty-three percent of the participants were nonwhite.

One variable which may prove to be critical in determining who could benefit most from the New Options program is time since onset of disability. Thirty-one percent of the participants in the program had been disabled less than two years when they entered New Options. The most recent time since onset of disability was five months. Another thirty-one percent of the program participants had been disabled two to five years before they came to New Options. Finally, thirty-eight percent had been disabled more than five years before they participated in the program. The longest period from onset of disability to admission in New Options was twenty-nine years.

Another critical variable which may later be tied to potential to benefit from this program is the individual's pre-admission living arrangement. Approximately half of the participants came from rural communities, and the other half were from metropolitan areas. Perhaps more importantly, eighty-two percent of the New Options participants were living with their family before they came to the program and the remainder came from institutionalized settings such as junior colleges, hospitals, and nursing homes. With respect to transportation, all but two of the sixty-six participants were dependent on someone else to drive them. Seventy-five percent of these individuals depended directly on family members or close friends.

NEW OPTIONS RESEARCH

INTERIM REPORT

January 31, 1978

We are trying to learn a number of things from the research at New Options. We want to find out the characteristics of the people who participate in the program. We are interested not only in their physical behavior, but also in their backgrounds and their attitudes. We want to document what they do and what they learn while they are in the program. We want to know what happens to them after they leave the program - whether the program had any signigicant effects on their lives - and if so, what were those effects and what about our program may have caused them. The following is a summary of some of the results of our research to date.

We are presently in the midst of our twelfth six-week program cycle, and sixty-six individuals have been admitted to the project. Fifty-five of these individuals were male and eleven were female. Forty-nine New Options participants were single and seventeen were married, divorced, or separated. Fifty of the sixty-six individuals were spinal cord injured and the others were severely disabled as a result of cerebral palsy, muscular dystrophy, polio, brain damage, spina bifida, rheumatoid arthritis, cerebellar dysfunction, and ataxia. Most of the individuals in the program were

NEW OPTIONS RESEARCH

INTERIM REPORT

January 31, 1978

By Lex Frieden
New Options Research Director
Texas Institute for Rehabilitation and Research
Houston, Texas

RESEARCH INFORMATION

New Options
Div. acty tape 3/78
booklet
for mgt. booklet
part. Service (detailed) follow up
1 L eval.
critical incidents
Todyo
rewrite duties
add training program
housing seminars

✓Duke
Library (Bill)
✓Dennis
✓Randy, ✓Roberta
✓David
✓Roger

meet with Spencer & Jean to redo TUFTS form

~~get copies~~ - get 1975 & '76 vol. of APMR

talk to Halstead about publication / REC reports

compile module discriptions/outlines and design questionaires.

add critical incidents

add COPES

add behavioral loop

type Copes form

type beh. questionaire

~~Roger cbt Stud gr~~

Develop means for recording individual odometer (thickness)

Detail procedure for weekly plotting

compute cycle 5 data

RTM get calculation of wkly study.

develop procedure for weekly plotting routine [illegible]

Discharge Quest:

compute cycle 5 data

detail procedure for analysis

Follow-up

Counselors

log corres, research

participants

log research convers.
(includes discharge
ques.; Jufts form
goal review.)
begin to analyze
present data

Jufts form [needs 10 copies]
& Revise

---

goal followup
develop procedure
for detailing goals

Mees form
continue development

Critical Incidents
expand & refine
Pilot test

Behavioral Seq
Develop & implement
Pilot test

NEW OPTIONS: FACILITATING THE MOVEMENT TOWARDS INDEPENDENCE BY SEVERELY PHYSICALLY DISABLED PERSONS[1]

BY Lex Frieden and Jean Cole

Texas Institute for Rehabilitation and Research
Houston, Texas

Recent developments in rehabilitation have placed an increased emphasis on creating opportunities for special housing, education, and employment for severely physically handicapped persons. The Rehabilitation Act of 1973 recognizes the special and unique needs of the severely disabled. The provision of opportunities offered by the Act has permitted some individuals who were formerly isolated in institutions such as nursing homes or in dependent home situations to begin lives of independence and productivity. These efforts, though important, have been slow to evolve, they lack comprehensiveness, and too few persons have been offered maximum options and opportunities.

There are countless individuals who find it overwhelmingly difficult to assume the responsibilities that these new opportunities afford. Many of these persons have the basic untapped capabilities necessary to become independent and develop a lifestyle of personal satisfaction and productivity. However, due to a fragmented approach of limited scope, and the absence of a model of transition, many severely

[1]Presented at the annual meeting of the American Psychological Association, San Francisco, California, August 30, 1977.

physically handicapped persons cannot bridge the gap between a protected institutional existence or an isolated and confining home situation to the management and assumption of an independent life-style.

Even with maximum personal capabilities, the process of moving from a dependent to an independent living arrangement or situation is difficult and includes many obstacles. The exceptional person is usually successful in negotiating a new life style, but the more typical person easily becomes isolated and confined to a closed environment by his disability. The potential for productivity and personal happiness, if such persons were given opportunities, remains mostly unexploited. Our system of rehabilitation services should be able to offer persons an environment where they can extend their basic abilities, build upon new learning experiences, and establish reasonable goals that are supported by carefully segmented planning and individual learning. When an individual possesses potentials for self-direction and vocational productivity, appropriate assistance is crucial in order to avoid stifling his/her capabilities and motivation.

Experience has shown that persons with severe disability who want to live independently are usually required to assume the responsibilities for medical, social, and economic necessities simultaneously. The complexity of these demands can frequently lead to deterioration of their physical well-being. The severely physically handicapped individual is prone to a variety of medical problems -- skin

breakdown, urological complications, muscle atrophy, and the physiological results of inactivity. Furthermore, when the severely physically handicapped person is reintegrated into the family, many pressures outside of those required to meet the prescribed medical treatment can become paramount concerns to the family. Therefore, even though medical needs should be given a higher priority by the family they often become secondary. Consequently,medical complications develop and re-admission to a hospital is imperative. This sets up a vicious cycle.

It has also been documented that in many family situations, the integration of the severely physically handicapped individual into the home must be a carefully planned process with maximum emphasis upon education and communication. A transitional experience is needed for many persons and their families to establish the necessary physical care, mobility, and emotional supports. A program of preparation that extends beyond the formal institution is the goal of a transitional experience. This experience should have a significant impact on the problems of medical recidivism.

Present national programming offers few prototypes that prepare the severely physically handicapped individual to move from a dependent setting into an independent setting. Structured programs which place an emphasis on offering maximum opportunities at cost-effective levels are essentially non-existent. Emphasis is not placed on allowing the severely physically handicapped person to assume the

multiple stresses of independent living and employment in a gradual manner.

In June,1976, Texas Institute for Rehabilitation and Research began a model transitional living program called New Options which is designed to foster the integration of severely physically handicapped individuals into their communities. Goals of integration may include the establishment of independent living, involvement in educational and vocational opportunities, active social participation in the mainstream of society, the enhancement of personal skills important in daily problem solving, and the stabilization of goals and objectives required to maintain a satisfying quality of life. The planning and initial months of operation of New Options were supported in part by RT-4 funds which continue to support a portion of the research to evaluate program effectiveness. In October of 1976 an R&D grant (13-P-57889/6-01) was funded by RSA. This has substantially increased the project's capability to conduct service demonstrations and evaluation research.

New Options presents certain information, skill training, and experiences in an effort to facilitate the behavioral adaptation and personal adjustment of individuals to severe physical disabilities. New Options is a six week live-in program composed of three primary elements, (1) a residential support system, (2) individual counseling and consultation, and (3) training, practice, and information modules.

The residential support system includes attendant service, food service, and transportation service. Participants in the New Options program live in the TIRR Maximum Independence Center, a barrier-free dormitory style facility where non-professional attendant care is provided 24 hours a day on a shared basis. Meals are prepared by a kitchen staff in the facility, and the project owns and operates a van type vehicle suitable for transporting seven persons in wheelchairs at one time. The residential support system at New Options is patterned after the system developed in the Cooperative Living Residential Project sponsored by TIRR and the Rehabilitation Services Administration from 1972 through 1975.

Individual counseling and consultation at New Options is provided primarily by a full time professional staff which includes the Project Director, Research Director, Personal Independence Counselor, and Functional Skills Adviser. Other individual counseling is done by consulting physicians, vocational counselors, occupational therapists, and active handicapped persons from the community. Counseling is directed toward solving specific individual problems as well as validating experiences and identifying needs.

The key element of New Options is the training module . Presently, there are eleven such modules in the program focusing on such subjects as financial management, consumer affairs, living arrangements, functional skills, mobility, sexuality, home-making skills, voca-

tional-educational opportunities, medical needs, and social skills. The basic responsibility for planning and arranging each module is divided among the professional staff people in the project. Additionally, active disabled persons who can serve as role models are employed as associates to assist with each module. In some cases, these associates assume almost total responsibility for the operation of their respective module. Each subject module generally meets one time per week for a period of two to four hours.

A number of educational techniques, mostly of an experiential nature, are used in each module to transmit information. Field trips are used extensively to provide opportunities for participants to observe various living arrangements, vocational and educational programs, recreational facilities, and so forth. Visits are made to agency offices, job sites, university campuses, apartment complexes, and private residences. Meetings are arranged with public officials, agency representatives, building managers, program administrators, and active handicapped persons throughout the community.

Considerable free time is programmed into the schedule so that participants may explore the community on their own, practice activities individually, complete personal agendas, or do whatever they want. Participants frequently use free time to run personal errands, to socialize, and to engage in recreational activities.

As of July 25, 1977, forty-nine individuals had been admitted to the New Options transitional project. Forty-three of these individuals were male and six were female. Thirty-eight New Options participants were single and eleven were married, divorced, or separated. Forty-one of the forty-nine individuals were spinal cord injured and the others were severely disabled as a result of cerebral palsy, muscular dystrophy, polio, brain damage, and ataxia. Most of the individuals in the program were from 20-25 years old. The exact age range was from 17-53 years.

Staff members and the project Department of Vocational Rehabilitation courtesy counselor largely agree on the following characteristics as important traits in persons who seem to have benefitted from the project: readiness to face life as a severely disabled individual; desire to make changes in lifestyle; willingness to set and work on some goals; willingness to risk experimenting with new ways of doing things and new kinds of behaviors; average intellectual capacity (comprehension of verbal input, no major memory deficits, reasonable attention span); ability to read; ability to speak well enough to be generally understood; ability to hear; no severe emotional pathology; and physical endurance for program (sitting tolerance, bowel control that is predictable, suitable urinary management).

One variable which may prove to be critical in determining who can benefit most from the New Options program is time since onset of disability. Thirty-three percent of the participants in the program had been disabled less than two years when they entered New Options. The most recent time since onset of disability was eight months. Another thirty-three percent of the program participants had been disabled two to five years before they came to New Options. Finally, thirty-three percent had been disabled more than five years before they participated in the program. The longest period from onset of disability to admission in New Options was twenty-four years.

Another critical variable which may later be tied to potential to benefit from this program is the individual's pre-admission living arrangement. Approximately half of the participants came from rural communities, and the other half were from metropolitan areas. Perhaps more importantly, eighty-two percent of the New Options participants were living with their family before they came to the program and the remainder came from institutionalized settings such as junior colleges, hospitals, and nursing homes. With respect to transportation, all but two of the forty-nine participants were dependent on someone else to drive them. Seventy-five percent of these individuals depended directly on family members or close friends.

With the exception of one individual, each of the participants in the program used either an electric or manual wheelchair for

mobility. All of the participants had special bowel care needs, and eighty-six percent depended on an assistive urinary device of some sort. Two-thirds of the individuals in the program needed help transferring from their bed to their wheelchair or from their wheelchair to their bed. Most of them needed physical assistance dressing and bathing. Some needed assistance feeding and writing. Most of their physical assistance before they came to New Options was provided by family members or by individuals in the institution where they lived. Only five of the participants were physically independent from a functional viewpoint.

Another key variable to which much attention has been directed is that of income or economic level. More than two-thirds of the individuals in the program had an income below $200 per month before they came to New Options. Only two of the thirty-five had incomes of more than $500 per month and one of these two supports a family of thirteen.

Fifty percent of the participants had some kind of comprehensive medical rehabilitation before they came to the program. Thirty percent had limited medical or vocational rehabilitation, and twenty percent had no previous rehabilitation. About fifty per cent of the New Options participants had been in school before they were disabled. The remaining fifty percent had been working. Most of these individuals had been doing mechanical labor such as construction work, mechanics work, and agricultural work.

Since the onset of their disability and before participating in New Options, about half of the individuals had tried to attend school. The other half had tried a variety of activities including reading, painting, mechanical work, stamp collecting, traveling, fishing, and "just getting by".

Since previous research suggests that gross behavioral activity levels in naturalistic settings may be better indicators of personal independence and behavioral adjustment than standarized muscle and function tests, several unobstrusive monitoring techniques including the Rest Time Monitor and Wheelchair Odometer are being used to continuously measure gross activity levels of New Options participants.

The average daily out of bed time for New Options participants was 11.2 hours per day. This compares to a daily best week average of 8.5 hours per day for paraplegics and quadriplegics who were in comprehensive rehabilitation programs at TIRR. Individual's mileage per week for the entire forty-three subject sample ranged from 1.1 to 35.8 miles. The average weekly mileage per individual across the entire sample was 7.3 miles, or approximately one mile per day average per individual.

In an effort to document the individual effects of the program on New Options participants, follow-up is routinely done three to

four months after each participant leaves the model transitional program. Several signigicant changes in living arrangements may be noted for those individuals on whom follow up data are complete. About half of the former participants are now living comparably more independently than they were before their participation in New Options. Additionally, nearly three fourths of the former participants are now in school, or have part time or full time jobs.

Observations made during the transition from protected settings such as nursing homes and parents homes to less well protected or more independent settings such as apartment units and college dormitories may lead to valuable insights regarding the psychological adjustment and adaptation of individual's to severe physical disabilities. For example: The number and variety of references to changing self images or self concepts by former transitional project participants is striking.

The following statements illustrate the sort of comments made by participants who experienced this change while in the program: "It is really hard to believe what can and is being done from wheelchairs. There are some very intelligent people in wheelchairs."; "Being in a wheelchair puts you in a minority but it doesn't stop you from living a normal life."; "Most people just don't realize that people in wheelchairs are normal too, they just have some kind of handicap. Everyone has a handicap of some sort, whether it be

large or small. Some people in wheelchairs are better off than some able bodied people."; "It is very hard for some people to adjust to being in a wheelchair. It is easier for some than for others, but it can be done."; "New Options opened my eyes and my mind to what a fulfilling life I could have in spite of my handicap."; "I cannot tell you how much self confidence I acquired in those few weeks - I got over being ashamed that I was in a wheelchair."

Could it be that these references are merely abstract descriptions of persons who realize they have more control over their environment than they once thought? Or, could it be that these references are merely reports of yet unfulfilled expectations? Perhaps these are references to newly acquired or internalized goals. Maybe these persons are practicing newly acquired skills or behaviors which affect their self image.

Judging from the program design, each one of the afore mentioned hypotheses may have some degree of validity. Certainly the program teaches information and skills which may change persons impressions about the relative influence they have over their own destiny. In some cases, information or skills acquired in the project may actually increase individual's capacities to control their environment and thus influence their own destinies. Goal setting and problem solving are important conceptual and operational bases of the program, and it is likely that repeated practice in these areas improves one's ability to function with more

self control in this complex social and physical environment. Finally, there is no doubt that the project staff, persons who refer individuals to the program, and participants as well, expect the program to have a positive effect.

Self reports by former participants are substantiated and validated by follow-up information and feedback received from counselors who sponsored individuals in the program. Most counselors agreed with their clients by saying that they seemed to be more self-sufficient, more self-confident, or more independent after they participated in New Options. Several counselors reported that they noticed a better outlook, a better attitude, or more motivation on the part of their client following participation in the program. Other counselors claimed that their clients were more goal oriented than they were before. Most comments from counselors who sponsored clients in the program were typified by the statement that "my client realized that he is ultimately responsible for meeting his own needs".

These reports raise questions about the degree of correlation between improved motivation and enhanced self image. Are reports of improved motivation based on observations of verbal assertiveness or behavioral achievement? Is motivation the manifest realization of critical consequences and behavioral contingencies? How does motivation relate to goal setting, or problem solving, or independence? Perhaps further research will lead to the answers for many of these questions.

The preceeding observations and descriptions characterize an apparently successful program designed to facilitate independence by severely physically disabled persons. However, the harsh reality is that neither New Options nor any other program like it can be extremely effective until society expands its definition of roles for independent handicapped persons, reverses discrepant contingencies, eliminates disincentives, and generally removes programmed barriers to self control and independence of severely disabled individuals.

Hopefully, the results of this project may justify a shift of emphasis by public welfare and vocational rehabilitation agencies from treatment, training, and vocational placement to treatment, training, and socio-environmental placement. Specifically, this means that traditionally conservative state departments of public welfare may realize that independent living is ultimately a viable and cost effective alternative to institutionalization for severely disabled individuals. New Options may serve to emphasize the need to treat chronically disabled individuals as a part of the total environment rather than as patients with problems that require narrowly focused attention.

NEW OPTIONS RESEARCH

INTERIM REPORT

January 31, 1978

By Lex Frieden
New Options Research Director
Texas Institute for Rehabilitation and Research
Houston, Texas

NEW OPTIONS RESEARCH

INTERIM REPORT

January 31, 1978

We are trying to learn a number of things from the research at New Options. We want to find out the characteristics of the people who participate in the program. We are interested not only in their physical behavior, but also in their backgrounds and their attitudes. We want to document what they do and what they learn while they are in the program. We want to know what happens to them after they leave the program - whether the program had any signigicant effects on their lives - and if so, what were those effects and what about our program may have caused them. The following is a summary of some of the results of our research to date.

We are presently in the midst of our twelfth six-week program cycle, and sixty-six individuals have been admitted to the project. Fifty-five of these individuals were male and eleven were female. Forty-nine New Options participants were single and seventeen were married, divorced, or separated. Fifty of the sixty-six individuals were spinal cord injured and the others were severely disabled as a result of cerebral palsy, muscular dystrophy, polio, brain damage, spina bifida, rheumatoid arthritis, cerebellar dysfunction, and ataxia. Most of the individuals in the program were

from twenty thru thirty years old. The exact age range was from 17-53 years. Twenty-three percent of the participants were nonwhite.

One variable which may prove to be critical in determining who could benefit most from the New Options program is time since onset of disability. Thirty-one percent of the participants in the program had been disabled less than two years when they entered New Options. The most recent time since onset of disability was five months. Another thirty-one percent of the program participants had been disabled two to five years before they came to New Options. Finally, thirty-eight percent had been disabled more than five years before they participated in the program. The longest period from onset of disability to admission in New Options was twenty-nine years.

Another critical variable which may later be tied to potential to benefit from this program is the individual's pre-admission living arrangement. Approximately half of the participants came from rural communities, and the other half were from metropolitan areas. Perhaps more importantly, eighty-two percent of the New Options participants were living with their family before they came to the program and the remainder came from institutionalized settings such as junior colleges, hospitals, and nursing homes. With respect to transportation, all but two of the sixty-six participants were dependent on someone else to drive them. Seventy-five percent of these individuals depended directly on family members or close friends.

With the exception of three individuals, each of the participants in the program used either an electric or manual wheelchair for mobility. All of the participants had special bowel care needs, and eighty-six percent depended on an assistive urinary device of some sort. Two-thirds of the individuals in the program needed help transferring from their bed to their wheelchair or from their wheelchair to their bed. Most of them needed physical assistance dressing and bathing. Some needed assistance with eating and writing. Most of their physical assistance before they came to New Options was provided by family members or by individuals in the institution where they lived. Only seven of the participants were physically independent from a functional viewpoint.

Another key variable to which much attention has been directed is that of income or economic level. More than two-thirds of the individuals in the program had an income below $200 per month before they came to New Options. Only three of the sixty-six had incomes of more than $500 per month and one of these two supports a family of thirteen.

Fifty percent of the participants had some kind of comprehensive medical rehabilitation before they came to the program. Thirty percent had limited medical or vocational rehabilitation, and twenty percent had no previous rehabilitation. About fifty per cent of the New Options participants had been in school before they were disabled. The remaining fifty percent had been working. Most of these individuals had been doing mechanical labor such

as construction work, mechanics work, and agricultural work.

Since the onset of their disability and before participating in New Options, about half of the individuals had tried to attend school. The other half had tried a variety of activities including reading, painting, mechanical work, stamp collecting, traveling, fishing, and "just getting by".

Several unobstrusive monitoring techniques including the Rest Time Monitor and Wheelchair Odometer are being used to continuously measure gross activity levels of New Options participants. The average daily out of bed time for New Options participants was thirteen hours per day. This compares to a daily best week average of around 8.5 hours per day for paraplegics and quadriplegics who were in comprehensive rehabilitation programs at TIRR. Individual's mileage per week for the entire sample ranged from 1.1 to 35.8 miles. The average weekly mileage per individual across the entire sample was 9.1 miles, or approximately 1.3 miles per day average per individual.

Approximately five hours of each participants time per day is spent doing activities scheduled by the project. As a result, participants are able and encouraged to use most of their time in self initiated and self managed activities. There are approximately ten planned modules each week, an average of three planned fieldtrips per week and pre-arranged meetings with about six associates-active handicapped individuals from the community.

In an effort to document the individual effects of the program on New Options participants, follow-up is routinely done three to four months after each participant leaves the transitional program. Several significant changes in living arrangements may be noted for those individuals on whom follow-up data are complete. About half of the former participants are now living comparably more independently than they were before their participation in New Options. Many of them have moved from nursing homes or their parents homes into apartments, houses, and dormitories - both individually and in shared group living arrangements. Additionally, nearly two-thirds of the former participants are now in school, or have part time or full time jobs.

Observations made during the transition from protected settings such as nursing homes and parents homes to less well protected or more independent settings such as apartment units and college dormitories may lead to valuable insights regarding the psychological adjustment and adaptation of individual's to severe physical disabilities. The number and variety of references to changing self images or self concepts made by former participants is striking. For example, participants have said: "It is really hard to believe what can and is being done from wheelchairs. There are some very intelligent people in wheelchairs."; "Being in a wheelchair puts you in a minority but it doesn't stop you from living a normal life."; "Most people just don't realize that people in wheelchairs are normal too, they just have some kind of handicap. Everyone has a handicap of some sort, whether

it be large or small. Some people in wheelchairs are better off than some able bodied people."; "It is very hard for some people to adjust to being in a wheelchair. It is easier for some than for others, but it can be done."; "New Options opened my eyes and my mind to what a fulfilling life I could have in spite of my handicap."; "I cannot tell you how much self confidence I acquired in those few weeks - I got over being ashamed that I was in a wheelchair.".

Self reports by former participants are substantiated and validated by follow-up information and feedback received from counselors who sponsored individuals in the program. Most counselors agreed with their clients by saying that they seemed to be more self-sufficient, more self-confident, or more independent after they participated in New Options. Several counselors reported that they noticed a better outlook, a better attitude, or more motivation on the part of their client following participation in the program. Other counselors claimed that their clients were more goal oriented than they were before. Most comments from counselors who sponsored clients in the program were typified by the statement that "my client realized that he is ultimately responsible for meeting his own needs".

Staff members and the project Department of Vocational Rehabilitation courtesy counselor largely agree on the following characteristics as important traits in persons who seem to have benefitted from the project: readiness to face life as a severely disabled indivi-

dual; desire to make changes in lifestyle; willingness to set and work on some goals; willingness to risk experimenting with new ways of doing things and new kinds of behaviors; average intellectual capacity (comprehension of verbal input, no major memory deficits, reasonable attention span); ability to read; ability to speak well enough to be generally understood; ability to hear; no severe emotional pathology; and physical endurance for program (sitting tolerance, bowel control that is predictable, suitable urinary management).

The preceeding summary of research at New Options is intended to answer some questions and to raise others. Efforts are presently under way to determine whether reports of improved motivation are based on observations of verbal assertiveness or behavioral achievement. We want to find out more about how independence is related to learned skills and behaviors and to self image or motivation. We want to know how the New Options program might be improved, and we want to know how portions of this program might be utilized to benefit more traditional rehabilitation programs. It is hoped that further research at New Options will help answer many of these and other questions.

RESEARCH PROJECT REPORT

PROJECT NO. R-172

1. TITLE: Transitional Living: A Program Fostering Community Integration of Severely Physically Handicapped Persons

2. PROJECT STATUS (Check):

Proposed ☐ New ☐ Continuing ☒ Completed ☐ Discontinued ☐ Transferred ☐ Other ☐

3. BEGINNING: 4/76 (Mo./Yr.) EXPECTED COMPLETION: 9/79 (Mo./Yr.) COMPLETED: _____ (Mo./Yr.)

4. PERSONNEL: (List Principal Investigator First)

NAME OF PERSONNEL AND DEGREE	DISCIPLINE	% TIME ON PROJECT (based on 8-hour days/year)
J. Cole, Ph.D.	anthropology	100%
L. Frieden, Ph.D. Candidate	psychology	90%
J. Sperry, B.S.	physical therapy	100%
L. Lavinson, M.S.W.	medical social worker	100%
J. Wise, M.S.	vocational counseling	30%
research assistant		50%
documentarian		100%
handicapped resource persons		variable
residential manager		100%
care attendants		100%

5. FINANCIAL DATA:

ESTIMATED COST FROM BEGINNING TO END OF PROJECT: $836,079.

ITEM	ANNUAL COST IN DOLLARS			
	RT-FUNDS	UNIV. FUNDS	OTHERS*	TOTAL
Personnel Costs	23,625		113,525	137,150
Supplies and Other Expenses			109,635	109,635
Travel			2,000	2,000
Equipment				
Indirect Costs Allowed by HEW	3,544		26,364	29,908
TOTAL	27,169		251,524	278,693
PERCENT	9.75%		90.25%	100%

* LIST OTHERS:

RSA R&D grant 13P57889/6-01
per diem revenue

PROJECT NO.: R-172

STATEMENT OF THE PROBLEM:

Recent developments in rehabilitation have placed an increased emphasis on creating opportunities for special housing, education, and employment for severely physically handicapped persons. The Rehabilitation Act of 1973 recognizes the special and unique needs of the severely disabled. The provision of opportunities offered by the Act has permitted some individuals who were formerly isolated in institutions such as nursing homes or in dependent home situations to begin lives of independence and productivity. These efforts, though important, have been slow to evolve, they lack comprehensiveness, and too few persons have been offered maximum options and opportunities. There are countless other individuals who find it overwhelmingly difficult to assume the responsibilities that these new opportunities afford. Many of these persons have the basic untapped capabilities necessary to become independent and develop a lifestyle of personal satisfaction and productivity. However, due to a fragmented approach of limited scope and the absence of a model of transition, many severely physically handicapped persons cannot bridge the gap between a protected institutional existence or an isolated and confining home situation to the management and assumption of an independent lifestyle.

Present national programming offers few prototypes that prepare the severely physically handicapped individual to move from a dependent setting into an independent setting. Structured programs which place an emphasis on offering maximum opportunities at cost-effective levels are essentially non-existent. Emphasis is not placed on allowing the severely physically handicapped person to assume the multiple stresses of independent living and employment in a gradual manner.

In June of 1976 TIRR began a model transitional living program called New Options which is designed to foster the integration of severely physically handicapped individuals into their communities. Goals of integration may include the establishment of independent living, involvement in educational and vocational opportunities, active social participation in the mainstream of society, the enhancement of personal skills important in daily problem solving, and the stabilization of goals and objectives required to maintain a satisfying quality of life. The planning and initial months of operation of New Options were supported in part by RT-4 funds which continue to support a portion of the research to evaluate program effectiveness. In October of 1976 an R&D grant (13-P-57889/6-01) was funded by RSA. This has substantially increased the project capability to conduct service demonstrations and evaluation research.

Three years of experience in a previous R&D residential project (SRS R&D 13-P-55487/6-01) (RT-4, Projects R-157 and R-158) have provided valuable background information to project personnel on the process of reintegration of severely physically handicapped persons into the community. Forty

severely disabled young adults have lived in the Cooperative Living Project since it opened in January of 1972. This project provided a first opportunity to begin involvement in education, vocational training, or employment. Almost all of the Cooperative Living residents made important gains in independence during their stay in the project. The program removed many constraints that existed in residents' former living environments, but contained no elements of structured transitional programming. Gains in independence thus occurred largely as a result of residents' own individual efforts over a relatively long period of time. (As of September, 1975, mean length of stay in the project was 15 months.)

The New Options transitional project has utilized the valuable background experience of the Cooperative Living Project, explicitly incorporating into a planned and structured transitional program many of the features fostering independence that operated implicitly in the earlier program. This structured transition offers a number of advantages: (a) the acquisitions of important skills can be made in much less time, (b) the new program serves a number of persons with marginal potential for independence who would have been unable to benefit from the earlier program that demanded greater personal resources, (c) the new program provides more information and experience than residents of Cooperative Living gained in spite of their longer stay in the project because of important added project resources, (d) the project permits the development and careful comparative evaluation of alternative transitional learning experiences. In essence, detailed studies can be made of controlled and directed transitional processes that in the Cooperative Living Project were left largely to chance.

The New Options project is housed in TIRR's Maximum Independence Center, a dormitory-style building located four miles from the main Institute building in the Texas Medical Center. Each project participant has a private room. Meals, transportation, and non-professional attendant assistance are provided on a shared basis. The project staff includes a project director (anthropologist), research director (psychologist), functional skills adviser (physical therapist), social worker, part-time vocational counselor, driver, attendant manager, and attendant staff. A number of active handicapped persons from the community who lead many program activities are called staff associates. The structure and content of the program are discussed at length under Current Year's Activity, Progress, and Findings to Date.

Two primary types of research are conducted in the transitional living project. The first examines the development and evolution of the project from a holistic anthropological perspective. It is intended to provide a description of internal processes of development, to trace the changing relationships of the project to its host rehabilitation hospital and to the state vocational rehabilitation agency, and to provide background information on the program as a context for viewing outcome data. A major goal of this portion of the study is to provide a structured overview of the transitional living program to facilitate replication. The second type of research employs a longitudinal multimeasure design with control groups to evaluate the

effects of the program on participants' behavior, attitudes, and information base. The hypothesis being tested in this portion of the study is that the TIRR transitional living program presents certain information, skills, and experiences which facilitate the behavioral adaptation and personal adjustment of individuals to severe physical disabilities. These two portions of the study are discussed separately below.

Sub-study I: An Anthropological Study of Program Development

OBJECTIVE (S):

1. To trace internal processes of development in the transitional living program, focusing on changes in goals, methods of planning, program content, and in other areas.

2. To analyze the project as a social system, examining roles, interpersonal relationships, and patterns of interaction among staff members and participants.

3. To examine external relationships between the transitional living project and other organizations with particular emphasis on relationships with the host rehabilitation hospital and the state vocational rehabilitation agency.

METHODOLOGY:

Respondents in this portion of the study include project participants, members of the attendant staff, professional staff members, and personnel of other organizations who interact regularly with the project. Participants in the transitional living program include severely physically handicapped persons completing rehabilitation programs at the Texas Institute for Rehabilitation and Research as well as handicapped individuals living in nursing homes or family homes where integration into the mainstream of society has been hindered. All participants must be medically stable and must meet the criteria defining persons as individuals with most severe handicaps (IMSH). The Institute and the Texas Rehabilitation Commission are important sources of referrals. Initially the participants have been single persons with spinal cord injuries who are between the ages of 18 and 50, though the population will be systematically diversified as the project progresses. The live-in project provides a program of transitional training and experience for 8 persons at a time with the program lasting 6 weeks for each participant. It is expected that a total of approximately 150 persons will participate in the transitional program during three years of operation.

Previous research that provides an overview of an entire therapeutic environment can be found in the literature on the concept of the therapeutic community (see for example Caudill, 1958; Cumming & Cumming, 1962; Rapoport, 1960). Literature on the development of community-based programs in the area of emotional or psychiatric disability is relevant to this study also

(Fairweather et al., 1969; Rausch & Rausch, 1968; Moos, 1974). Some methods of data collection have been borrowed from these studies.

The major method of data collection is participant observation made by the project director from an anthropological perspective and recorded in the form of field notes (Pelto, 1970). These observations are directed toward the objectives listed above as well as toward other areas that emerge as significant during the evolution of the project. They focus on informal day-to-day interaction, on planned program activities, on organizational activities such as staff meetings, and on interaction between personnel of the project and outside organizations.

Observational data are supplemented by other types of information. A comprehensive record of project activities is maintained using detailed weekly calendars and logs kept by the attendants and driver. Some participants are asked to keep diaries during their stay to record their activities and their feelings and responses to experiences.

Interviews are conducted periodically with participants, staff members, and persons from outside organizations who interact with the project to explore their feelings about various aspects of the program. At the end of each six-week cycle, participants are asked to complete a questionnaire evaluating the training modules, staff, and other aspects of the program. In the future, additional information on personal perceptions of the transitional program will be gathered. Professional staff members will record brief summary assessments of their daily activities in staff diaries on a time sample basis. Once during each six-to-eight week program cycle, staff members and participants will record their views of the program environment using a measure developed by Moos (1974) in studying community-based programs for persons with psychiatric disabilities (Community Oriented Program Evaluation Scale). If time and resources permit, a projective format similar to the Thematic Apperception Test using pictures of typical project situations may also be employed to elicit views of the project (Caudill, 1958).

Descriptive reports produced in this anthropological study are intended to convey a general view of the evolution of the transitional project over time and to analyze processes of development. This portion of the project research documents the nature of the program itself and thus serves as a measure of the independent variable (program) in the portion of the research dealing with program effects and outcomes.

Sub-study II: A Study of Program Effects and Outcomes

OBJECTIVE (S):

1. To determine the behavioral effects of the transitional program.

2. To determine the informational effects of the transitional program.

3. To determine the attitudinal effects of the transitional program.

4. To determine what specific effects the program will have on certain types of individuals and to develop a means of predicting relative outcomes.

METHODOLOGY:

Design: A longitudinal multimeasure design with control groups is being employed in this study. A series of indicated measures is systematically being made before, during, and after the subject participates in the program to determine the effect of the independent variable (program) on the subjects' behavior, attitudes, and information base.

Subjects: Each participant in the New Options transitional living program is coincidentally a subject in this study. Other severely disabled individuals may also be asked to participate as control subjects in this study. (See description of participant population in preceding section.)

Control Groups: Since subjects are rotated through the program on a continuous basis, those individuals who are just coming into the program serve as a control group for those who are leaving (see Campbell & Stanley, 1963, Institutional Cycle Design). In order to insure comparable control groups, the program is kept as stable as possible with planned changes occurring only on even cycles. In the future, subjects from the complete pool of applicants will be matched and paired on the basis of intake and referral data. Individuals from each pair will then be randomly assigned to consecutive treatment or program cycles. Additionally, depending upon available resources, it may be possible to obtain control data from matched individuals who for various reasons never enter the program.

MEASURES:

1. Independent Variables: The primary independent variable (program) is being constantly monitored and documented with staff and subject diaries and checklists. The anthropological study of program development is a major source of this information. Subject variables related to objective 4 are discovered by intake documents (medical and personal histories) and referral forms.

2. Dependent Variables: The dependent variable related to objective 1 (behavioral effects) is being measured regularly by several instruments. These instruments include wheelchair odometers and rest time monitors (Halstead, Cooperative Rehabilitation Engineering Center, TIRR, BCM, and TAMU), and functional activity and performance scales (Tufts Long Range Evaluation Summary, RT-7). Additional instruments which are presently under development to measure behavioral effects of the program include behavioral logs (Willems, RT-4, Project R-136), a goal oriented behavioral check list, and a survey of critical incidents.

The dependent variable related to objective 2 (information effects) will be measured by a series of quizzes. These quizzes are presently being designed and relate to the informational content of specific training modules and seminars. These quizzes are under construction at the present

time and should be used throughout the forthcoming project reporting period.

The dependent variable related to objective 3 (attitudinal effects) is being measured by a questionnaire developed by the project staff. Other standarized instruments such as the Siller Semantic Differential, Yuker Attitudes Toward Disabled Persons Test, Tennessee Self Concept Scale, etc., will be introduced periodically in order to validate and supplement the data obtained with this instrument.

The dependent variable related to objective 4 (outcome) is being measured by some of the instruments described above as well as others. Follow-up questionnaires are routinely mailed to subjects approximately four months after they participate in the program. These questionnaires include module ratings, program ratings, application information, follow-up questions, a goal completion survey, and the functional activity and performance scale mentioned above. Follow-up questionnaires are also sent to those counselors who refer clients to the program. Plans are being made for a staff person to do follow-up in the field, thus providing an opportunity to do follow-up interviews and direct observations.

PATIENT/CLIENT CHARACTERISTICS:

Age
- 1-16 years: 0
- 16-64 years: 39
- 65 and over: 0

Sex
- Male: 34
- Female: 5

Income Status
- Public Assistance: 39
- Self-support: 0
- Modified self-support: 0

SRS/RSA Priority Target Groups
- Severely disabled: 39
- Drug abusers: 0
- Alcoholics: 0
- Public offenders: 0
- Other: 0

Clients on Vocational Rehabilitation Rolls: 39

Total Patient/Clients Served with R&T Center Funds: 39

RELEVANCE OF THE PROBLEM TO REHABILITATION:

Many of the functional skills and the psychological and social coping abilities that serve well within a rehabilitation hospital are inadequate resources as severely physically handicapped individuals leave this specialized protected environment and return to the larger society. Some persons manage to bridge the gap successfully between the institutional environment and the community, but these are usually persons with exceptional capabilities and resources. Current rehabilitation programs are largely lacking in methods to assist physically impaired persons in making this transition. For many handicapped persons, the demands of independent living and of educational or vocational productivity are more than can be managed simultaneously. Consequently, many potentially productive persons never have a chance to become independent, and they either retreat or are pushed into isolated environments. The New Options project is intended to develop and evaluate transitional programming designed to bridge this serious gap in rehabilitation services. Community integration and an active lifestyle can become feasible goals for many handicapped persons if they are taught and can practice new adaptive skills and if they are allowed to deal with stresses and assume responsibilities in a segmented sequence.

CURRENT YEAR'S ACTIVITY, PROGRESS, AND FINDINGS TO DATE:

a. Program Development: During the project's first year, major tasks were planning program content, assembling a staff, putting the basic transitional program into operation, and planning and implementing research procedures. In planning the project, core staff members traced the experiences of residents of the previous Cooperative Living Project and talked with them about how they initiated changes in their lives. There seem to be several important prerequisites for becoming actively involved in the community. One of these is having information about what opportunities are available and the knowledge of how to get needed information. The second prerequisite is the possession of certain personal skills that are needed in order to take advantage of available opportunities. These skills may include social assertiveness, diplomacy, an ability to budget energy well, or an ability to manage financial affairs. A third important prerequisite is a more general skill that may be termed problem-solving capability. This involves the ability to analyze a situation, to obtain new information, to make decisions, and to formulate sequential plans. It involves being able to anticipate consequences and to take action before crises develop.

In order to convey important information and to teach people needed skills, a series of 10 training modules were established. These modules are intended to show people the range of options available to them in (a) living arrangements, in (b) education/vocational training and employment, (c) in transportation, (d) in the performance of physical tasks, (e) in meeting medical needs, (f) and in sexual relationships. Modules are also offered to help people develop new skills in (g) managing financial affairs , (h) dealing with attendants and budgeting energy, (i) developing social skills and

assertiveness, (j) goal-setting and problem-solving. Each module meets one time per week and a typical week includes about 30 hours of planned program activities. Time is also built into the schedule for participants to work on individual projects such as drivers training.

A variety of teaching methods are used in the project. Training modules include classroom instruction, group discussions, and numerous fieldtrips into the community. The modules are usually co-lead by a regular staff member and a staff associate. The associates are handicapped persons who are actively involved in the community and who are paid to work in the project. They are an important resource, providing extensive information to participants and serving as behavior models. The staff has tried to choose a variety of associates who represent differing lifestyles and diverse values and viewpoints. The extensive use of staff associates is based on observation of the importance of modeling in the previous residential project.

The project has developed various resource materials in conjunction with modules. These include written materials for participants to take home in an individual notebook. Some modules have also been videotaped; and much more of this activity is planned.

The New Options staff includes a project director(anthropologist), a research director (psychologist), a social worker, a functional skills adviser with a background in physical therapy, and a part-time vocational counselor. In addition to organizing group activities, each of these persons is involved in goal-setting and problem-solving with participants on a one-to-one basis. The purpose of this counseling is to help the individual learn to solve problems on his own. This approach often involves departures from traditional professional roles in which staff members tend to solve problems for clients rather than letting them devise their own solutions. Many outside resource persons are also involved, including physicians, agency personnel, and other persons encountered by handicapped persons in the community.

An important element of New Options, in addition to the program content, is the experience of living for six weeks in a dormitory-style setting with a non-professional attendant staff. Participants frequently interact with each other informally on a one-to-one basis, and there seem to be some important effects of this close interaction with peers. Many participants have never been away from the personal care of family members or a nursing staff, and learning to manage the interaction with attendants and direct their own care is an important skill to be acquired.

The experience of the project's first year has yielded significant findings in several areas of program development:

(1) Program Content: For the most part the planned program content has proven to be appropriate and useful from the viewpoint of both staff members and participants. A few changes have been made in the original set

assertiveness, (j) goal-setting and problem-solving. Each module meets one time per week and a typical week includes about 30 hours of planned program activities. Time is also built into the schedule for participants to work on individual projects such as drivers training.

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(1) Program Content: For the most part the planned program content has proven to be appropriate and useful from the viewpoint of both staff members and participants. A few changes have been made in the original set

of 10 modules. A new module has been added on the use of leisure time. The module on problem-solving proved to be too abstract to teach effectively, so much of its content has instead been incorporated into other modules. The social skills module has varied from cycle to cycle depending on the competancies and needs of particular groups of participants. In addition to core program areas for the participants as a group, time has also been set aside for 'electives'. These are experiences in the community arranged for one individual participant with special interests in areas such as cooking, gardening from a wheelchair, or exploring the feasibility of doing upholstery work.

Methods used to convey program content have evolved with experience to include more fieldtrips, more contact with a greater variety of staff associates, and the use of new media such as videotaping.

(2) Staffing: In general, the staffing planned for the project has been effective, though some changes have been made. The most difficult role to define and fill has been that of personal counselor. It has been hard to achieve a good balance between therapy on the one hand and more concrete planning and problem-solving with individuals on the other. More exploration is needed in this area. The staff has also learned that more time is needed from the part-time vocational counselor, and this position has been changed from 20% to 30% time effort. A new part-time staff position has been created for a Coordinator of Staff Associates. This individual is responsible for making logistical arrangements and for supervising the active handicapped persons from the community who conduct various program activities.

In viewing the project as a social system, it is interesting to note that one program staff member always seems to be a focal point of informal socialization among the group of participants. Initially this role was filled by the social worker, but when a new individual took over this staff position the focus of informal socialization was transferred to the functional skills adviser. All groups of participants seem to have a need for placing one professional staff member in this role.

(3) Residential System: A residential system using shared supportive services has been borrowed directly from the earlier Cooperative Living residential project. Experience has indicated a need for the attendant staff to understand and feel they are a part of the program as a whole, so several mechanisms have been developed to foster their involvement in other aspects of the program. These have included group meetings with members of the program staff and arrangements for individual attendants to visit some of the training modules. It has also become apparent through experience that a method is needed to assure that the entire staff responds consistently to participants' requests for physical assistance. This is particularly important in situations where individuals ask for assistance with tasks they can manage alone. Plans are currently being developed for each participant and the functional skills adviser to formulate a written contract as persons enter the program to make care needs an explicit part of individual program goals.

(4) Selection of Participants: Staff members and the project DVR courtesy counselor largely agree on the following characteristics as important traits in persons who seem to have benefitted most from the project: readiness to face life as a severely disabled individual; desire to make changes in lifestyle; willingness to set and work on some goals; willingness to risk experimenting with new ways of doing things and new kinds of behaviors; average intellectual capacity (comprehension of verbal input, no major memory deficits, reasonable attention span); ability to read; ability to speak well enough to be generally understood; ability to hear; no severe emotional pathology; and physical endurance for program (sitting tolerance, bowel control that is predictable, suitable urinary management).

The further refinement of criteria for predicting outcomes is an important project goal.

Experience has demonstrated that the program seems to be most effective when participants in a given cycle do not differ too widely in intellectual level. The program can be altered to accomodate persons at different intellectual levels from cycle to cycle, but it is an advantage if persons within any one group are relatively similar in this respect. Other types of diversity such as differences in rural or urban background, length of time since onset of disability, and general direction of future plans, can frequently be utilized to advantage in promoting group interaction.

One of the most significant problems in choosing participants is assessing the individual's degree of medical stability through reports from referring DVR counselors and physicians. Professionals who have not worked previously with severely physically disabled individuals may provide misleading information. In some cases participants have needed more medical care than the project was designed to provide.

(5) Expectations of the Program: A few project participants and referring DVR counselors seem to have held unreasonable expectations of what the program can provide. Such expectations are attached not only to the New Options project but to the notion of moving to Houston in general. Many persons hold an exaggerated view of tne number of residential facilities, jobs, and supportive services available in the city. The staff has made an effort to define reasonable expectations and to communicate these before individuals enter the project. The following list represents the views of project staff and of the DVR courtesy counselor about what participants can expect to accomplish in New Options: gaining information on what opportunities are available in community (living arrangements, educational training programs, vocational availability, transportation availability); learning the skills to go about getting information; learning to manage financial affairs; learning to relate with attendants to get needs taken care of; learning to budget energy; learning to adapt oneself to new environment; learning to be more comfortable in public (being visible, asking for help); learning to examine how individuals interact with other persons and ways this might be changed; having the opportunity to be among other handicapped persons and learning how they cope with problems; examining feelings about issues important to each individual

(their identity, family relationships, sexuality, ability to control their life course); learning to define goals and directions; becoming more comfortable in experimenting with alternative ways of doing things; learning how to solve problems and having actual experiences where such learning can be practiced; help people learning sequential planning; and learning to anticipate problems and make plans on how to handle them before a crisis develops.

(6) Relationships with the Host Rehabilitation Hospital: In general the New Options project is perceived as having an identity somewhat apart from other Institute programs in the opinions of Institute staff, program staff,and DVR counselors from various parts of the state. This degree of separation has been intentional in some respects since the program was designed to develop a new service delivery model which includes new program content and new staff-participant relationships.

There are several types of linkages with the host rehabilitation hospital. One of these is the involvement of program staff members in other Institute structures such as departments or various committees. The relationship of professional staff members (including the social worker, physical therapist, and vocational counselor) to their respective professional departments is somewhat ambiguous vis-a-vis their administration responsibility to the project director since in general most departments are reluctant to detach persons for assignment to non-departmental entities. Linkages to the host rehabilitation hospital are also maintained through Institute staff members who assist the project by (a) consulting with the project staff or (b) presenting program content to participants. Links with other Institute programs that occupy the same annex building are minimal. Contacts do occur in cases of medical emergency when nursing personnel from another section of the building provide assistance to project participants.

(7) Relationships with the State Department of Vocational Rehabilitation: Contacts with the Texas Rehabilitation Commission occur at several levels. Information is exchanged with each participant's home counselor both before and after the individual enters the project. The project also has a courtesy counselor who works with the project staff in general planning and program evaluation and who also meets with individual participants during their six-week stay. The state Program Specialist for the Severely Disabled meets with the staff as needed to discuss general program evaluation and planning. The project has sponsored one two-day training workshop to acquaint counselors in the area with the program, and other such workshops are planned for counselors from other areas of the state. For the most part the relationship between the project and TRC is viewed positively by persons from both entities. Follow-up data indicate that most counselors feel the project has been helpful to their clients.

b. Longitudinal Research on Individual Outcomes: As of March 23, 1977, 35 individuals have been admitted to the New Options transitional project. Thirty one of these individuals were male and four were female. Twenty five New Options participants were single and ten were married, divorced or separated. Thirty one of the thirty five individuals were spinal cord injured and the others were severely disabled as a result of muscular dystrophy, polio, brain damage, and ataxia. Most of the individuals in the program were from 20-25 years old. The exact age range was from 17-53 years.

One variable which may prove to be critical in determining who can benefit most from the New Options program is time since onset of disability. Thirty three percent of the participants in the program had been disabled less than two years when they entered New Options. The most recent time since onset of disability was eight months. Another thirty three percent of the program participants had been disabled two to five years before they came to New Options. Finally, thirty three percent had been disabled more than five years before they participated in the program. The longest period from onset of disability to admission in New Options was twenty four years.

Another critical variable which may later be tied to potential to benefit from this program is the individuals' pre-admission living arrangement. Approximately half of the participants came from rural communities, and the other half were from metropolitan areas. Perhaps more importantly, ninety percent of the New Options participants were living with their family before they came to the program and the remainder came from institutionalized settings such as junior college, hospitals, and nursing homes. With respect to transportation, all but two of the thirty five participants were dependent on someone else to drive them. Seventy percent of these individuals depended directly on family members or close friends.

Each of the individuals in the program used either an electric or manual wheelchair for mobility. All of the participants had special bowel care needs,and eighty six percent depended on an assistive urinary device of some sort. Two thirds of the individuals in the program needed help transferring from their bed to their wheelchair or from their wheelchair to their bed. Most of them needed physical assistance dressing and bathing. Some needed assistance feeding and writing. Most of their physical assistance before they came to New Options was provided by family members or by individuals in the institution where they lived. Only four of the participants were physically independent from a functional viewpoint.

Another key variable to which much attention has been directed is that of income or economic level. More than two thirds of the individuals in the program had an income below $200 per month before they came to New Options. Only two of the thirty five had incomes of more than $500 per month and one of these two supports a family of thirteen.

Fifty percent of the participants had some kind of comprehensive medical rehabilitation before they came to the program. Thirty percent had limited medical or vocational rehabilitation, and twenty percent had no previous rehabilitation.

About fifty percent of the New Options participants had been in school before they were disabled. The remaining fifty percent had been working. Most of these individuals had been doing manual mechanical labor such as construction work, mechanics work, and agricultural work. Since the onset of their disability and before participating in New Options, about half of the individuals had tried to attend school. The other half had tried a variety of activities including reading, painting, mechanical work, stamp collecting, traveling, fishing, and "just getting by".

At the time of this report, follow-up information was complete on only eleven of the thirty five individuals. Follow-up is routinely done three to four months after each participant leaves New Options. Several significant changes in living arrangements may be noted for the eleven individuals on whom follow-up data are complete. Five former participants are now living comparably more independently than they were before their participation in New Options. Of these five, two are living in college dormitories and three have apartments of their own. With respect to the activities of these eleven individuals, six are now in school, three have part time or full time jobs, and two are "just getting by".

When asked three months after they had left the program what they got from New Options, three of the eleven individuals said that they were more aware of their own abilities or better oriented. Three individuals indicated that they were more independent, more self-confident, or more self-sufficient. Two former participants claimed that they had a better social life (i.e. dating, going out). Finally, seven individuals mentioned specific kinds of information that they received while they were in the program which they felt was particularly helpful to them. This information involved such subjects as living arrangements, financial affairs, budgeting, attendant management, and vocational educational opportunities.

In a routine effort to substantiate and validate the follow-up information and feedback received from New Options participants, each person who referred an individual to the program is contacted three to four months after that individual leaves the program. In each of the eleven cases in which data are complete, the referring individual was a vocational rehabilitation counselor. Eight counselors said that their clients seemed to be more self-confident, more independent, or more self-sufficient after they participated in New Options. Seven counselors said that they noticed a better outlook, a better attitude, or more motivation on the part of their client following participation in the program. Four counselors claimed that their clients were more goal oriented than they were before.

One counselor thought that his client had become exceedingly pessimistic as a result of his experience in the program and one other counselor believed that her client had selected unrealistic goals as a program participant. In spite of a few obviosly negative statements, most comments from counselors who sponsored clients in the program were typified by the statement that "my client realized that he is ultimately responsible for meeting his own needs".

Since previous research suggests that gross behavioral activity levels in naturalistic settings may be better indicators of personal independence and behavioral adjustment than standarized muscle and function tests, several unobstrusive monitoring techniques including the Rest Time Monitor and Wheelchair Odometer are being used to continuously measure gross activity levels of New Options participants.

The Rest Time Monitor is an electronic device designed to monitor time out of bed. It consists of a series of pressure-sensitive ribbon switches located under the mattress of the study subject, and a slow-speed strip chart recorder placed in a remote location. When in bed, the subject's weight closes one or more of the switches completing an electrical circuit which produces a deflection of the recording stylus. The size of the deflection is proportional to the number of switches closed which is determined by the subject's position in bed. Subject movements result in amplitude changes on the recording paper which make it possible to identify artifacts and minimize measurement error. With continuous operation, the Rest Time Monitor provides a simple, inexpensive method of obtaining an objective, permanent record of the number of times and duration the subject is in or out of bed for each 24 hour period. Daily assessment of the Rest Time Monitor over the past 18 months has indicated that the measurements are highly accurate and reliable (Halstead, 1976).

In view of the fact that Rest Time Monitors have only recently been installed in the facility occupied by New Options participants, experience with this measurement method has been limited. Complete data is only available for one cycle of four New Options participants. However, these preliminary data promise some interesting findings. The average daily out of bed time for four New Options participants (three quadriplegics, one paraplegic) over an entire program cycle of six weeks was 11.2 hours per day. This compares to a daily best-week average of 8.5 hours reported by Halstead(1976) for fourteen paraplegics and quadriplegics who were in comprehensive rehabilitation programs at TIRR. These preliminary data support the assumption that severely disabled individuals continue to gain stamina and improve sitting tolerance after they complete a concentrated program of comprehensive rehabilitation. Further data will be carefully analyzed to determine what minimum sitting tolerance may be required for a severely physically disabled person to function in an independent living situation, a full time course load at school, or a full time job. Data from this Rest Time Monitor study may also be helpful in examining the likelihood of skin breakdown as a function of time out of bed. Finally, it appears as if data from the Rest Time Monitors will complement that obtained from the Wheelchair Odometers.

The Wheelchair Odometer is a mechanical device which may be attached between the spokes of a wheelchair wheel near the hub, and used to count the number of revolutions made by that wheel. The Wheelchair Odometer consists of four basic parts: a rotary ratchet counter, a weight attached to the counter arm, "stops" to limit the counter-arm excursion, and a clamp to attach the odometer the wheelchair spokes. The odometer works on a simple, mechanical principle. Operationally, a combination of gravity and the motion of the

wheel create a pendular movement of the counter arm. This pendular movement is achieved as the counter, which is fixed to the wheel, turns, and the counter arm, which is allowed to swing free, either lags behind or falls forward due to the pull of gravity. The counter adds one count with each complete rotation of its shaft, or with each full turn of the wheel. With a rotary ratchet mechanism, counts are added whether the chair is moving forward or backward. (Halstead, 1973).

In the present study, a Wheelchair Odometer is attached to one wheel of each of the wheelchairs used by the New Options participants. Each odometer is read during the noon hour every day, and cumulative counts are recorded and listed by individual participants. For each individual, the number of revolutions per day is determined by subtracting the number of counts recorded on one day from that of the following day. The actual distance traveled per day for each individual is determined by multiplying the number of revolutions logged by that individual times the circumference of the wheel on his or her chair.

At this point, useable data has been collected on thirty New Options participants through six full cycles of the program. Data on five other participants has been dropped for various reasons. Daily distance records for individuals appear to vary considerably from one day to the next. However, records of weekly distance traveled by individuals appear to be more constant and thus are more useful indicators of gross behavioral activity trends. Figures 1 and 2 are graphic representations of individual weekly distances traveled by New Options participants in their wheelchairs during the first two cycles of the transitional living program. Individual's mileage per week for the entire thirty subject sample ranged from 1.1 to 35.8 miles. The average weekly mileage per individual across the entire sample was 7.3 miles, or approximately one mile per day average per individual. Figure 3 indicates the average number of miles per week across one entire group of New Options participants for a complete program cycle. The vertical bars in this figure indicate the number of field trips, or occasions when the entire group traveled away from the annex on a planned outing. In all but three of twenty one possible cases thus far, the odometer readings co-vary with the number of planned outings for the week, reflecting the direction of change and relative magnitude of the gross behavioral activity level of the group.

Odometer data have been analyzed to determine whether there are any significant differences in wheelchair activity between those individuals who use electric wheelchairs and those who use manual wheelchairs, or between those individuals who are more severely impaired and those who are less so. No significant differences in wheelchair mobility are apparent in either case. However, differences are very apparent when mileage records for those individuals with reported medical complications such as pressure sores and urinary tract infections are compared with records of the same individuals from weeks when no health problems were reported. Careful analysis reveals that more than eighty percent of the medical problems or complications mentioned in the physician's report during the first two program cycles, are

reflected in the individual's mileage record by a decrease in average mileage from the preceding week. In fact, nearly forty percent of all mileage decreases from the preceding week for individuals in these two groups appear to be the result of medical problems or complications.

The results of the Wheelchair Odometer study suggest that the average number of miles per week traveled by a person in a wheelchair may be a function of gross behavioral activity of the individual. The degree to which gross behavioral activity levels predict personal independence remains to be explored. The results do indicate, however, that there is a bottom mileage limit which an individual must exceed in order to perform independently all of the necessary and routine activities of daily life. Casual observations of the data and the behavior of the individuals also indicate that there may be a maximum level of efficiency, or average number of miles per week, which when exceeded, indicates that the individual is "spinning ones wheels" or "going in circles". It appears as though an individual must travel at least five miles per week and not more than 15 miles per week in order to maintain an efficient schedule of independent behavioral activities. In other words, activity levels below 5 miles per week may indicate severe behavioral dependence and those above 15 miles per week may signal the probability of future breakdowns, ultimately resulting in behavioral dependence. This hypothesis will be tested in the future by employing systematic behavioral observations of the individuals in the New Options transitional program, and comparing data from these observations with that obtained from the Wheelchair Odometers. Also, predictive validity of the Wheelchair Odometer study will be tested in the future by using follow-up interviews and questionnaires with the subjects to determine their routine daily activities and personal independence.

c. Planned Future Activities: Planning is currently underway to expand program development in the following areas: (1) improvement of follow-up services, perhaps through the addition of another staff member; (2) substantially increased production of program materials (written information, texts, workbooks, videotapes) for use in the program and for dissemination; (3) consideration of the advantages and liabilities of alternative program settings, perhaps the use of an apartment setting; (4) development of more referrals by seeking new sources of financial sponsorship for individuals in the project; (5) consideration of including participants with various types of disabilities.

DISSEMINATION OF FINDINGS:

The production of audio-visual and written materials on the content of the transitional project has been defined as a major objective since the project began. As the content of various modules has been developed and tested through experience, efforts have begun to present this content using various media. Written information has been developed and is being tested and refined in each of the content areas of the program. The staff has also begun to videotape various modules, starting with medical needs, living arrangements, and functional skills. The production of such materials will

increase substantially in the second and third years of program operation.

Information on the project as a whole has been disseminated through formal presentations as listed below. Staff members have also disseminated information on the project through personal contacts at conventions, meetings of advisory committees, and other visits to various agencies or facilities. In addition, the project has received and answered many written requests for information from handicapped individuals and also from representatives of agencies interested in transitional programming.

Papers and Presentations:

Cole, J.A. Independent Living and the New Options Transitional Project. Presented at Rehabilitation Counseling Department, University of Minnesota, February 3, 1977.

Cole, J.A., Frieden, L.F., Sperry, J.C., and Lavinson, L.J. New Options TRC Training Workshop, TIRR, March 22-23, 1977.

Cole, J.A., Holden, B.L., and Frieden, L.F. The New Options Project: A Live-In Program to Foster Social Adaptive Skills. Presented at the Annual Meeting of the American Congress of Rehabilitation Medicine, San Diego, November 12, 1977.

Frieden, L.F. Independent Living by Severely Disabled Individuals. Presented at the Annual Conference of the Oklahoma Rehabilitation Association, Tulsa, Oklahoma, August 16, 1976.

Frieden, L.F. New Options: Transition to Independence. Presented at the Annual Meeting of the American Psychological Association, Washington, D.C., September 4, 1976.

Frieden, L.F. Independent Living. Presented at the Oklahoma Conference for People with Mobility Handicaps, Tulsa, Oklahoma, April 2, 1977.

Frieden, L.F., Cole, J.A., and Sperry, J.C. New Options Transitional Project. Presented at a meeting of the Cooperative Rehabilitation Engineering Center, Houston, Texas, January 28, 1977.

Frieden, L.F. and Halstead, L.S. Application of Unobstrusive Longitudinal Monitoring Techniques to Assess Gross Behavioral Activity in a Non-Institutional Setting. Presented at the Annual Meeting of the American Congress of Rehabilitation Medicine, San Diego, California, November 11, 1976.

In addition to these formal presentations, in-service training programs were given by the New Options staff in the departments of social service, physical therapy, occupational therapy, and nursing at TIRR.

Written Materials and Videotapes:

Carter, R.E. and Nelson, J.A. Mechanisms of Spinal Cord Injury. Texas Institute for Rehabilitation and Research, March 1977. (videotape)

Cole, J.A., Sperry, J.C., and Frieden, L.F. New Options Participants' Guide. Texas Institute for Rehabilitation and Research, March 1976.

Frieden, L.F. Choosing a Living Arrangement. Texas Institute for Rehabilitation and Research, May, 1977. (videotape)

Frieden, L.F. Programs to Aid Handicapped Individuals. Texas Institute for Rehabilitation and Research, September, 1976.

Rogers, J. and Nelson, J.A. Tissue Trauma, Texas Institute for Rehabilitation and Research, April, 1977. (videotape)

Spencer, W.A. and Nelson, J.A. Respiratory Complications in Physical Disability. Texas Institute for Rehabilitation and Research, May, 1977.(V)

Sperry, J.C., Cole, J.A., and Frieden, L.F. New Options Brochure. Texas Institute for Rehabilitation and Research, January 1977.

~~UTILIZATION OF FINDINGS~~:

Many of the products of this project may be utilized by severely disabled individuals and service providers. Research findings and information about sitting tolerances and stamina requirements with respect to functional independence is presently in demand. More than sixteen written requests for preliminary findings in this area have already been answered by the project. Representatives from agencies and organizations such as the Paralyzed Veterans of America, National Paraplegia Foundation, Center for Independent Living, United Cerebral Palsy, and Veterans Administration have already inquired about the possibility of making audio-visual training material developed by this project available to their members and clients. ~~Also, many of those same organizations are considering the possibility of sponsoring participants in the New Options transitional program.~~

Many materials will be appropriate for incorporation into both comprehensive rehabilitation and re-evaluation and follow-up programs at the Institute where patient education is a high priority. Many of the materials could also be used in day programs where a class or series of classes could be offered to handicapped populations through the sponsorship of various agencies. A recent workshop for DVR counselors also demonstrated the usefulness of New Options programming for counselor training on opportunities and resources for severely physically handicapped clients.

In addition to the use of project materials in other programs, a number of agencies have expressed serious interest in utilizing the project as a direct resource for their own clients. These include the Veterans Administration

spinal cord system, state DVR agencies in Montana and Oklahoma, and several workmans compensation insurance carriers.

POLICY, PROGRAM, OR PRACTICE CHANGES:

Many of the functional skills and the psychological and social coping abilities that serve well within a rehabilitation hospital are inadequate resources as severely physically handicapped persons leave this specialized protected environment and return to the larger society. Some persons manage to bridge this gap successfully between the institutional environment and the community, but these are usually persons with exceptional capabilities and resources. Current rehabilitation programs are lacking in methods and in defined approaches that will assist persons in making this transition. This gap in services has far-reaching implications for the entire field of rehabilitation. For most handicapped persons, the demands of independent living and of educational or vocational productivity are more than can be managed simultaneously. Consequently many potentially productive persons never have a chance to become independent and they either retreat or are pushed into isolated environments. Of those who do try to achieve an active and productive lifestyle, many are unable to meet the demands that it requires.

The New Options project is intended to develop and evaluate transitional programming designed to bridge this serious gap in rehabilitation services. Community integration can become a feasible goal for many persons if they are taught and allowed to practice the skills needed in the real world and if they are allowed to deal with stresses and assume responsibilities in a segmented sequence.

The results of this project may have profound consequences for the field of rehabilitation generally. If New Options is able to demonstrate conclusively that the acquisition of independent living skills and disability related information like that taught in the program is prerequisite to the optimal adaptation to severe disability, educational programs of this sort will almost certainly be demanded by vocational rehabilitation agencies and their clients, and provided by service, training, and treatment facilities across the country. Also, the man-environment approach applied here may be applied throughout rehabilitation - from early treatment through vocational placement and follow-up.

The results of this project may justify a shift of emphasis by public welfare and vocational rehabilitation agencies from treatment, training, and vocational placement to treatment, training, and socio-environmental placement. Specifically, this means that traditionally conservative state departments of public welfare may realize that independent living is ultimately a viable and cost-effective alternative to institutionalization for severely disabled individuals. This project may emphasize the need to treat chronically disabled individuals as a part of the total environment rather than as patients with problems that require narrowly focused attention.

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I. DEFINITION

New Options is a six week live-in program designed to help severely disabled people acquire community living skills. The program provides opportunities for individuals to learn skills which may help them in establishing independent living, educational involvement or vocational involvement or active social participation. The program places emphasis on improving an individual's capabilities in a variety of environments. The goal of New Options is to assist the severely disabled person who is ready to make some changes in his life and needs help in gaining information, developing personal skills, and enhancing problem solving capabilities. +2

To be eligible for admission to New Options a person must be severely physically disabled and use a wheelchair as their primary means of mobility though we have accepted three participants who were ambulatory with assistive devices. The person must be medically stable (ie. no acute infections or pressure sores) and be physically capable of being up and active at least eight hours a day. 2

Paper presented by Jane Sperry @ Asia Meeting in Monterey, Calif. fall '77

II. BACKGROUND & INTRODUCTION

Severely disabled people need specialized information on housing, attendant care, money management, sexuality, jobs, schools, transportation, etc. Some of this information is and can be given during a comprehensive rehabilitation admission but sometimes the person is just not ready to hear that kind of information, expecially in the detail necessary to make it useful. The content of the New Options program evolved from examining the changes that severely disabled people made in their lives following discharge from a rehabilitation hospital. We then attempted to condense this information into subject areas which could be addressed during a transitional living project such as New Options.

III. DESCRIPTION

The New Options project is housed at the Texas Institute for Rehabilitation and Research Annex building in Houston, Texas. The project offers basic supporting services to participants. These services include round-the-clock non-professional attendant help, meals, a private room, and transportation.

A participant may enter New Options with the general goals of moving away from his family, or gaining information about his vocational potential or obtaining a drivers evaluation or investigating sources of financial support or other goals. During regular individual counseling sessions with the Project Social Worker and Physical Therapist the participant is assisted in learning how to make concrete plans to achieve these goals. Our philosophy is not to do for the participants but to teach them the skills necessary to manage the different aspects of their lives.

The basic unit of conveying information to participants is thru training modules. These are group meetings on a particular topic and are usually held weekly during the six week cycle of New Options. Modules are given in the areas of ...(slide). A few of these modules (FS, SS, VOC, SEX) are led or co-led by members of the New Options staff but the majority of the modules are led by a group of people we call staff associates. These are active

handicapped people who are living in the community and who have already dealt with problems in their lives our participants have just identified. For example, they may be living in an apartment complex which offers necessary attendant help or they may have established a long term relationship with another person, or they may be driving a specially equipped vehicle. Since New Options began in June of 1976 we have used 63 staff associates as consultants or teachers and have paid them for their participation in the program.

The content of the modules varies as a function of the needs of the group but the information is usually conveyed in a combination of group meetings with the group leader and possibly a guest speaker, or field trips. Field trips may be to apartment complexes - some of which offer attendant help - the airport, shopping centers, job site visits, banks, grocery stores, wheelchair repair shops or many other locations in and around the city of Houston. Not only do these trips provide information or give participants the chance to complete module assignments but also the participant is given the opportunity to interact with the public in both structured and unstructured settings. Each week, there are approximately 10 modules, 3 field trips, and pre-arranged meetings with about 6 staff associates.

Participants spend an average of 13 hours per day out of bed and approximately 5 hours each day in activities scheduled by the project. They are encouraged to use their unscheduled time in self-initiated activities to meet personal needs or goals including such things as ....(medical appointments, driver's training, etc.).

IV. RESEARCH

At the end of we
~~Last Friday~~, March ~~31st~~, completed the 13th six-week cycle of New Options since the project began in June of 1976. To date we have had 71 individuals admitted to the project - 58 male and 13 female. Fifty-three have had spinal cord injuries and the others had cerebral palsy, brain damage, muscular dystrophy, polio, arthritis, and spinal bifida. The average age was 22 years old but the actual age range was from 17-53. Nearly ¼ of the participants were non-white. Fifty-eight participants were living with families before entering New Options and all but two people were dependent on others to meet transportation needs. Approximately 1/3 of the participants have been injured under two years, 1/3 have been injured 2-5 years, and 1/3 over 5 years.

The majority of participants have had their stay sponsored by Texas Rehabilitation Commission but we also accept referrals from insurance companies, vocational rehabilitation agencies in other states or individuals.

New Options Research objectives are to determine the behavioral informational and attitudinal effects of the transitional program, to determine what specific effects the program will have on certain types of individuals, and to develop a means of predicting relative outcomes. Research data is collected during New Options and follow-up is routinely done 3-4 months after a person leaves the project. Based on early data from 25 former

participants, we have found:

- about ½ of former participants are living comparably more independently than they were before entering New Options;

- nearly 2/3 of former participants are now in school or have full or part-time jobs.

V. FUTURE PLANS

One of the major goals during our next year is to become more involved in producing audio-visual material. We are presently at work on the script for a 16mm movie which is scheduled for shooting the end of May. This film will introduce both the alternatives available to severely disabled people and the New Options project.

Additionally, we are working on a selection of booklets, work-books, film strips, videotapes, and/or slide sound series which will be available to others interested in our module content information.

AUDIOVISUAL RESOURCES EXHIBIT

American Academy of Physical Medicine and Rehabilitation
&
American Congress of Rehabilitation Medicine

Hyatt Regency
New Orleans, Louisiana
November 12 – 17, 1978

This form must be mailed in DUPLICATE to: AMERICAN CONGRESS OF REHABILITATION MEDICINE, 30 North Michigan Avenue, Chicago, Illinois 60602.

DEADLINE FOR APPLICATION: May 1, 1978 Postmark

Audiovisual materials will be exhibited in two separate formats:

1. *Film Theater* – continuous, scheduled showings of films on topics relating to rehabilitation. Recent productions are encouraged, but films shown in previous years may be submitted. Only 16 mm films with a viewing time of 30 minutes or less can be accepted.

2. *Audiovisual Resources Presentation* – this will be a scheduled session of original videotapes developed for patient, family or staff education. A representative of the agency responsible for the work will be encouraged to be available following the showing for a brief discussion regarding utilization. The goal of this new format is to share original works and make available resources known to members. Works need not have been commercially produced or be commercially available to be submitted. Only 3/4 inch videotape cassette with viewing time of 30 minutes or less can be accepted.

I hereby make application to present audiovisual material at the 55th Annual Session of the American Congress of Rehabilitation Medicine / 40th Annual Assembly of the American Academy of Physical Medicine and Rehabilitation:

Application is for: *Film Theater* X *Audiovisual Resources Program* _____

TITLE OF WORK: "New Options"

SUBMITTED BY:

NAME	*TITLE*
Jean Cole, Ph.D.	Transitional Project Director
Jane Sperry, LPT	Functional Skills Adviser
Mary Ann Board, MSW	Social Worker
Lex Frieden	Research Director

NAME *TITLE*

Texas Institute for Rehabilitation and Research
INSTITUTIONAL AFFILIATION

1333 Moursund Houston, Texas 77030
ADDRESS

RUNNING TIME: 25 minutes *CHECK IF APPLICABLE: Silent* _____

Sound X *Color* X *Black & White* _____

DESCRIPTION: Type below, double spaced, a brief description, not over 125 words, of the contents of your work for evaluation purposes by the Program Committees, and for publication in the Official Program booklet.

This film depicts a severely disabled person moving to an independent living situation. A young man is shown in his home being cared for by his mother. Then he enters a community living skills training program and is assisted in acquiring information, enhancing personal skills, and developing problem-solving capabilities. Scenes in various living, social, and mobility situations are viewed and a program fieldtrip is made to a bank. Here the participants interact with the bank staff and general population and are exposed to typical attitudinal and architectural barriers. The film ends showing the severely disabled individuals in an independent living situation and dealing positively with many previous problem areas of his life.

ACCEPTANCE: You will be notified on or before July 30, 1978, if your work is accepted for showing at the joint Annual Meeting of the Academy and the Congress. Full instructions will be included in the acceptance letter.

LIABILITY: The Academy / Congress will not be liable for the safekeeping of your work, but will take every precaution in the handling of your work during its use in the program. A qualified projectionist will be responsible for showing.

ARRIVAL DATE: Your work, if accepted, must be shipped for arrival at the meeting on or before November 11, 1978, or may be left at our convention Press Room on November 12, 1978.

SHIPPING ADDRESS:
American Congress of Rehabilitation Medicine
Hyatt Regency New Orleans
New Orleans, Louisiana 70140
Attn: Creston C. Herold
(Hold for arrival)

_____ (Date)

_____ (Signature)

_____ (Type Name)

_____ (Address)

_____ (City) (State) (Zip)

_____ (Phone)