

DOCUMENT RESUME

ED 417 530

EC 306 272

AUTHOR Garland, Corinne W.; Kniest, Barbara A.; Quigley, Andrea C.
TITLE Caring for Infants and Toddlers with Disabilities: New Roles for Physicians. Final Report.
INSTITUTION Child Development Resources, Norge, VA.
SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC. Early Education Program for Children with Disabilities.
PUB DATE 1998-02-28
NOTE 50p.
CONTRACT H024D40044
PUB TYPE Reports - Descriptive (141)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Community Involvement; Competency Based Education; Continuing Education; Curriculum Development; *Disabilities; *Disability Identification; *Early Identification; *Early Intervention; Evaluation Methods; Family Involvement; Individualized Family Service Plans; Infants; Inservice Education; Interdisciplinary Approach; *Medical Education; Models; Pediatrics; *Physicians; Preschool Education; Statewide Planning; Toddlers; Transitional Programs
IDENTIFIERS Virginia

ABSTRACT

This report discusses the activities of the Caring for Infants and Toddlers with Disabilities: New Roles for Physicians Outreach Project (CFIT Outreach), a program designed to increase physician participation in the early intervention system through replication of a proven model of inservice training. The model, which provides continuing medical education for physicians, was developed in collaboration with the Virginia chapters of the American Academies of Pediatrics and of Family Physicians and with the University of Virginia School of Medicine. The curriculum was based on a set of competencies developed by the American Academy of Pediatrics and adapted by the project. The model includes three replicable components: (1) state planning, in which CFIT Outreach staff work with an interdisciplinary state leadership planning group and use a train-the-trainer approach to train teams to conduct introductory seminars; (2) seminars, which introduce physicians to the concepts of a community-based, family-centered team approach to early intervention and to independent study; and (3) independent study, which includes an independent study manual and accompanying audiotapes to provide information on child find, development evaluation and assessment, Individualized Family Service Plans, and transition. Appendices include CFIT competencies, an introductory seminar agenda, and independent study manual introductory materials.
(Author/CR)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

Caring For Infants and Toddlers with Disabilities:
New Roles for Physicians

FINAL REPORT

Early Education Program for Children with Disabilities
U.S. Department of Education
Grant Number: H024D40044
CFDA: 84.024D

Corinne W. Garland, M.Ed.
Project Co-Director
Barbara A. Kniest, M.Ed.
Project Co-Director
Andrea C. Quigley, M.Ed.
Project Coordinator

Child Development Resources, Inc.
P.O. Box 280
Norge, VA 23127
(757) 566-3300

February 28, 1998

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

2

II. ABSTRACT

Caring for Infants and Toddlers with Disabilities: New Roles for Physicians (CFIT) Outreach Project

An Early Education Program for Children with Disabilities Project

Corinne W. Garland, M.Ed
Executive Director/
Project Co-Director

Barbara A. Kniest, M.Ed.
Project Co-Director

Andrea Quigley, M.Ed.
Project Coordinator

Caring for Infants and Toddlers with Disabilities: New Roles for Physicians Outreach Project (CFIT Outreach) is a program of Child Development Resources, Inc. (CDR), a nationally recognized private, nonprofit agency located in Norge, Virginia. CDR provides services for young children and families and training and technical assistance to early intervention and early childhood personnel.

CFIT Outreach was designed to increase physician participation in the early intervention system through replication of a proven model of inservice training. The model, which provides continuing medical education for physicians, was developed in collaboration with the Virginia Chapters of the American Academies of Pediatrics and of Family Physicians and with colleagues at the University of Virginia School of Medicine. The training curriculum was based on a set of competencies developed by the American Academy of Pediatrics and adapted by the project. Almost 1000 health care professionals in nine states and territories have participated in CFIT introductory seminars and/or independent study.

The CFIT model includes three replicable components: State Planning, Introductory Seminars, and Independent Study. The Introductory Seminars and the Independent Study have been approved for continuing medical education credits.

- **State Planning:** In each state in which the project works, CFIT Outreach staff work with a state leadership planning group composed of Part H representatives, physicians representing the state chapters of the American Academies of Pediatrics and of Family Physicians, parents, and other key stakeholders to plan the replication process. Using a train-the-trainer approach, interdisciplinary teams are trained to conduct Introductory Seminars.
- **Introductory Seminars:** Regional seminars introduce physicians to the concepts of a community-based, family centered team approach to early intervention and to the Independent Study.
- **Independent Study:** An independent study manual and accompanying audiotapes provide a knowledge base in four competency areas: child find, developmental evaluation and assessment, IFSP, and transition.

Several products were developed by the project. Caring for Infants and Toddlers with Disabilities: A Manual for Physicians is a 200 page, 9 section manual which includes practice activities, supplemental readings, and contacts for referral to early intervention services. Manuals are customized to reflect the early intervention policies and procedures of each replicating state. Four accompanying audiotapes cover the four competency areas of child find, evaluation and assessment, IFSP, and transition and can be used as a preview or summary of the reading material. The CFIT Competencies on which the curriculum is based have been indexed to the independent study manual and assist physicians in directing their study. Knowledge and Competency Measures were developed as pre/post tests for measurement of change as a result of study. These products are available as resources to help physicians throughout the country become full participating members of early intervention teams.

CFIT evaluation data provide strong evidence of the efficacy of the model in increasing both pediatricians' and family physicians' knowledge and competency as members of early intervention teams. Information about replication of the CFIT Model is available from Child Development Resources (757) 566-3300.

III. TABLE OF CONTENTS

| | | |
|-------|--|----|
| IV. | CFIT GOALS AND OBJECTIVES | 1 |
| V. | THEORETICAL FRAMEWORK FOR PROJECT APPROACH | 3 |
| VI. | DESCRIPTION OF CFIT MODEL | 6 |
| VII. | PROBLEMS ENCOUNTERED | 13 |
| VIII. | EVALUATION | 14 |
| IX. | PROJECT CFIT IMPACT | 19 |
| X. | FUTURE ACTIVITIES | 21 |
| XI. | ASSURANCES | 22 |
| | REFERENCES | 23 |

APPENDICES

- A. CFIT Competencies
- B. Accreditation Statements
- C. Replication Agreement
- D. Introductory Seminar Agenda
- E. Criteria for Site Selection
- F. Independent Study Manual Introductory Materials

IV. CFIT GOALS AND OBJECTIVES

Goal 1: To collaborate with Part H lead agency personnel and state chapters of the American Academies of Pediatrics and Family Physicians to plan and implement CFIT model replication activities in six to nine states.

Objectives:

- 1.1 To establish and/or maintain working relationships with state agencies or state chapters of AAP and AAFP requesting outreach assistance.
- 1.2 To use a state leadership group to plan replication of the CFIT model of inservice training with physicians.
- 1.3 To develop a CFIT replication plan with the state leadership group specifying project and state responsibilities.
- 1.4 To provide information about the project to lead agency personnel responsible for the Comprehensive System of Personnel Development (CSPD).
- 1.5 To work with the contractor for the early childhood technical assistance development system (e.g., NEC*TAS) to identify other states interested in replicating the CFIT model during years two and three.

Goal 2: To replicate the CFIT model of inservice training with physicians, leading to their increased knowledge and skills regarding family-centered early intervention services for children with disabilities.

Objectives:

- 2.1 To work with the state leadership group to customize the Independent Study Manual.
- 2.2 To assist the state leadership group in identifying an interdisciplinary training team that includes parents.
- 2.3 To facilitate the preparation of the interdisciplinary training team to conduct the Introductory Seminar.
- 2.4 To enlist help from families of children with low incidence disabilities to encourage participation of their child's physician in project activities.
- 2.5 To provide assistance to the state leadership group in implementing Independent Study and Technical Support.

2.6 To evaluate the CFIT outreach replication process.

2.7 To provide follow-up consultation and technical assistance to the state leadership group.

Goal 3: To ensure participation in project activities of physicians who care for children from cultural, linguistic, or racial minority groups.

Objectives:

3.1 To identify the communities in which children from cultural, linguistic, or racial minority groups reside.

3.2 To identify sources of health care, including names of physicians, for children from cultural, linguistic, or racial minority groups.

3.3 To assist the leadership group to recruit physicians who care for children from cultural, linguistic, or racial minority groups and who represent the diversity of the communities in which they practice.

Goal 4: To promote awareness and replication of the CFIT model and its products through dissemination activities.

Objectives:

4.1 To design, develop, and produce project awareness materials.

4.2 To revise project products in response to state needs and changing federal legislation.

4.3 To disseminate information about the CFIT model, outreach activities, and project products to state and national audiences.

V. THEORETICAL FRAMEWORK FOR PROJECT APPROACH

Congress, recognizing that the complex needs of infants and toddlers with disabilities cannot be met by a single discipline or agency, called for states to plan interagency, community-based, coordinated, family-centered systems of care through Part H of the Individual with Disabilities Education Act (IDEA) -- systems in which physicians' participation is essential. Physicians' offices are critical entry points to services designed to foster children's medical, social, and intellectual development (Pidcock, 1987). The opportunity for children and families to receive early intervention services is, to a large degree, dependent on physicians who are alert to a wide variety of developmental problems and are aware of where to find services needed by children and families (Scott & Garland, 1994). The physician is frequently the first of many professionals from whom parents seek advice when they have concerns about their child's development and whom they trust to provide information about their child's development (Scott & Garland, 1992).

Families have, for decades, reported the problems they have encountered when their physicians' referrals for early intervention have not been timely; when physicians have not fully shared information or perceived families as part of the decision-making process; when information and care have been provided without the emotional support families have needed; when health care and development are not integrated within the early intervention system.

There is little doubt on the part of medical and other early intervention professionals of the need for physicians to participate in the early intervention system at both the system design and service delivery levels. Physicians serve on most state ICCs (Shackelford, 1997) reflecting the perceived importance of their role in early intervention systems planning.

At the service delivery level, both legislation and recommended practice promote a strong role for health care professionals on the early intervention team. The comprehensive developmental needs of infants and toddlers with disabilities cannot be adequately addressed without also recognizing their medical/health and family support needs (Von Rembow & Sciarillo, 1993). The medical information a physician can provide to families and to other early intervention team members is often critical to the accurate assessment of children's development and an appropriate Individualized Family Service Plan (IFSP). Likewise, families and other early intervention team members can provide the physician with information regarding children's development that is a crucial component of routine health supervision. For children with severe disabilities and /or significant health impairments, the importance of this collaboration is heightened.

In order for physicians to assume their new roles as partners in providing community-based, interdisciplinary early intervention services, they must (1) be familiar with the provisions of Part H legislation, (2) understand the nature and importance of early intervention services, and (3) understand their role within the system of services (Wenger et al., 1989). However, the literature suggests that physicians are typically not prepared by their medical training with the knowledge and skills they need to be active participants in the early intervention service system. In fact, despite initiatives by their professional organizations, many physicians remain unaware that Part H exists, let alone that the law has implications for their professional practice (Cohen, Kanthor, Meyer, & O'Hara, 1990). Blackman, Healy, & Ruppert (1992) described results of a statewide survey of pediatricians conducted by the New York State American Academy of

Pediatrics District II in which only 15% of the respondents felt well informed about Part H, and only 8% saw themselves as being involved in the development of IFSPs.

The CFIT model meets an urgent and compelling need perceived by parents, physicians, and other early intervention providers. The CFIT model of training is effective in increasing both pediatricians' and family physicians' knowledge and competency as members of early intervention teams.

VI. DESCRIPTION OF CFIT OUTREACH MODEL

A. Description of CFIT Outreach Model

The purpose of CFIT Outreach is to increase physician participation in early intervention systems through replication of a proven model of training. This model was developed in collaboration with physicians who served on Virginia's ICC, the Virginia chapters of the American Academy of Pediatrics (AAP) and American Academy of Family Physicians (AAFP), colleagues at the University of Virginia (UVA) School of Medicine, and families of children with disabilities. The curriculum is based on competencies regarding early intervention developed by the AAP and adapted by the project (Appendix A, CFIT Competencies). CFIT training has been approved for continuing medical education (CME) credits (Appendix B, Accreditation Statements). The model was developed between 1991-1994 and used in seven regions of Virginia. Data on efficacy of the model and of model replication in other states are discussed in Section VIII.

The CFIT model includes three replicable components: State Planning, Introductory Seminars, and Independent Study. The **State Planning** component involves the development of state leadership planning groups composed of Part H (to be renamed Part C, July, 1998) personnel, physicians representing state chapters of the American Academies of Pediatrics and of Family Physicians, parents, and other key personnel to plan inservice training for physicians through the replication of the CFIT model. State leadership planning groups work with project staff to plan and implement the replication process in their own state.

The state LPG develops, with CFIT support, a written action plan for training. This plan includes tasks to be completed, roles and responsibilities of CFIT staff and LPG members,

timelines for accomplishing tasks, and procedures for evaluation data collection. The relationship between CFIT and the LPG is formalized through a signed replication agreement (Appendix C).

Together CFIT staff and LPG members gather information on state Part H policies and procedures and state and local resources to use in customizing the independent study manual. The LPG determines a process for identifying physicians, other early intervention providers, and parents to serve as panelists for the regional introductory seminars. CFIT staff help the LPG to determine the number, time, and location of seminars; to ensure full accessibility; and to disseminate information about the seminars to physicians, other early intervention providers, and parents. With the assistance of the AAP and AAFP members of the LPG, invitations to community physicians to attend the seminars are printed on academy letterhead and signed jointly by academy chapter presidents and LPG representatives.

After the LPG completes the logistical planning and selects panelists for the seminars, project staff help to prepare those panels during a full-day train-the-trainer event conducted by CFIT staff and the LPG. This training provides panelists with information about the CFIT curriculum, models the panel presentation, and provides opportunities for discussion. Physician panelists are given the CFIT independent study manuals to complete prior to their participation in the regional introductory seminars.

Introductory Seminars. The CFIT course sequence moves the learner from acquisition of prerequisite knowledge to mastery of knowledge and skill. Figure 1 outlines the course sequence by outcome, purpose, method, instructional technique, instrumentation, and time. The three-hour regional **Introductory Seminars are the second component of the CFIT model.** The seminar lays the foundation for subsequent learning, introducing physicians to the concept of a family-

centered team approach to early intervention services and to the CFIT independent study process. The structure of the seminar was planned during model development in collaboration with physicians, parents, and Part H representatives. A panel presentation is used to create a shared understanding of the role expectations each early intervention team member - physician, other early intervention provider, and family member - has of the others, particularly during the processes of **child find, assessment, IFSP, and transition**. Panelists present information from their diverse perspectives and engage physicians in discussion. Physicians also receive information about how their local early intervention system works and have a chance to meet local early intervention service providers, increasing their awareness of community resources (Appendix D, Introductory Seminar Agenda).

Figure 4
COURSE SEQUENCE

INTRODUCTORY SEMINAR OUTCOME: An understanding of the need for competency-based training based on the change in physicians' roles as a result of Part H of IDEA and increased commitment to project participation.

| PURPOSE | METHOD | INSTRUCTIONAL TECHNIQUE | INSTRUMENTATION | TIME |
|--|--|---|---|---------|
| To provide an overview of the roles of physicians with regard to: Child Find, Assessment, IFSP and Transition | <ul style="list-style-type: none"> Group Training | <ul style="list-style-type: none"> Interdisciplinary Panel Group Discussion Handouts | <ul style="list-style-type: none"> Introductory Seminar Evaluation | 3 Hours |

INDEPENDENT STUDY OUTCOME: A strong knowledge base in each of the four competency areas.

| PURPOSE | METHOD | INSTRUC-TIONAL TECHNIQUE | INSTRUMENTATION | TIME |
|---|---|---|---|----------|
| To provide detailed information about Child Find, Assessment, IFSP, and Transition | <ul style="list-style-type: none"> Individual Learning | <ul style="list-style-type: none"> Written Materials Audiotapes | <ul style="list-style-type: none"> Physician Knowledge Pre/Post Measure Physician Competency Pre/Post Measure Independent Study Manual and Audiotapes Evaluation | 3 Months |

Regional seminars are typically held in the evenings in convenient locations selected by the LPG. Physicians leave the seminars with their independent study manuals, audiotapes, and certificates of attendance that can be used to obtain CME credits.

Independent Study. **Independent Study, the third and final component,** is designed to be individualized, self-directed, and self-paced and to acknowledge the difficulties physicians have in finding time for inservice training. The content of the Independent Study is based on the competencies developed by the AAP and adapted by the project. Competencies address four early intervention processes in which physicians' participation is particularly important: **Child Find, Assessment, IFSP, and Transition.** The CFIT manual, customized to reflect each state's early intervention policies and procedures, is indexed to competencies in those four areas so that physicians can locate content based on their areas of greatest interest and need. The 200 page, 9 section manual (Appendix E, Independent Study Manual Introductory Materials), reviewed and approved as part of the process of awarding CME credits for independent study, includes practice activities, supplemental readings, and contacts for referral to early intervention services throughout the state. Four accompanying audiotapes cover the four competency areas and can be used as a preview or summary of the reading material.

The Independent Study component of CFIT training takes approximately three months to complete. Physicians receive names and telephone numbers of resources whom they can contact for technical support in understanding and integrating the new information into practice. Physicians evaluate seminars and the independent study materials for quality and usefulness and overall satisfaction. Physicians also complete pre/post training measures to provide information

about changes in knowledge and competencies as a result of CFIT training. Measures and data analysis methods are discussed in Section VIII.

B. Description of Replication Sites

Project staff selected replication sites using Criteria for Site Selection (Appendix E).

Replication activities were conducted in the following nine states/territories:

- ▶ Ohio
- ▶ Illinois
- ▶ Delaware
- ▶ Indiana
- ▶ Idaho
- ▶ Nebraska
- ▶ Texas
- ▶ Guam
- ▶ Commonwealth of the Northern Mariana Islands

In addition, in Oklahoma, only site development work was completed.

C. Dissemination Activities

A variety of strategies were used to disseminate project information and resources.

- Information about the CFIT model and outreach services and a sample independent study manual were sent to NEC*TAS. Information about the project was included in the NEC*TAS Outreach Catalogs.
- CFIT Outreach activities were highlighted in articles in the following newsletters and/or journals with national dissemination:
 - ▶ CDR's Open Lines which is published quarterly
 - ▶ "Pediatric News" (November 1994)
 - ▶ "Family Practice News" (December 1994)
 - ▶ "Zero to Three"
 - ▶ Infants and Young Children
- Physician representatives from state LPGs disseminated CFIT awareness materials at the "Power of the Pediatrician Conference" (national conference for state representatives of the AAP Children with Disabilities Committees) and through their statewide AAP and AAFP meetings and state newsletters.

- Project staff facilitated 2 presentations for parents on the topic "Talking with Physicians"-one for Virginia's 1995 DEC statewide parents' conference and one for parents in Guam.
- Presentations were made at the 1995 and 1996 DEC International Conferences, the NEC*TAS Partnerships for Progress Conference (July 1995), and two SIFT-OUT meetings (by project staff and by a physician from a replication site's LPG).

Other national dissemination strategies included providing CFIT information at the 1996 International Division for Early Childhood Conference; at the 1994, 1995, and 1996 NEC*TAS/OSEP Combined Meetings; and the 1994 and 1996 Zero to Three Conference. A chapter including information about CFIT was included in Families, Physicians, and Children with Special Health Needs: Collaborative Medical Education Models (1994). Project staff responded to phone and written inquiries regarding project services and products from personnel in 23 states: New Hampshire, New York, South Carolina, New Jersey, Georgia, Kentucky, California, Tennessee, Kansas, Mississippi, West Virginia, Louisiana, North Dakota, North Carolina, Washington, Colorado, Massachusetts, Oregon, Wyoming, Connecticut, Alabama, Arizona, Missouri, and from Japan.

D. Training Activities

CFIT staff worked with state leadership planning groups to plan and implement CFIT training in their states. A key state planning task was the gathering of Part H policies and procedures and resource information for use in customizing the CFIT independent study manual. LPG members in all replication sites identified providers of health care for children from cultural, linguistic, or racial minority groups. Some states, such as Ohio, have a state Office of Primary Care which is responsible for the underserved population. Other targets included health departments, community health centers, organizations of Asian-American physicians, and clinics

such as the A.I. Dupont Nemours Clinic in Delaware that provides community-based services for low income families. Special efforts were made in two sites to include military personnel who often experience isolation from community services. Training on Saipan and Guam was opened to nurses who provide a significant amount of the primary health care to children on the islands. CFIT assisted the LPG with preparations for the regional introductory seminars such as selecting physicians, parents, and other early intervention personnel to attend a train-the-trainer seminar and to serve as panelists at regional introductory seminars; inviting physician participants; developing training schedules and agenda; facilitating the awarding of CME credits for seminar attendance; and gathering evaluation data.

The Introductory Seminars introduce physicians to the concepts of a community-based, interdisciplinary, interagency early intervention approach to family-centered services and to the Independent Study. Seminars are held regionally to limit travel time for physicians. Physicians leave the Introductory Seminar with the independent study manual and accompanying audiotapes. During the period of self-directed independent study, consultation and technical support for physicians are provided by the LPG and local contacts.

Almost 1000 health care professionals participated in 26 introductory seminars and/or independent study in seven states and territories (Ohio, Illinois, Delaware, Indiana, the Commonwealth of the Northern Mariana Islands, Guam, and Idaho). Oklahoma held two LPG meetings but was unable to secure the necessary commitment from physician panelists for the introductory seminars. Nebraska and Texas had held two planning meetings by the end of the project period and were preparing for Train-the-Trainer seminars to occur in early 1998. Customized independent study manuals were completed for all sites.

VII. PROBLEMS ENCOUNTERED

As mentioned above, Oklahoma was unable to secure sufficient commitment from physicians to complete the replication process. This appeared to be related to changing priorities within the state planning process. CFIT staff will keep their LPG contacts on our mailing list and offer them the opportunity to pursue replication again at some future point, should they desire to do so.

Because of the travel cost in time and dollars, the replication process was adapted for Guam and the Commonwealth of the Northern Marianas. Many of the preliminary planning tasks were conducted on the phone and through the mail. Project staff made an extended on-site visit to conduct two Train-the-Trainer seminars and two Introductory Seminars.

The model has been successful in being adaptable to physicians' schedules. However, feedback from physicians and low return rates suggest that the evaluation measures are too lengthy. The project continues to look for strategies to encourage physicians to return their post evaluation measures. In future activities, project staff will explore ways to respond to this concern while continuing to gather pertinent evaluative information.

Although the project has been successful in reaching a large number of physicians, feedback from physicians indicates that the three hour length of the seminar is a barrier to attendance by some. Project staff will explore options for altering the seminar format with the physicians involved in the original project design and the project evaluator. Should we alter the format, physicians participating in the adapted version will be treated as a separate group in evaluation.

VIII. EVALUATION

The efficacy of the CFIT model was based on the results of training of a group of approximately 200 Virginia physicians. Between 1994 and 1997, almost 1000 health care professionals in seven other states and territories have received training. Pre-post data are currently available from six of those states since time for completion of independent study delays post-test data collection. Those states are: Ohio, Illinois, Delaware, Indiana, the Commonwealth of the Northern Mariana Islands, and Guam.

To determine model efficacy, three sets of questions were asked concerning (1) the extent to which training increased physicians' knowledge about early intervention services; (2) the extent to which training increased physician's competence to fulfill their roles as members of early intervention teams; and (3) the extent to which training content and materials were perceived as useful and of high quality by participants. Data provide strong evidence of model efficacy and replicability and are summarized below.

Figure 1. Average Percentage Correct on the Knowledge Measure Pre- and Post-tests by State

| Domain | States | | | |
|------------------|--------|------|--------------|------|
| | Model | | Other States | |
| | Pre | Post | Pre | Post |
| Child Find | 53.3 | 64.7 | 51.7 | 60.3 |
| Assessment | 60.3 | 80.8 | 65.6 | 76.4 |
| IFSP Development | 68.1 | 94.7 | 70.4 | 81.3 |
| Transition | 66.7 | 71.1 | 81.7 | 80.6 |
| TOTAL | 57.4 | 74.6 | 54.5 | 65.0 |

● Extent of Increased Physician Knowledge

About Early Intervention Services. The

Physician Knowledge Measure assesses knowledge in the four areas of early intervention services. The measure consists of 15 multiple choice questions. In the original model, participants scored 57.4% correct on the Physician Knowledge Measure before the training. The post-training scores showed a

statistically significant increase to 74.6% correct (Fig. 1). This change represents a 17.2% increase in physicians' knowledge **and indicates that CFIT training resulted in increased physician knowledge about family-centered early intervention services for children with disabilities.**

Comparison of the combined results in six states to the original model demonstrate similar findings. Figure 1 also represents the scores of the original model participants and scores for physicians in six other states. These data were analyzed using a 2 Time (Pre-vs. Post-Test) X 2 State (model development state vs. combined other states) repeated measures ANOVA. Analyses of total knowledge measure scores show significant improvements between pre- and post-tests. Total scores and scores in three of the four subdomains show significant improvements between pre- and post-tests by both model participants and physicians in other states.

The results on the Physician Knowledge Measure provide strong evidence of the efficacy of CFIT training for both the original model and other states. For both groups, there initially was an approximate 45% deficit in important knowledge about early intervention services which was reduced by approximately 33% through CFIT training. **The project was able to increase significantly the knowledge of all groups of physicians trained.**

- **Extent of Increased Physician Competency.** The Physicians Competency Measure examined physicians' measure of their own competence as members of early intervention teams, using the competencies developed by the American Academy of Pediatrics and adapted by CFIT. Figure 2 represents the competency measure data from the original model and the other states' combined

Figure 2. Average Rating of the Competency Measure Pre- and Post-tests by State

| Domain | States | | | |
|------------------|--------|------|--------------|------|
| | Model | | Other States | |
| | Pre | Post | Pre | Post |
| Child Find | 2.92 | 4.11 | 3.26 | 4.36 |
| Assessment | 2.86 | 3.91 | 3.26 | 4.12 |
| IFSP Development | 2.48 | 3.92 | 2.82 | 4.11 |
| Transition | 2.39 | 3.81 | 2.87 | 3.93 |
| TOTAL | 2.69 | 3.94 | 3.06 | 4.15 |

data. Analysis of these data indicated that the original model increased physicians' competency ratings from 2.69 pre-training to 3.94 post-training.

Analysis of the competency measure indicated that the pre- vs post-training differences were significant for all four sub-scales. Physicians in other states also demonstrated gains similar to those found in the original model. Differences in pre- and post-training competency ratings were examined in

a 2 Time (Pre-vs. Post-Test) X 2 State (model development state vs combined other states)

ANOVA. The results of the ANOVAs of the four post-subdomains and total scores indicated

consistent significant gains between pre- and post-test for both the original model and the

combined replication states. Thus, **the participants in the CFIT training in both the original**

model and in replication states showed significant increases in their self-rated competency

in the four sub-domains. Figure 3 (page 17) represents the pre- to post-test differences in total

ratings for both the model and the combined outreach states. **Again, the CFIT model of**

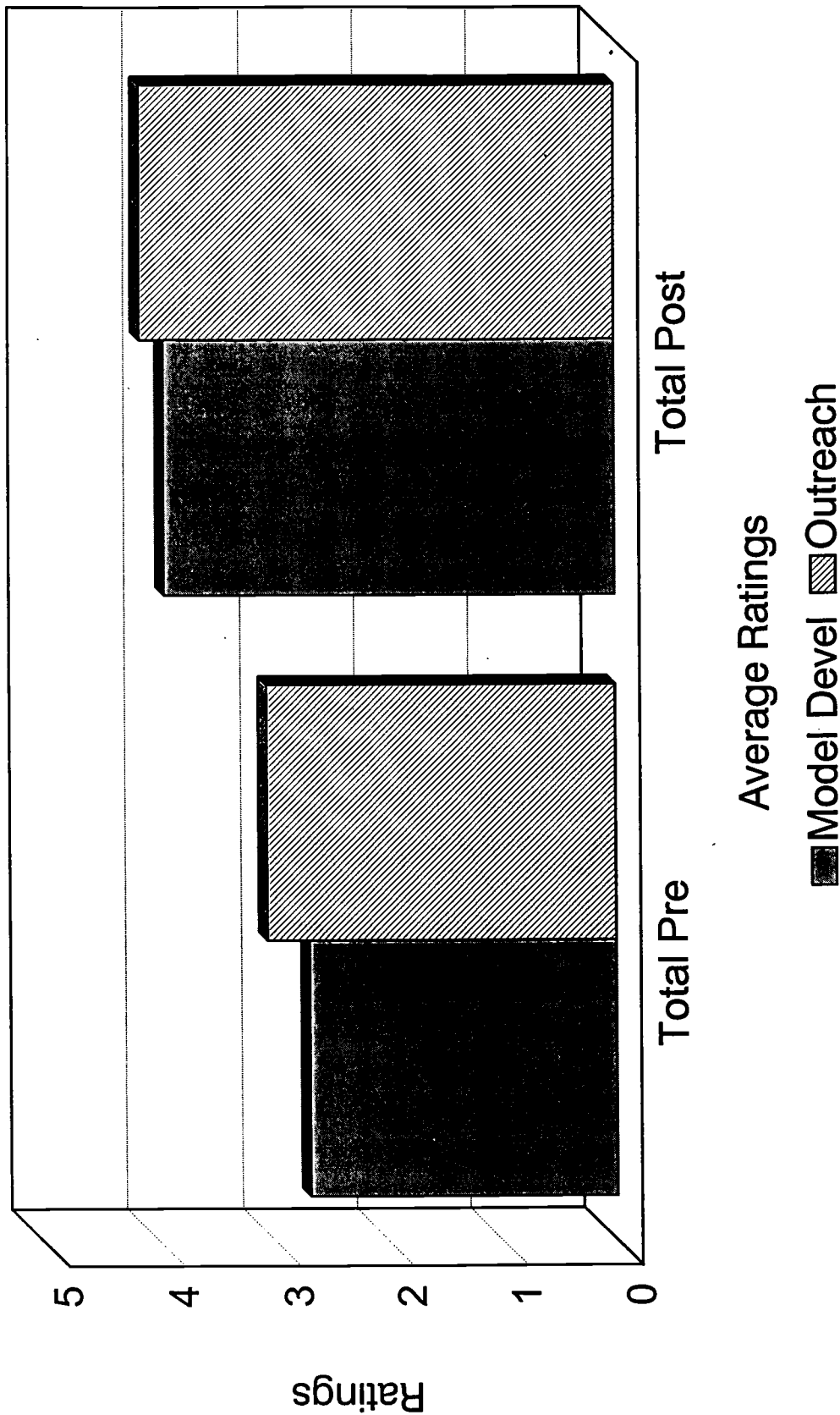
training increased physicians' measure of their competence to fulfill their important role in

early intervention.

- **Extent to Which Training Content and Materials Were Perceived as Useful and of High Quality.** Physicians participating in CFIT training at the model demonstration site and in six additional replication states completed two rating scales to evaluate the quality and usefulness of the Introductory Seminar and of the independent study manual and audiotapes. On a 7 item 5-

Figure 3

Difference in Competency Ratings - Pre-test and Post-test



22

point Likert-type scale with 5 being high, participants at the model demonstration site rated the Introductory Seminar as 4.3 and the independent study manual as 4.2. Data for the six additional states demonstrated similar levels of satisfaction. **These ratings indicate a high degree of satisfaction with the quality and usefulness of the CFIT model of inservice training and materials.** The following statements summarize CFIT model efficacy data:

- ◆ CFIT training results in increased physician knowledge about family-centered early intervention services for children with disabilities.
- ◆ CFIT training increases physicians' competence to fulfill their important role in early intervention.
- ◆ Physicians indicate a high degree of satisfaction with the CFIT model of inservice training and perceive training content and materials to be useful and of high quality.
- ◆ CFIT is a replicable model producing consistent results across sites.

Physicians' own comments best show the effects of CFIT training:

- ◆ "I have developed a better understanding of my own role as a pediatrician in implementing a process to assure that we meet the needs of young children with disabilities." - A family physician
- ◆ "I found the perspectives of the parent-panelists very valuable in helping me to understand the importance of the services offered to the families of children with disabilities. Thank you for a great educational experience. It will help me a great deal in my practice." - A family physician
- ◆ "I plan to add developmental screening to each physical exam in my office practice." - A pediatrician
- ◆ "Audiotapes were clear, concise, and informative, great format!" - A family physician
- ◆ "The program is put together well. I wish this could be more widely distributed to all primary care physicians." - A pediatrician

IX. PROJECT CFIT IMPACT

The CFIT Project has contributed to current knowledge and practice by providing families, physicians, the early intervention system, and the professional community at large with:

- a successful and replicable model of inservice training for physicians that results in increased knowledge and competence regarding the role of the physician in community-based, family-centered, early intervention services,
- a model of continuing education for physicians that is individualized, self-paced, and self-directed,
- a model of inservice training that meets the continuing education standards of the medical community with approval for CMEs, and
- curricula and materials that include an independent study manual and accompanying audiotapes that can be customized for use by other states throughout the country.

Indiana has done an exceptional job of continuing the impact of the initial replication training. To be eligible for reimbursement as a Part H early intervention provider, physicians must complete the CFIT Independent Study including the pre and post evaluation measures. Three hundred fifty two additional physicians in Indiana have expressed interest in the independent study and were mailed pre-tests for completion. Two hundred sixteen of those physicians completed the pre-test and were mailed the independent study manual. Post-measures are currently being returned. The Indiana liaison has conducted the following activities:

- ▶ sponsored luncheons at the annual conferences of the Indiana Chapters of the American Academies of Pediatrics and Family Physicians
- ▶ participated as exhibitor in Indiana Chapter AAP Day at the legislature
- ▶ gave presentation to the Indiana Association of Medical Education Directors and was asked to give follow-up presentations at five hospitals across Indiana during grand rounds or lunchtime seminars

- ▶ kept local council coordinators informed of the status of physicians enrolled in independent study

Several states have conducted Introductory Seminars for pediatric residents. CFIT staff recognize the need for getting information about family-centered early intervention services incorporated into training programs for medical professionals and will continue to explore avenues for encouraging this effort.

X. FUTURE ACTIVITIES

A major focus of future activities will be on continued replication of the CFIT model of training. Child Development Resources has been awarded a three-year outreach grant to replicate the CFIT model in other states. The project, CFIT Physicians Outreach, will continue to assist state leadership groups in using the CFIT model to increase the involvement of physicians in community-based early intervention systems.

As a result of the Virginia Interagency Coordinating Council's continued support for additional CFIT training in Virginia, CDR will be carrying out the CFIT model under a separate contract with the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services.

CDR has also been awarded a four year demonstration grant to develop a model of inservice training for registered nurses and pediatric nurse practitioners. This new model will build on the successful CFIT model of inservice training for physicians and will adapt the CFIT independent study manual for use with nurses.

XI. ASSURANCES

This statement serves as an assurance that the required number of copies of this final report have been sent to the Office of Special Education Programs, U.S. Department of Education and to the ERIC Clearinghouse on Handicapped and Gifted Children. In addition, copies of the title page and abstract have been sent to the other addresses as requested.

REFERENCES

- American Academy of Pediatrics (1988, Nov.). Proceedings From A National Conference on Public Law 99-457: Physician Participation in the Implementation of the Law. Washington, D.C.
- Blackman, J. A., Healy, A., & Ruppert, E. S. (1992). Participation by pediatricians in early intervention: Impetus from Public Law 99-457. Pediatrics, 89 (1), 98-102.
- Cohen, H., Kanthor, H., Meyer, M.R. & O'Hara, D. (1990). American Academy of Pediatrics Survey: District II. The Mental Retardation Institute, New York Medical College, Valhalla, N.Y.
- Pidcock, F.S. (1987). Developmental screening techniques for pediatricians. Pediatric Basics, 47, 7-11.
- Scott, F. & Garland, C. (1992). "Assessing and Remediating Pediatricians' Needs in Early Intervention." Early Childhood Report. LRP Publication, April (P.14-16).
- Scott, F. & Garland, C. (1994). What Do Physicians Want to Know? Statewide Survey Report of Physicians' Needs for Early Intervention. In R. Darling & M. Peters (Eds.), Families, Physicians, and Children with Special Health Needs: Collaborative Medical Education Models. Westport, CT: Greenwood Publishers.
- Shackelford, J. (Ed.). (1997). State ICC overview: Policies, programs and practices of state interagency coordinating councils. Chapel Hill, NC: NEC*TAS Publication.
- Von Rembow, D. & Sciarillo, W. (Ed.). (1993, June). Nurses, Physicians, Psychologists, and Social Workers Within Statewide Early Intervention Systems: Clarifying Roles Under Part H of the Individuals with Disabilities Education Act.(1st ed.). Bethesda, Md.: Maryland Infants and Toddlers Program & Association for the Care of Children's Health.
- Wenger, M., McLauren, J., Guild, P., Loda, F., Gallagher, M., DeFries, G., Rich, L., & Bergsten, C. (1989). Physician involvement in planning for P.L. 99-457 Part H: Interagency coordinating council roles and systems planning issues. Chapel Hill, NC: Carolina Institute for Child and Family Policy.

APPENDIX A

CFIT Competencies

CARING FOR INFANTS AND TODDLERS WITH DISABILITIES: NEW ROLES FOR PHYSICIANS

COMPETENCIES ON WHICH CURRICULUM IS BASED AND PAGE REFERENCES TO CORRESPONDING SECTIONS OF THE MANUAL

| A. CHILD FIND | PAGE REFERENCES |
|--|--|
| The primary care physician will: | |
| 1. display an awareness of the importance of developmental and family issues | pp. 2 - 2-4 |
| 2. know the components and intent of P.L. 99-457 and the policies and procedures of their state relative to screening, identification, and referral of children to Part H services | pp. 3 - 3-3 pp. 4 - 4-3 |
| 3. know the criteria for eligibility within their state for Part H services. | pp. 4-2, 4-3 pp. 6-3, 6-4 |
| 4. be able to identify factors placing a child at-risk for developmental delay with particular emphasis on those factors making a child eligible for Part H services | pp. 4-2, 4-3 pp. 5-2 - 5-6 |
| 5. have and regularly employ strategies in a variety of settings (e.g., newborn nursery, hospital stays, well-child office visits) for the observation and identification of children who have disabilities, developmental delays, or who may be at-risk for delay | pp. 5-3 - 5-6 |
| 6. be skilled in the use and interpretation of developmental screening techniques | pp. 5-6 - 5-9 |
| 7. have a strategy for providing periodic screening in the context of office-based primary care including | |
| a. developmental screening of all infants; and | |
| b. periodic rescreening for all children. | pp. 5-6 |
| 8. know and use the procedures for referring infants and toddlers to the Part H services within the community, and know the variety of community resources available for infants and toddlers who may be eligible | pp. 5-9 - 5-13 State Directory |
| 9. have and regularly use a variety of strategies to enhance linkages and coordination of care including making and receiving referrals to and from secondary and tertiary care settings, risk registries, and other relevant consultants | pp. 5-6 pp. 5-11 - 5-13 pp. 5-15 - 5-19 State Directory |
| 10. have and regularly use a variety of strategies for increasing family awareness of developmental milestones, resources for assessment, the importance of early identification, potential for improved outcomes | pp. 5-3 - 5-6 p. 5-9 |
| 11. have and regularly use a variety of formal and informal interview techniques to elicit family concerns and observation regarding the development of their infants and toddlers | pp. 5-3, 5-4 pp. 5-6, 5-7 pp. 7 - 7-15 |

| A. CHILD FIND (Continued) | PAGE REFERENCES |
|--|---|
| <p>12. have and use communication skills and strategies appropriate for ensuring family understanding of medical information, including consultant findings, and for ensuring their involvement in decisions about referral to Part H or further evaluation and intervention</p> | <p>pp. 5-9 → 5-11 pp. 5-15 → 5-18</p> |
| <p>13. have strategies and routines for the acquisition of new state of the art knowledge base related to this area</p> | <p>p. 5-14</p> |

| B. ASSESSMENT | PAGE REFERENCES |
|--|--|
| <p>The primary care physician will:</p> <ol style="list-style-type: none"> 1. be aware of options for his/her own involvement in assessment, diagnosis, and management of the child's health needs based on interests and skills, and be able to communicate clearly that degree of involvement to parents or caregivers 2. be skilled in interpreting diagnostic information and implications of diagnosis with family, including eliciting their ideas and concerns 3. know and use resources for obtaining consultation from other Part H providers necessary and be skilled in presenting need and rationale for consultation to family 4. be able to interpret all findings for the family in an understandable way and involve and support family in decisions related to additional assessment, referral, and intervention 5. be able to perform longitudinal monitoring of a child to clarify trends of growth or function, when appropriate 6. be able to provide family with options for referral and to make appropriate referrals to agencies providing needed services 7. be able to present information related to the child's medical condition and functional level to family and other team members responsible for development of a plan of intervention 8. be skilled in formal and informal interview techniques to allow families to share their strengths and needs related to their child's development and provide emotional support in the process 9. be skilled in formal and informal interview techniques that encourage families to share their own perceptions of their child's problems, strengths, and needs, and that help families clarify those perceptions 10. be aware of community resources and have skills in helping families obtain the services they desire | <p>p. 6-6</p> <p>Preface pp. 6-11, 6-12 pp. 6-15 → 6-18</p> <p>State Directory</p> <p>p. 6-2 pp. 6-11, 6-12</p> <p>pp. 5-3 → 5-6 pp. 6-3 → 6-6</p> <p>State Directory Appendix B</p> <p>p. 6-6</p> <p>p. 6-2</p> <p>pp. 6-10 → 6-13 pp. 7-2 → 7-5</p> <p>p. 7-4 State Directory Appendix B</p> |

| C. DEVELOPING AND IMPLEMENTING IFSPs | PAGE REFERENCES |
|---|---|
| <p>The primary care physician will:</p> <ol style="list-style-type: none"> 1. be aware of P.L. 99-457 and of principles of family-centered intervention plans 2. be able to define and arrange medical consultations required for the child's assessment, diagnosis, and ongoing management in a manner consistent with the self-selected degree of involvement and to maintain communication with consultant 3. know and be able to discuss with a family the value of an IFSP, and know how to initiate or help a family initiate a group process to begin IFSP development 4. assist family in determining who should be involved in the IFSP process 5. know the procedure for referral to local early intervention service provider(s) responsible for IFSP development and help family in arranging for their participation 6. be able to communicate, as a member of the IFSP team, the child's medical and health needs either directly or through the parent to the team 7. be able to help other members of the IFSP team understand the impact of those conditions on a child's overall development and implications of medical conditions for program planning 8. assist the family in preparing for the IFSP development, providing support throughout the process, and encouraging the family to be heard and have a principal role in the IFSP development 9. present and clarify information gained during assessment about the child's conditions, functional levels, family strengths and needs, in sufficient detail to be useful in the IFSP 10. be able to function as the coordinator or liaison regarding child's health or medical needs, communicating with the child's case manager or other person representing the team providing early intervention services | <p>p. 2-2 pp. 3 - 3-2 pp. 8 - 8-2</p> <p>pp. 8-3, 8-4 p. 8-16</p> <p>pp. 8 - 8-4</p> <p>pp. 8-2, 8-3</p> <p>p. 5-6 pp. 5-9 - 5-13 State Directory</p> <p>pp. 6-11, 6-12 pp. 8-3, 8-4</p> <p>pp. 8-3, 8-4</p> <p>p. 6-2 p. 6-10 pp.7 - 7-15 pp. 8-3, 8-4</p> <p>p. 6-12 pp. 7-2, 7-3 pp. 8-3, 8-4</p> <p>pp. 8-15, 8-16 pp. 9-3, 9-4</p> |

| D. TRANSITION | PAGE REFERENCES |
|--|-----------------|
| <p>The primary care physician will:</p> <ol style="list-style-type: none"> 1. understand the stress associated with transition from one service to another for the child and for the family | <p>p. 9-1</p> |

| D. TRANSITION (Continued) | PAGE REFERENCES |
|--|----------------------------------|
| 2. be aware of community-based early intervention systems that may provide services for children leaving the hospital and returning home (see competencies related to child find and referral) | pp. 9-3, 9-4 State Directory |
| 3. be aware of the criteria which might lead to the termination of early intervention services and help the family become aware of the possibility of discharge from early intervention | pp. 9-4, 9-5 |
| 4. be aware of other services for children leaving early intervention programs and be able to provide information about services to families | pp. 9-4, 9-5 State Directory |
| 5. know how to make a referral to public schools for preschool special education services and know the criteria for eligibility | pp. 9-4, 9-5 State Directory |
| 6. know the advantages of integrated placements for children with disabilities, be aware of options for integrated placements, and be able to communicate that information to families | p. 9-5 pp. 9-7, 9-8 |
| 7. participate as a member of the team in developing plans for transition to be incorporated in the IFSP | p. 9-2 |
| 8. have communication skills needed to encourage and support families in developing plans for transition to be incorporated in the IFSP | p. 9-2 |
| 9. have communication skills needed to encourage and support families and children during the transition to services after early intervention | p. 9-2 p. 9-4 pp. 9-7, 9-8 |
| 10. be aware of the need for and value of service coordination after early intervention | p. 9-5 |
| 11. know other resources for service coordination in the community and provide that information to families | State Directory |

American Academy of Pediatrics (1988, Nov.). Proceedings From A National Conference on Public Law 99-457: Physician Participation in the Implementation of the Law. Washington, D.C.

APPENDIX B

Accreditation Statements

The University of Virginia School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

The University of Virginia School of Medicine designates this education activity for up to 11 hours (3 hours for the introductory seminar, 8 hours for independent study) in Category 1 of the Physician's Recognition Award of the American Medical Association. Each physician should claim only those hours of credit that he/she actually spends in the educational activity.

This continuing medical education activity has been reviewed by the American Academy of Pediatrics (AAP) and is acceptable for 11 AAP credit hours (3 hours for the introductory seminar, 8 hours for independent study). These credits can be applied toward the PREP Education Award available to Fellows and Candidate Fellows of the American Academy of Pediatrics.

This program (CFIT Introductory Seminar) has been reviewed and is acceptable for up to 2.5 Prescribed credit hours by the American Academy of Family Physicians. This program (CFIT Independent Study) has been reviewed and is acceptable for up to 6 Prescribed credit hours by the American Academy of Family Physicians. Term of approval is for one year from beginning distribution date of January 1, 1998, with option to request yearly renewal.

APPENDIX C

Replication Agreement

**CARING FOR INFANTS AND TODDLERS WITH DISABILITIES:
NEW ROLES FOR PHYSICIANS (CFIT)
OUTREACH REPLICATION AGREEMENT**

This agreement is between Child Development Resources' CFIT Outreach Project and the Indiana Leadership Planning Group.

I. CFIT OUTREACH PROJECT COMMITMENT

CFIT Outreach will provide the following services to assist the Leadership Planning Group in replicating the CFIT model of inservice training for physicians:

- provision of sample independent study manual, including audiotapes, to leadership planning group members and assistance in determining who/how to customize for state-specific information
- assistance in identifying an interdisciplinary training team and preparing them to conduct the Introductory Seminar
- assistance in implementing Independent Study and Technical Support
- provision of samples of data collection forms for evaluating replication activities
- continuous technical support needed to ensure successful replication of the CFIT model
- other, as appropriate

II. LEADERSHIP PLANNING GROUP COMMITMENT

The Leadership Planning Group agrees to replicate the CFIT model of inservice training for physicians and agrees to:

- provide information needed to customize the Independent Study Manual
- identify and secure financial resources to support cost of replication
- ensure that training is accessible to physicians providing care to children from cultural, linguistic, or racial minority groups
- ensure that training is provided through an interdisciplinary team to include physicians, other early intervention personnel, and parents
- assist in evaluating CFIT Outreach through data collection
- other, as negotiated

| NAME | AFFILIATION | DATE |
|-------|-------------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |



APPENDIX D

Introductory Seminar Agenda

CFIT REGIONAL INTRODUCTORY SEMINAR

SAMPLE AGENDA

6:00 - 9:00 PM*

- | | |
|-------------|--|
| 6:00 - 6:15 | Registration/Complete Pre-Evaluation Measures |
| 6:15 - 6:30 | Welcome and Introductions |
| 6:30 - 6:45 | Philosophical Foundations Role of MD in Planning and Advocacy |
| 6:45 - 7:30 | Interdisciplinary Panel Addressing Child Find & Assessment |
| 7:30 - 8:00 | Questions and Answers with Community Providers |
| 8:00 - 8:45 | Interdisciplinary Panel Addressing IFSP & Transition |
| 8:45 - 9:00 | Evaluation/Wrap Up |

*Dinner will be provided

2/97

APPENDIX E

Criteria for Site Selection

CRITERIA

▶ Support for replication activities from Part H office

▶ Support for replication activities from state chapters of the American Academy of Pediatrics (AAP) and the American Academy of Family Physicians (AAFP) or commitment from representative to work to generate that support

▶ Commitment from Part H and Academy representatives to participate as members of the leadership group for planning replication

▶ Willingness to assist in identifying other key personnel to assist in planning activities

▶ Commitment to providing training through an interdisciplinary team that includes physicians, early intervention personnel, and parents, and assisting with arrangements that make that possible (child care, travel, stipends, etc.)

▶ Commitment to making training accessible to physicians who provide care to children from cultural, linguistic, or racial minority groups

▶ Willingness of Part H office to assist in gathering state-specific information needed to customize the Independent Study Manual

▶ Willingness to secure financial resources to support cost of replication including cost sharing of CFIT staff travel

▶ Commitment to data collection for evaluation of CFIT replication effectiveness

APPENDIX F

Independent Study Manual Introductory Materials

CARING FOR INFANTS
AND TODDLERS
WITH DISABILITIES:

A MANUAL FOR PHYSICIANS

By:

Francine G. Gallagher, M.Ed.

Corinne W. Garland, M.Ed.

Barbara A. Kniest, M.Ed.

CHILD DEVELOPMENT RESOURCES, INC.

with consultation from

Robert Boyle, M.D.

Susan Anderson, M.D.

University of Virginia School of Medicine

Revised from the original

Caring for Infants and Toddlers With Disabilities:

A Self-Study Manual for Physicians

Authors: Patti Seklemian, M.A., Francine G. Scott, M.Ed.
and Corinne W. Garland, M.Ed. (1993)

Caring for Infants and Toddlers with Disabilities: New Roles for Physicians is a continuing medical education project developed and implemented by Child Development Resources, Inc. The project is sponsored by the University of Virginia School of Medicine. Support for this project is provided by grant number HO24D40044 from the Early Education Program for Children with Disabilities, U.S. Department of Education. Points of view or opinion do not, however, necessarily represent official views or opinions of the Department of Education.

Copyright © 1993. 2nd Edition © 1995. All rights reserved. No part of this work may be reproduced without permission. For permission or to purchase additional copies, please contact: Child Development Resources, CFTT, P.O. Box 280, Norge, VA 23127 (804) 566-3300.

Revised from the original *Caring for Infants and Toddlers With Disabilities: A Self-Study Manual for Physicians*. Authors: Patti Seklemian, M.A., Francine G. Scott, M.Ed. and Corinne W. Garland, M.Ed.

Caring for Infants and Toddlers with Disabilities: New Roles for Physicians was originally released in May, 1993. [This manual (2nd edition) was reviewed and approved in August 1995. (Expiration date August 1998)]

This independent study manual was planned and produced in accordance with ACCME Essentials.

Accreditation Statement

The University of Virginia School of Medicine designates this continuing medical education activity for 8 hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

The University of Virginia School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

This continuing medical education activity has been reviewed by the American Academy of Pediatrics (AAP) and is acceptable for 8 AAP credit hours. These credits can be applied toward the PREP Education Award available to Fellows and Candidate Fellows of the American Academy of Pediatrics. (Expiration Date June 1998)

This program has been reviewed and is acceptable for 6 Prescribed hours by the American Academy of Family Physicians. Term of Approval is for one year from beginning distribution date of September 1, 1995, with option to request renewal.

PREFACE

Striking a balance between hope and realism is a challenge for those working with infants and their parents. Recently, I was asked to evaluate an infant with microcephaly (small head size) noted at birth. The baby's pediatrician followed her for well-child care for several months until it became clear that there were serious questions about vision and general development. Her parents were extremely anxious about the possibility of problems and refused further evaluation for many weeks after the pediatrician broached the subject. Finally, the parents agreed to a limited "second look" by a developmental pediatrician at a tertiary care center.

One look confirmed my suspicions based on the history I had received beforehand. Martha, now 4 months old, displayed little visual or auditory attention although she seemed to see and hear. She did not smile or interact socially, even though her parents were attentive and obviously attached to her. Her head circumference had changed little from birth.

During my interview, Martha's mother kept interjecting questions about things she might have done wrong during the pregnancy although her prenatal care and behavior were exemplary. My recommendations for further testing - magnetic resonance (MR) imaging of the brain, auditory brainstem evoked responses, electroencephalography, and ophthalmologic examination - were met with resistance, partly out of fear of possible harm and discomfort and partly out of fear of the results. It took several weeks for the parents to consent.

As expected, the MR study was abnormal, showing a failure of neurons to migrate completely to the cerebral cortex (lissencephaly). Furthermore, there was agenesis of the corpus callosum. The other tests were unremarkable.

I knew that the follow-up interpretive with Martha's parents was going to be difficult (i.e., emotionally charged). My intent was to refer them to genetics for counseling and to the community early intervention program. The more difficult task would be balancing hope and realism. Clearly, Martha would have serious developmental problems, but the exact extent could not be determined at this age.

Wolraich (1987) has written about communication of distressful information to parents. Several points he has made are useful for situations such as the one described above, whatever the setting:

- Allow parents to feel free to discuss concerns and feelings. Do not try to relieve guilt by statements such as "You shouldn't feel guilty because..." Professionals may acknowledge their own discomfort when conveying the information.
- Discuss possible reactions from other family members. It may be helpful to provide information to other supportive people, such as friends or close relatives, if the parents so desire.
- In the case of initial discussions, parents may not remember many of the details.
- Additional sessions or tape recordings are helpful.
- Terms such as cerebral palsy, pervasive developmental disorder, or developmental delay frequently are misunderstood. Carefully and repeatedly defining new words, using visual aids, pausing for reactions or questions, and providing written take-home materials can be useful.
- Rather than focusing on parents' acceptance of the child's condition, discussion should be directed toward what can be done to help. One pitfall is to imply that a permanent condition can be cured or will go away. Parents need to understand the



limitations, as well as the potential benefits, of various medical, educational, therapeutic, and psychosocial interventions.

Martha's parents are now mulling over the referral to the early intervention program. I expect they will choose to engage these services in hopes of ameliorating, if not curing, Martha's problems. They seemed most relieved to hear that brain abnormalities are not fatal, and they continue to cling to the hope that their child's developmental problems will be minor. My writing of this preface has reinforced in my mind the need to communicate well with the early intervention program. The process of supporting Martha and her parents only began with my contact; in fact, communication of diagnosis is inevitably somewhat destructive. The most important work will continue in the community. By sharing what I have learned about Martha and her parents with the community service providers, the flow of support should continue and build without interruption.

-- James A. Blackman, M.D., M.P.H.

REFERENCE

Wolraich, M. (1987). General management techniques. In: M.L. Wolraich, (Ed.) *The Practical Assessment and Management of Children with Disorders of Development and Learning*. Chicago: Year Book Medical.

Reprinted with permission from James A. Blackman, "From the Editor" in *Infants and Young Children*, Vol. 5:2, with permission of Aspen Publishers, Inc., © 1992.

INTRODUCTION

Historical Perspective

Caring for Infants and Toddlers with Disabilities: New Roles for Physicians (CFIT) is a model of inservice training designed to ensure that physicians have the information and skills needed to be full participants in community systems of early intervention. The CFIT model was developed by Child Development Resources (CDR) working in collaboration with the Virginia Chapters of the American Academy of Pediatrics and the American Academy of Family Practice and colleagues at the University of Virginia School of Medicine. This model was developed in response to training needs identified through a survey of pediatricians (Scott, 1990) and in recognition of the importance of physician involvement in statewide systems of early intervention for young children with disabilities and their families. (A copy of an article describing this survey can be found at the end of this Introduction.)

Funding to develop the CFIT model was provided by the U. S. Department of Education, Office of Special Education Programs (OSEP), Early Education Program for Children with Disabilities (EEPCD) for a three year period beginning in 1991. During that phase, *Caring for Infants and Toddlers with Disabilities: A Self-Study Manual for Physicians* was developed and introduced to 200 physicians in Virginia. Training content was based on a set of competencies developed by the American Academy of Pediatrics and adapted for use by the CFIT project.

In 1994 funding was awarded to CFIT Outreach to assist other states in providing this inservice program to physicians in their states. The CFIT Outreach model includes three components: State Planning, Introductory Seminars, and Independent Study.

Design and Use of This Manual

Caring for Infants and Toddlers with Disabilities: A Manual for Physicians includes nine sections regarding the efficacy of early intervention, the philosophical basis for and legislative history of early intervention, and the process that a family experiences while working with the early intervention system. The role of the physician as an important member of the early intervention team is described throughout. The manual is divided into white pages and colored pages. The white pages contain information that is pertinent to physicians practicing anywhere in the U.S. Within the white pages, this character, ➤ indicates that additional information specific to the early intervention system in your state is contained in the colored pages that follow. The information in these pages has been provided by representatives of the early intervention system in your state. Each section may also include supplemental readings and practice activities. Additional information and resources are included in the appendix.

This manual is designed for independent study. A set of accompanying audiotapes covering child find, assessment, IFSP, and transition may be used as a preview or summary of the reading material. Two self-assessments are used with this manual, one that measures your current knowledge of early intervention and one that measures the degree to which you already possess the competencies recommended by the American Academy of Pediatrics. These two measures have been developed to assess the effectiveness of the independent study and to help guide you in your independent study. Appendix A references each competency to information in the manual to make it easy for you to find the information you need based on your self-assessment. Use your self-assessment results to direct both your reading and your use of the practice activities that have been designed to help you apply the information in a practical manner. Assessment results can help you determine how much time to invest in each content area. Upon completion of the independent study phase, you will be asked to complete the knowledge and competency measures again as a self-assessment of your progress.

CONTENTS

SECTION

1. EARLY INTERVENTION
2. PHILOSOPHICAL FOUNDATIONS
3. LEGISLATIVE HISTORY
4. PART H SYSTEM
5. CHILD FIND
6. CHILD EVALUATION AND ASSESSMENT
7. IDENTIFICATION OF FAMILY RESOURCES, PRIORITIES, AND CONCERNS
8. IFSP AND SERVICE COORDINATION
9. TRANSITION

APPENDICES

10. A: Competencies on Which Curriculum is Based and Page References to Corresponding Sections of the Manual
11. B: State and National Resources
12. C: State Part H Service Delivery Policies
13. D: Definition of Developmental Delay in Other States



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").