RESEARCH AND TRAINING CENTER IN SERVICE COORDINATION

Practice Interview Data Report

Purpose

The current study was conducted in conjunction with a series of descriptive and intervention (experimental) studies aimed at identifying outcomes and practices in the provision of effective service coordination. A review of literature revealed that there are no efficient and effective measures of both service coordinator practices and outcomes. As Knapp (1995) and others have pointed out, no single measure of child development adequately reflects the breadth of the goals of a comprehensive, coordinated system. The current study was designed to provide an innovative means of measuring practices that support essential outcomes of services coordination.

Research Design

A qualitative research design was utilized to identify: (1) what outcomes families hoped to achieve for their child and family as a result of early intervention, (2) who helped to achieve those outcomes, and (3) what practices those individuals used to help. Semi-structured interviews with family members of a child participating in early intervention and a semi-structured telephone interview with each family's service coordinator were used as a means of generating data. The qualitative means of collecting input from family members and service coordinators provided a sound basis for examining essential outcomes and practices of service coordination. A combination of qualitative methods allows for verifying data and generates new ways of thinking which may reveal contradictions in the data (Brotherson, 1994). The use of multiple perspectives in this study is designed to help inform and assess the efficacy of early intervention service

coordination. Qualitative methods are advantageous in that they encompass interpersonal, social and cultural contests more fully than quantitative methods (Solutes, 1990).

Site Selection

Four focal states were empirically selected for participation in this study. These states were Connecticut, Indiana, Massachusetts and North Carolina. Investigators serving at institutions within these states were collaborative partners in all aspects of the Research and Training Center (RTC) and serve on the advisory board. Family and service coordinator demographics within these states are representative of the national early intervention demographic data.

Participants

Participants for this study included 80 family members who had a child enrolled in an early intervention program in one of the RTC four focal states and each family's early intervention service coordinator. Families were recruited according to specific guidelines to ensure that a representative cross-section was obtained. A recruitment grid listing each of the family and child demographic variables desired for participation in this study was sent to project staff in each of the focal states. As project staff identified potential participants they contacted staff members at the RTC in Connecticut to make sure there was equal distribution across the different recruitment variables and across states. Efforts were made to achieve a balance across each state based on demographics including:

Ethnicity:

- Black
- Latino
- White
- Asian/Middle Eastern/Other

Child's level of need:

- Mild = Two (2) standard deviations below the mean or average of the testing instrument used.

- Moderate = Three (3) standard deviations below the mean or average of the testing instrument used.

- Complex = Four (4) standard deviations below the mean or average of the testing instrument used.

Family location:

- Rural
- Suburban
- Urban

Socioeconomic status:

- Low income
- Not low income

Staff at the RTC compiled a master list of family demographics that was centrally compared with the target demographics. See Table 1.

Table 1. Family Interview Recruitment Grid.

Family Selection Criteria									
	Child Age	Less than 1 year			1 – 2 years			2 – 3 years		
Ethnicity	Needs	Com	Mod	Mild	Com	Mod	Mild	Com	Mod	Mild
Black	Urban		CT IN IN	CT IN		NC IN	NC CT	CT	CT MA	CT NC
	Rural			IN	IN	NC NC	NC NC			
	Suburban		IN IN	MA				CT		NC NC

Latino	Urban	MA					CT	MA	CT MA	MA CT CT
	Rural			NC						
	Suburban	NC	CT IN	NC			IN	CT		CT CT
White	Urban	MA	MA	IN IN	MA	MA	CT	MA	MA CT	IN MA
	Rural	IN		IN	CT	IN	IN NC	IN CT	IN	NC NC
	Suburban	MA MA	CT IN IN	CT NC	IN NC	IN	CT MA		CT	IN
Asian/ Middle Eastern/ Other	Urban			IN			NC MA	MA	NC MA	CT CT MA
	Rural			NC	NC					MA
	Suburban			NC MA	NC	NC	MA NC		MA	MA

A total of 100 families were recruited for participation in this study; however, only data from 80 participants were included in the final analysis. Of the 80 families, 40.0 % lived in urban areas, 36.2% lived in suburban areas, and 23.8% of the families lived in rural areas. The majority of the families were white (42.5%), while additional ethnicity groups represented included Black (23.8%) Latino (12.5%), and other (21.2%). Approximately 42 percent of the families were from low-income households and 57 percent were from non low income households based on parent report. The children with disabilities were categorized according to three age groups: 0-1 year old (31.3%), 1-2 years old (31.3%), and 2-3 years old (37.4%). Children were also categorized

according to the complexity of their needs. Of the 80 families, 43.7% indicated their child's needs were mild, 31.3% were moderate and 25.0% identified their child's needs as complex.

In each of the four focal states some of the service coordinator participants served more than one family in the study, making the number of service coordinators smaller than the 80 family participants (N=65). Of the service coordinators participating in this study, 41.5% worked part time and 58.5% worked full time. The majority of service coordinators had 1.1-5 years of experience (44.6%), 26.1% had 5.1-10 years experience, 18.5% had less than one year experience and only 4.6% had more than 15 years experience.

Instruments

Interviews with family members and service coordinators were used to identify (1) outcomes that families hoped to achieve as a result of early intervention, (2) who helped to achieve those outcomes and (3) the practices that they used. Interviews were chosen as a means of data collection because of the rich detail that can be generated by allowing others to share their stories (Patton, 1990). During interviews, family members and service coordinators were asked questions that elicited their perceptions and experiences with early intervention, and specifically service coordination.

A protocol was developed by project staff specifically for this study in May 2001. The RTC staff revised the protocol in July 2001 and conducted a pilot study with five families in the four focal states, which resulted in further refinement of the protocol. Project investigators approved the final protocol on July 17, 2001 and obtained IRB approval from the University of Connecticut Health Center. The protocol consisted of semi-structured questions and probes aimed at eliciting rich and pertinent conversations with family members and service coordinators about families' experiences and the outcomes they hoped to achieve as a result of

participating in an early intervention program. The family interview protocol was designed to gain input from families based on their experiences with early intervention and service coordination to: (1) identify outcomes of effective service coordination, (2) identify who helped to address those outcomes as perceived by families and (3) identify and measure practices that lead to effective service coordination outcomes. The protocol also included questions pertaining to the importance of each identified outcome, how service coordination helped with the outcomes, and how long it took to achieve the outcomes. Finally, the family was asked: "If service coordination is working well, how would you know it?" Interviews were audio taped and responses were recorded on data recording forms.

The protocol used for service coordinator interviews was designed to elicit conversation pertaining to service coordinators' perceptions of what outcomes were important to families, and specific practices they engaged in to help families achieve those outcomes. Additional questions pertained to service coordinators' years of experience, training and supervision.

<div align="center">Procedures</div>

In-person interviews with 80 family members and telephone interviews with each family's early intervention service coordinator were conducted as a means of identifying (1) outcomes families wanted to achieve for their child and family as a result of participating in early intervention, (2) the people who helped to achieve those outcomes and (3) the practices used to help achieve those outcomes.

<u>Train Staff</u>

Staff were trained on data collection procedures and how to use the protocol for the family and service coordinator interviews on August 1, 2001. This training session was held at

the RTC in Connecticut. Participants included all individuals who would potentially be conducting interviews. Once trained, staff at the RTC in Connecticut mailed packets of the interview protocols, including an introductory letter, the interview forms and self-addressed return envelopes to each location. Each site was provided with a checklist to ensure proper return of all interview materials.

Recruitment Procedures

Families were primarily recruited through service providers and service agencies. Project staff from all sites contacted providers in their state to request their help in informing families of the opportunity to participate in the present RTC study. Staff gave an overview of the RTC to providers and explained what the interview process would entail. Staff also informed providers of the specific guidelines that were being followed during the recruitment process.

Providers identified families that were interested in participating in the project and matched them with the requested demographic variables that were needed. Families were given the option to call RTC staff directly or give permission to share their information and have staff contact them directly. With family consent, project staff contacted the identified families and further informed them about the project and the approximate time commitment for conducting an interview. Service coordinators were recruited for participation by virtue of the fact that they provided service coordination for one or more of the families participating in the study.

Interview Procedures

Interviews were scheduled and conducted beginning August 6, 2001, and were completed by March 2002. Project staff in the four focal states (Massachusetts, North Carolina, Indiana, Connecticut) contacted families and informed them about the project and the approximate length of time necessary to complete the interview. All interviews with family members were conducted

in a location the family identified as being convenient. At the time of the interview, families were asked to give written informed consent to conduct the interview, as well as consent to obtain a copy of their child's most recent Individualized Family Service Plan (IFSP) and permission to contact and interview their service coordinator through the early intervention program. Participants were given a copy of the interview guide prior to conducting the interview. Families were introduced to the concept of service coordination and asked to respond to the statement, "tell me about your family", which led to a discussion about their child, their experience with early intervention, and the status of services being provided. The interviewer, during the course of listening to families' stories, identified outcomes and practices that were described by the families during the interview. In addition to documenting key points on a data recording form, each interview was audio-taped to provide accuracy during data analysis. Member checks were completed at the end of each interview to ensure the researchers captured the true intent of what families communicated.

Upon completion of the family interviews and with written informed consent, project staff called each family's early intervention service coordinator to request a copy of the child's most recent IFSP as well as a time to conduct a telephone interview with the service coordinator. A written informed consent form was faxed to the service coordinator to sign and send back to the RTC in Connecticut. Telephone interviews were scheduled at times convenient for the service coordinators. Each interview was audio-taped in addition to the researcher documenting critical information regarding outcomes and practices of service coordination on a data recording form. Staff in each of the four focal states mailed materials back to the RTC as interviews were completed, including audio-tapes, data recording forms, and IFSPs.

Data Analysis

During data analysis it is critical that standards of rigor are adhered to by all project personnel (McWilliam, 2000). A reliability check was conducted on a randomly selected sample of 20% of tapes from the initial 100 interviews. The trained researcher denoted outcomes, who helped to achieve those outcomes, and practices from the transcribed interview. A comparison of data sets extracted from the interviewer and those of the project researcher was performed demonstrating 81.6% correspondence between interviewer and researcher. Project staff elected to transcribe all 100 interviews and record data from the interviews as a reliability assurance and means of recording data for future measures. Reliability checks have been completed on 100% of the initial family and service coordinator interviews. Of the 100 families who were recruited and interviewed, six (6) of the family interview tapes did not yield enough data for analysis and fourteen (14) family interview tapes were not audible, yielding a total participation of 80 families and their respective early intervention service coordinator.

Statements pertaining to outcomes families hoped to achieve as a result of early intervention, persons responsible for addressing those outcomes, and the practices they used were extracted from the transcriptions and organized in to a master database of outcomes, practices and persons who helped for both the family and service coordinator interviews. Of particular interest during this data analysis were the practices used to help achieve desired outcomes as identified by family members and service coordinators.

Family and service coordinator interview practices were sorted and reduced into 12 interview practice codes through a five step data reduction process (Li, Marquart & Zercher, 2000). Once theming of all family and service coordinator interview practice data were completed, the individual practice statements were coded according to the interview outcome
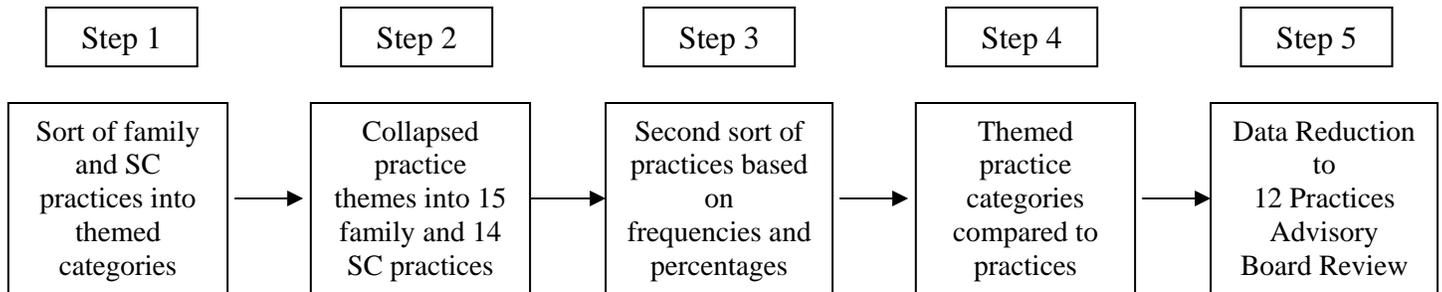
codes, as well as the Delphi outcome codes and by the system-family-child codes. Likewise, the practices were coded by the interview practice codes, the Delphi practice codes and the system-family-child codes.

Interview Practices Reduction and Theming

Practice statements generated from interviews with family members and practices identified by service coordinators were sorted into themed categories based on similar content and meaning (Patton, 1990). Practices were themed through a five step process. During step one two research assistants sorted the family interview practices into themed categories, while two separate research assistants sorted practices identified by service coordinators into themed categories. The themes were tested and refined through recursive review to ensure category independence. The project coordinator and data manager then reviewed and conducted an additional sort during step two to ensure no practice themes were omitted. Thematic coding in step two yielded 15 themed codes for family practices and 14 service coordinator practice themed codes. During step three frequencies and percentages of practices in each themed category were calculated. The project coordinator and data manager collapsed practice categories with less than 5% frequency into other categories that reflected similar content as a means of adhering to the integrity of practices statements as reported through the family and service coordinator interviews. The fourth step entailed comparing practice data from the Delphi study with that of the family and service coordinator interviews to identify both similarities and differences, as well as to ensure consistency in wording. During the fifth and final step the principle investigator and project coordinator further reduced the practice themes to 12 categories that were the same for family interview data and service coordinator interview data and reviewed these with members of the project advisory board. Advisory board members came

to consensus on the wording of the final practice themes. See Figure 1 for interview practice methodology.

Figure 1. Interview Practice Methodology

Step 1		Step 2		Step 3		Step 4		Step 5
Sort of family and SC practices into themed categories	→	Collapsed practice themes into 15 family and 14 SC practices	→	Second sort of practices based on frequencies and percentages	→	Themed practice categories compared to practices	→	Data Reduction to 12 Practices Advisory Board Review

Practice Coding

Interview practice statements from families and service coordinators have been put into tables, respectfully, and coded according to the final twelve interview practice codes, the Delphi practice codes that resulted from the RTC Delphi practice survey and the system-family-child framework outlined in the original grant propoal.

The interview practice codes are:

1. Providing families with information

2. Assisting families with obtaining formal and informal supports

3. Coordinating services

4. Monitoring the provision of services

5. Providing support and encouragement

6. Giving suggestions and strategies to families to enhance child development

7. Completing administrative duties

8. Providing direct service to child

9. Facilitating transition process

10. Facilitating communication among team members

11. Developing and reviewing IFSPs

12. Ensuring family understanding of child development

The Delphi practice codes are:

1. Providing Information

2. Ensuring Family Understanding

3. Being Responsive to Families

4. Developing IFSPs

5. Monitoring Progress

6. Ensuring Family Satisfaction

7. Promoting Child Development

8. Addressing Healthcare and Safety Issues

9. Completing Administrative Responsibilities

10. Planning for Transitions

11. Collaborating with Community Organizations

12. Engaging in Professional Development Activities

Finally the interview practice responses were also coded by the system-family-child:

1. System

2. Family

3. Child

4. System/Family

5. System/Child

6. Child/Family

7. Child/Family/System

Project staff independently coded the family interview practice data separate from the service coordinator interview data. Practice statements were coded to consensus with the project coordinator and data manager conducting reliability checks on 100% of the coded practices. Comparisons of the interview practices according to the various codes were completed to determine the level of agreement between families and service coordinators on key issues related to service coordination practices. Descriptive statistics were run for the interview code comparison and the Delphi code comparison.

Results

Interviews with family members and conversations with service coordinators in early intervention have helped to identify essential outcomes of service coordination and the practices that support those outcomes. Eighty family members with a child enrolled in early intervention in the RTC focal states (Connecticut, Indiana, Massachusetts, and North Carolina) and their early intervention service coordinators engaged in meaningful conversation to reveal what outcomes families hoped to achieve as a result of early intervention, who helped them to achieve those outcomes, and what those individuals did to help. The integration and comparison of families' and service coordinators' accounts help to clarify how service coordination is experienced and practices service coordinators engage in to help families meet goals they would like to achieve for their child and family.

<u>Interview Practice Reduction</u>

Results from the reduction and comparison of the various practice data sources yielded 12 interview practice categories. Advisory board members reviewed the practice themes and came to consensus on the final themed codes to ensure consistency of terminology and wording. The themed codes are provided below:

1. Providing Information

2. Assisting Families with Obtaining Formal and Informal Supports

3. Coordinating Services

4. Monitoring the Provision of Services

5. Providing Support and Encouragement

6. Giving Suggestions and Strategies to Enhance Development

7. Completing Administrative Duties

8. Providing Direct Service to the Child

9. Facilitating the Transition Process

10. Facilitating Communication among Team Members

11. Developing and Review IFSPs

12. Ensuring Family Understanding of Child Development

<u>Practice Coding</u>

Interview practice data for families and for service coordinators were coded to consensus by project staff according to the Delphi practice codes and the interview practice codes. Comparison of interview practices coded by the Delphi practice codes are represented in the Table 2.

Table 2. Comparison of Interview Practice Statements Coded by Delphi Practice Codes

	Total Percent of Interview Responses by Delphi Practice Codes											
Interview	Info	Understanding	Responsive	IFSP	Monitoring	Satisfaction	Development	Health and Safety	Admin	Transitions	Collaborating	Prof.Dev
Families	8.4	7.7	19.3	.6	1.6	3.6	31.9	12.9	9.4	2.8	1.1	.6
Service Coords	7.8	4.2	11.8	1.3	2.2	3.8	33.7	5.5	22.1	5.0	1.8	.7

Based on the Delphi Practice Coding of the family and service coordinator interview practice statements, family members and service coordinators both identified "Promoting Child Development" with the greatest frequency (31.9% for families and 33.7% for service coordinators). Families identified "Developing the IFSP" and "Engaging in Professional Development" equally as the practices least helpful in achieving desired outcomes for families (.6% for both). Service coordinators also identified "Engaging in Professional Development Activities" as the least frequent practices for promoting child and family outcomes (.7%).

Comparison of interview practices coded by the Interview Practice Codes are represented in the Table 3.

Table 3. Comparison of Interview Practice Statements Coded by Interview Practice Codes.

	Total Percent of Interview Responses by Interview Practice Codes											
Interview	Provide Info.	Supports	Coord Services	Monitor	Support	Dev Strategies	Admin	Direct Service	Trans	Team	IFSPs	Dev.
Families	12.0	13.2	9.8	9.2	8.7	7.6	4.8	26.1	3.0	2.9	1.0	1.5
Service Coords	10.5	10.1	9.1	8.4	7.8	9.6	6.6	26.5	4.0	2.9	2.4	1.9

Families and service coordinators both identified providing direct service as the practice that most frequently helped to achieve identified outcomes (26.1% and 26.5 % respectively). Families identified completing the IFSP the least (1%), while service coordinators reported teaching about child development the least (1.9%).

Summary

Listening to the accounts of family members and their early intervention service coordinators has been a critical component of the research activities carried out by the Research and Training Center in Service Coordination. Family members have helped to identify essential outcomes of service coordination and the practices utilized to achieve those outcomes. As noted by Patton (1990), there is much to learn from listening to those directly impacted by social phenomena. Service coordinators also helped identify what is important to families and how we can best help them meet outcomes they hoped to achieve for their child and family as a result of early intervention. The outcomes and practices identified through talking with family members and service coordinator can assist the field of early intervention in providing quality services to families.

References

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Appendix A

Appendix B