Chapter 1

Interdisciplinary Team Assessment for Young Children

Purposes and Processes

Michael J. Guralnick

The interdisciplinary team assessment of young children with possible developmental delays or of those with established developmental disabilities constitutes a critical component of the larger system of services and supports for children and their families during the early childhood years. The importance of gaining insights from many disciplines with respect to a child's development and how it unfolds in the context of family and community life is well recognized. After all, child development, health, and early intervention professionals agree that an ecological-developmental perspective that considers the influence of numerous biosocial factors is essential both to understand development and to design interventions that benefit children and families (Belsky, 1984; Bronfenbrenner, 1979; Guralnick, 1997; Sameroff, 1993).

Many factors are, of course, involved in carrying out an effective interdisciplinary team assessment. At a minimum, the specific purposes and associated interdisciplinary processes must be designed to address the initial con-
cerns that families present to the team as well as those that arise as the process unfolds. Often parents are referred to an interdisciplinary team for assessment because of their own concerns about their child's development. Sometimes these concerns are highly specific, perhaps relating to their child's cognitive or motor development. In other instances, the problems are more difficult for caregivers to articulate, reflecting a general sense that something is not quite right or a lingering fear that the child's development has been compromised by a medical condition (e.g., prematurity and low birth weight, maternal diabetes). Occasionally, certain issues are raised by the family physician or a child care professional or perhaps even a close relative. Increasingly, however, interdisciplinary teams are also asked to become involved with children who have well-established developmental delays but are now exhibiting unanticipated difficulties. Concerns about unusually slow progress, even when early intervention services are being provided, or the appearance of behavior problems are common. Finally, interdisciplinary teams often form specialized groups within the larger team to address specific disorders such as phenylketonuria (PKU) or matters such as feeding difficulties.

As might be expected, the diversity of child, family, and community circumstances likely to be encountered by an interdisciplinary team is considerable. Biologically based conditions that can adversely affect development, including genetic disorders and congenital infections, are numerous and complex (Lipkin, 1996). Conservative estimates suggest that as many as 1 million children in the United States from birth through 5 years of age can be identified as having significant disabilities (see Bowe, 1995). Moreover, the extraordinary vulnerability of young children to developmental difficulties in contemporary society has been well documented (Baumeister & Woodley-Zanthos, 1996; Guralnick, 1998; Hanson & Carta, 1995). Conditions associated with poverty, the risks of adolescent parenting, the impact of prenatal illicit drug or alcohol exposure, and concerns related to parental mental health conditions and limited intellectual abilities are among the risk factors that increasingly challenge a child's development as well as community service and support systems. Often environmental and biological risk factors co-occur, as in the case of many children born prematurely at low birth weights. The number of children facing other forms of multiple risks, either due to the combination of environmental risk and disability factors or the co-occurrence of multiple problems for children with established disabilities (e.g., cognitive delay, epilepsy), is increasing as well. When one adds to these circumstances the cultural diversity of the families seeking services and the variability in resources found in home communities, it is apparent that all concerned face extraordinary challenges in developing a meaningful set of recommendations and programs.

CONTEXT OF THE INTERDISCIPLINARY PROCESS
The hallmark of an interdisciplinary team is its ability to integrate and synthesize information from numerous disciplines through an interactive, group
decision-making process (Garner, 1994a; Rokusek, 1995). Yet, it is important to note at the outset the parameters within which this interactive process unfolds. In particular, this is an expensive undertaking, one that not only requires the involvement of professionals from many different disciplines but also a staff to coordinate and schedule assessments and to help organize relevant information. In addition, there is the investment of time from the family, the child, and perhaps community professionals. Moreover, families may be required to travel considerable distances in order to locate a team with adequate resources to meet their needs. As a consequence, most interdisciplinary assessment teams try to complete the entire process within 1 or 2 days. Although vital questions can be addressed during this time, numerous other issues are often raised that must be considered in reevaluations or as part of another component of the service and support system for children and families. Clearly, both the advantages and the limitations of the interdisciplinary team approach must be recognized, and they are discussed throughout this volume.

Interdisciplinary team assessments are most valuable if they contribute information to help the child and family in the larger home community context. By including community professionals as much as possible either in the process itself or through extensive communications, the team's recommendations are more likely to be implemented effectively and to be realistic. Early intervention systems vary dramatically from community to community, and this fact must be recognized as part of the team's deliberations and recommendations. Similarly, interdisciplinary assessment teams must work closely with other teams in the service system, particularly those involved in developing individualized family service plans (IFSPs) for infants and toddlers and individualized education programs (IEPs) for preschool-age children.

The composition, scope of effort, and location of interdisciplinary assessment teams can vary considerably as well. However, this book emphasizes the operation of comprehensive interdisciplinary teams, often located at major medical centers and universities. These teams are similar in many respects to the child development teams addressing the concerns of children with developmental disabilities or those at risk for developmental delays as described by the seminal work of Holm and McCartin (1978). Nevertheless, it is anticipated that the discussions in this book that focus on comprehensive interdisciplinary teams, including both disciplinary assessments and the interdisciplinary process, can be readily applied to a range of interdisciplinary teams.

PURPOSE OF INTERDISCIPLINARY TEAM ASSESSMENTS
The overarching purpose of the interdisciplinary team assessment of young children is to develop plans and recommendations, including locating community resources to meet the identified needs of the child and family. To accomplish this, the interdisciplinary team assessment process should yield at least five outcomes. First, it is essential to establish the child’s developmental and health patterns and to profile family functioning in a community context.
This outcome is achieved through assessments by representatives of disciplines considered relevant to the presenting concerns. In essence, this process begins by ensuring that team members from each discipline are able to gather information and to understand thoroughly, in relation to their domains of expertise, child and family functioning. These discipline assessments that establish patterns of strength and concern form the core of a more complex process that integrates and reconciles this material.

A second outcome is to determine areas in which additional information is needed. This is an important feature of the clinical assessment because, as described previously, the process is time limited. Even with reasonably good records or history taking, the nature of the information that can be gathered is nevertheless limited by the assessments that occur during a restricted time period. Moreover, additional issues may arise during the course of the assessment that require information to be obtained at a later time. This point highlights that the team's conclusions and recommendations will vary considerably in terms of their degree of certainty. Accurately estimating this degree of certainty, communicating it effectively to the family, and formulating a strategy for obtaining additional information to increase the degree of certainty are all expected outcomes of the interdisciplinary team assessment.

Third, if necessary, the interdisciplinary team assessment will need to help establish a diagnosis or at least provide the probable source or sources of the child's difficulties. This diagnostic process can occur at many levels. At minimum, the team can provide a classification diagnosis in which a category is assigned that best fits the child's developmental profile. Terms such as developmental delay, autism spectrum disorder, or cerebral palsy constitute such categorical diagnoses. Standard classification systems, such as the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (American Psychiatric Association, 1994), are often used for this purpose. When no clear biological markers are available to assist in determining a categorical diagnosis, as is often the case, the team must engage in the generally difficult task of integrating the diverse disciplinary information to achieve a reasonable level of agreement. It is essential, however, that the child's individual developmental profile and the variability inherent in any classification system be communicated adequately to parents. Oversimplifying the diagnostic findings, especially regarding young children, can be misleading and can redirect the family's focus from the rich and diverse patterns of their child's behavior.

At another level, the team tries to determine an etiology as part of the diagnostic process. With the development of more sophisticated genetic testing, the source of a developmental delay, for example, such as that associated with fragile X syndrome, can be confidently established. Other nongenetic, biologically based etiologies are often more tenuous, but a team can reasonably identify the likely source or sources of the child's major problems. In the same way, environmental etiologies or influences are examined by the team. The nature
of the parent–child relationship, possible abuse or neglect, related chronic health conditions, or the mental health status of the parents are all important contributors to identifying either a specific etiology or gaining insight into the source or sources of the problem.

Despite the often uncertain nature of the diagnostic outcome, it is a critical feature of the interdisciplinary team process. Establishing a diagnosis may help link families to specific parent support groups, determine eligibility for services, provide a focus for the team’s recommendations, facilitate anticipatory guidance for families, and supply parents with some deeper understanding of the nature of their child’s problem despite frequent difficulties in working through a diagnosis. It also may have family planning implications.

Fourth, the interdisciplinary team assessment is expected to provide recommendations and suggestions for intervention. From both a disciplinary and an interdisciplinary perspective, perhaps the most valuable feature of the process is the recommendations that result. In some instances, recommendations will be quite specific, focusing on interventions such as prescribing a diet for a child with PKU, recommending a specific program to facilitate a child’s language development, or encouraging the family to seek a particular community service. In other instances, the recommendations will be quite general, such as suggesting that the child be enrolled in therapeutic child care or an intensive early intervention program or explaining how to locate a qualified physical therapist in the community. The advice should, of course, respond to the concerns that originally prompted the assessment but may well go beyond those issues as the situation dictates.

The interdisciplinary team assessment recommendations in many ways are the starting point for a new intervention program. The interventions themselves generally are not carried out by team members, although some team members or groups within teams do elect to provide longer-term management, at least for some issues. Discussions with the family and community providers are essential to determine whether the team wishes to take a management role.

Finally, an outcome of the interdisciplinary team assessment is often to establish a framework for more detailed, intervention-oriented assessments. The global nature of many of the assessments comprising the interdisciplinary team approach, although valuable for addressing the issues that brought families to the team, is typically only the first stage in an extended undertaking of disciplinary- and interdisciplinary-based assessments and early interventions. For example, for children newly identified as exhibiting developmental delays that require intervention services, additional steps designed to gather information uniquely suited for intervention often occur in the context of the community early intervention service system. Community teams providing assessments that assist in the creation of IFSPs and IEPs are also interdisciplinary in their composition. Information from the initial interdisciplinary assessment team can focus and refine these community team intervention-oriented assess-
ments. This final expected result of the interdisciplinary team emphasizes its role in the continuum of early intervention services and supports.

**PROCESS OF INTERDISCIPLINARY TEAM ASSESSMENTS**

For these five outcomes to occur in an accurate and sensitive fashion, a coherent and systematic process governing the interdisciplinary team assessment must be in place. A considerable burden is placed on the team to gather past and current information in a timely, sensitive, and accurate manner; to integrate it effectively; to be prepared to alter the plan and make rapid decisions; and to communicate effectively with families throughout the entire assessment. The critical features of this process described by Holm and McCartin (1978) remain applicable today and are discussed in this section as five sequential steps. Specific case examples utilizing this process can be found in Section III.

In the first step of the interdisciplinary team process, referred to as the **Preliminary Conference (Step 1)**, an initial team leader or service coordinator is chosen by clinic intake staff based on the nature of the problems identified in the referral and the availability of team members. Relying on initial information about the child and telephone contacts with the family, issues of concern and the disciplines that should be involved are then tentatively selected by the team leader. Additional information from school, community professionals, or families also is requested at this time.

Following the receipt of new information (e.g., family questionnaires, school service data, clinic forms), a **Preassessment Conference (Step 2)** is convened in which the tentatively identified team members evaluate this information, determine any other issues of concern, and finalize the assessment plans and disciplines that will participate. This course of action is then shared with the family; if they agree, the formal assessment is scheduled.

This formal assessment begins with the **Disciplinary Assessments (Step 3)**, whereby individual disciplines conduct an evaluation within the scope of their expertise and within the context of the concerns identified in the previous two steps. Some types of information are collected routinely by each discipline, but disciplinary assessments are also uniquely tailored to the circumstances presented by each child and family. When appropriate, especially to reduce redundancy in the assessment, two or more disciplines may see the child or the family at one time. In establishing the schedule of disciplinary assessments, particular attention is devoted to ensure that the child will experience minimal fatigue or boredom from what clearly is a demanding process. At this step, every effort is made to strike a balance between an ideal schedule from the child's and family's perspective and the practical demands of a busy clinic program.

Following the assessments, each discipline provides a **Discipline Summary (Step 4)** organized in a series of notes with respect to test scores, observations, decision points, and new information or new issues that may have arisen in the course of the assessment. Informal contact among team members
also occurs during this period as ideas are formulated, often complementing the informal exchanges that have occurred during the previous disciplinary assessment process. As teams gain experience and confidence working with one another, these informal contacts become more useful and facilitate the remainder of the process. In any event, this step concludes with each discipline’s having developed a set of tentative recommendations that will be shared with the team and family.

The fifth and final step is the Integration of Disciplinary Information and Recommendations. It is here, in face-to-face meetings with all involved, that the original and newly emerging issues are addressed from the perspectives of all disciplines. Under the guidance of the team leader, disciplinary summaries are presented, information is synthesized, new problems are considered, and a final set of conclusions and recommendations—with all reasonable qualifications—is presented to families. This, of course, is the most challenging part of the interdisciplinary team assessment, demanding that the team displays its most sophisticated level of interpersonal, clinical, and communicative skills.

It is important to point out that these five steps are an idealized version of the actual process. In practice, many steps overlap. As noted previously, the process is a dynamic one, with disciplines exchanging information at points other than the final step of the assessment. This dynamic quality often changes the nature and type of assessments, raising new issues that must be dealt with in a timely and flexible manner.

**PRINCIPLES OF INTERDISCIPLINARY TEAM ASSESSMENT**

The purposes and processes of the interdisciplinary team assessment are governed by what might best be referred to as a set of principles. These principles are intended to represent late 20th century values and practices in the general fields of child development, early intervention, and developmental disabilities. It is these principles that provide guidance for the behavior of team members toward one another, the way in which assessments are conducted, the type of relationships established with the family and with community providers, and the team members’ understanding of the child as a developing individual. The following discussion provides a number of such guidelines for the attitudes and actions of the team. This list is certainly not exhaustive, but it highlights the many underlying issues faced by interdisciplinary team assessment members and how late 20th century values and practices can influence the entire enterprise.

**Ecological Validity of Assessments**

Standardized formats are required in many assessment situations, and information gained from these assessments is correlated with important developmental and behavior patterns that occur in everyday activities. Yet, many test situations themselves do not enable the child to express important abilities,
characteristics, and skills. Accordingly, whenever possible, team members should maximize the ecological validity of the assessment by careful selection of tests and the use of informal as well as formal procedures (see Bailey & Wolery, 1989). By including naturalistic situations, for example, as part of the evaluation plan or by involving the family in the process whenever possible, the child’s comfort level is increased, and different perspectives of the child’s functioning can be obtained. The ecological validity of the assessments is enhanced as well by obtaining input from multiple sources (e.g., family, friends, teachers, child care workers, community professionals). Ultimately, it is the convergence and consistency of information from these multiple sources that will ensure that the interdisciplinary team assessment yields a meaningful outcome.

Recognizing Uncertainty
Variability in test performance and the existence of potentially conflicting information is likely even in the most ecologically valid assessments. Moreover, a simple snapshot of a child’s performance must always be considered suspect, but confidence in the team’s conclusions can be enhanced by obtaining other information, especially in relation to the stability of a child’s developmental patterns. Issues of surveillance and timely reevaluations must be considered in this context, yet recognizing, accepting, and communicating the appropriate level of uncertainty remains an important principle.

Coordination and Nonredundant Testing
The gathering of prior information and scheduling and conducting the assessments require a high level of coordination. The stress on children and families is extraordinary, and the interdisciplinary assessment team must maximize smooth functioning among all facets of the process. Similarly, team members should ensure that testing is as nonredundant as possible, as many disciplines utilize similar assessment strategies and instruments. Moreover, the era of managed care has made it even more critical to select disciplines and tests that yield results in the most efficient and cost-effective manner possible.

Dynamic Nature of the Assessment
On the surface, the organization and scheduling of the process suggest a fixed series of events for the interdisciplinary team assessment. However, there are always surprises. It is not uncommon for new information to emerge during interviews with parents or providers or for major discrepancies to appear regarding the child’s development in relation to past information. During the assessment itself, these developments must be communicated to team members and families as rapidly as possible so adjustments can be made prior to synthesizing information and developing recommendations.

Respect for Contributions of Other Disciplines
Extensive literature is available on interdisciplinary team functioning and the type of interpersonal relationships that should characterize an effective team.
For example, issues of communicative style, protocol, the ability to listen, leadership, and establishing common ground philosophies have been examined in considerable detail (Garner, 1994a, 1994b; Spencer & Coye, 1988; Stoneman & Malone, 1995). All of these concepts notwithstanding, perhaps the most fundamental requirement for establishing a true interdisciplinary team is an essential respect for each discipline’s contribution to the overall process and, equally important, for the perspective each provides with respect to the biosocial and ecological-developmental approaches that constitute sound early intervention plans. Ideally, the training for each individual discipline included an understanding of contributions by other disciplines. If not, team members must work hard to learn from others, both within and outside the team’s activities.

**Cultural Competence**

As the diversity of the population increases, considerable demands are placed on interdisciplinary team members to understand and relate to children and families whose cultural backgrounds differ radically from their own. The importance of becoming “culturally competent” is essential for the accuracy of any assessment and equally important in establishing an effective collaboration with the family (Lynch & Hanson, 1993). Clearly, for recommendations to meet the needs of families and to be realistic, differences in ethnic and religious backgrounds as well as family roles and expectations must be considered. Of course, these sensitivities should be part of any assessment centered around the family, yet the emergence of cultural issues poses a new level of complexity for the entire service and support system. Perspectives on the meaning of a child’s disability and even the benefits of mildly intensive individualized interventions can become issues that must be thoughtfully addressed in a cultural context (Harry, 1992).

**Role of Family**

The central role of the child’s family in the interdisciplinary team assessment process is well established. A family’s input with respect to their child’s development is absolutely critical, and, for the most part, parents are the team’s clients. Because parents are responsible for their child’s development, it is through their actions that the team’s recommendations will be realized. Failure of the team to build an appropriate relationship with the family, to understand their values, and to communicate effectively will diminish the contributions of the entire process.

Indeed, concepts with respect to forming parent-professional partnerships and ensuring that families are empowered to carry out their responsibilities must be reflected throughout the entire assessment (Dunst & Trivette, 1989; Pearl, 1993). This principle implies that the family’s perspective be accorded considerable, if not absolute, weight. In practice, however, there are circumstances that make this principle difficult to implement in its most complete sense. Occasionally, the team may perceive that the child’s best interests and...
those of the family diverge, and there are instances in which the values of the
team may not be concordant with the family’s values. Disagreement may occur
over priorities or attitudes within the family (e.g., insufficient time for recom-
mended child therapies, lack of belief in efficacy). Some of these conflicts can
be traced to cultural differences, as discussed previously. Unfortunately, no
easy solution is likely in these instances, but a vigorous negotiation process
should be initiated in which the team states its case in a context of open com-
unication (see Bailey, 1987).

Finally, this principle also implies that the family should be able to par-
ticipate in every activity and team discussion if they so choose. However, there
may be instances in which the team or a subgroup wish to deliberate with the
caregivers absent, such as when there are strong indications of parental abuse
or neglect. Moreover, given the complex, dynamic nature of the interdiscipli-
nary process, and the numerous hypotheses that are generated as part of any
clinical activity, team members often feel most comfortable “thinking out
loud” without familial scrutiny. Does this violate the essence of the parent-
professional partnership? Although no simple answer to this question emerges,
it seems that a useful operating strategy, and the one most consistent with this
particular principle, is to include the family at all points in the process unless a
clear reason not to do so is articulated and agreed upon by all team members.
Each team should establish its own operating framework and try to apply it on
a case-by-case basis. This case-by-case approach may be unsatisfactory to
some, but it places the burden for excluding parents, even for a brief time, on
having a well-developed framework and a corresponding set of arguments. If
exclusion becomes more than a rare occurrence or considerable dissension ex-
ists among team members, the team should reevaluate its framework and op-
erating principles. Of note, this entire family-focused process may prove to be
a useful exercise in clarifying individual disciplines or the collective values of
the team with respect to the roles of families.

Role of Community Providers
In order for the team’s recommendations to be useful, it is essential not only
that parents take responsibility, but also that community providers be involved
as much as possible. For children already enrolled in an early intervention pro-
gram, active participation of educators and other early intervention specialists
is critical. It is less likely that the interdisciplinary team’s recommendations,
even general ones, will be translated into practice without extensive involve-
ment of practitioners from the child’s home community. Seeking input from
key providers who are familiar with the child is certainly one vital part of this
process, but conducting follow-up communications with providers—particularly
the child’s service coordinator identified as part of the IFSP or IEP
process—is perhaps even more critical. If the circumstance permits, having the
child’s community service coordinator or other key provider participate as an
observer and resource is ideal.
Inclusion and Support

The interdisciplinary process often leads to an initial dissection of the child into specific developmental domains before reconstructing the “whole child” within the larger family and community context. Nevertheless, this reconstruction process can easily fall short, as team members emphasize identified issues and link them to an often fractionated service system. To minimize this problem, teams should adopt the principle that their recommendations be designed to include the child and family in typical home and community activities. By having interdisciplinary teams address issues related to maximizing inclusion, particularly in relation to the child’s social world, recommendations are more likely to address the child as an individual functioning within a larger ecological context. Increasing the inclusion of children and families has, of course, been a major theme since the mid-1970s in the field of developmental disabilities and is reflected in well-articulated ethical, legal, and value systems (Guralnick, in press).

Similarly, thinking about how best to organize and develop supports within the larger community for the child and family places the “whole” child at the center of the team’s efforts. As thoughtfully articulated by Stoneman and Malone (1995) in the context of the interdisciplinary team assessment, the assessment itself and the recommendations that follow should consider strategies that involve the entire community of family, friends, providers, and others who can provide needed supports.

PURPOSE AND ORGANIZATION OF THIS VOLUME

The purpose of this volume is to provide an accessible reference for those considering developing interdisciplinary assessment teams, for new members of existing teams, and for students or trainees preparing for professional practice in the field of developmental disabilities focusing on young children. Although the intent and composition of interdisciplinary teams vary considerably, it is the expectation that the approach presented in this book can be readily applied to a variety of circumstances and needs. The goals, processes, and principles described in this volume may well be of fundamental relevance to interdisciplinary assessment teams in their many forms.

In Section II of this book, the perspectives of nine disciplines are presented. Although other disciplines are sometimes part of interdisciplinary teams, emphasis has been placed on the contributions of the following nine specialties: 1) audiology, 2) speech-language pathology, 3) neurodevelopmental pediatrics, 4) nursing, 5) nutrition, 6) occupational therapy, 7) physical therapy, 8) psychology, and 9) social work. Each of the nine chapters addresses the discipline’s information-gathering strategies, commonly used assessment instruments, typical problems encountered, decision-making procedures, and approaches to interpreting assessments and making recommendations, as well as other issues relevant to the discipline.
Following these disciplinary presentations, Section III contains a series of case studies. It is through these cases that attempts are made to convey the nature of the five-step process outlined previously, how the principles described influence the team, the difficulties encountered, and the solutions proposed. Where appropriate, separate commentaries are provided in which points of interest are discussed.

Finally, Section IV provides an important international perspective on these issues. Interdisciplinary assessment teams have been established all over the world, and their conceptual frameworks and ways of operating are adapted to both current and historical conditions. Descriptions from Russia, Italy, and Sweden illustrate these points.

**REFERENCES**


Schiefelbusch (Eds.), *Early intervention—A team approach* (pp. 97–122). Baltimore: University Park Press.


