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Connie Nicholas Carnes, Charles Wilson and Debra Nelson-Gardell

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Extended Forensic Evaluation When Sexual Abuse Is Suspected: A Model and Preliminary Data

Connie Nicholas Carnes
Charles Wilson
National Children's Advocacy Center
Debra Nelson-Gardell
University of Alabama

This article describes an extended forensic evaluation model, designed and piloted at the National Children's Advocacy Center (NCAC). The design and rationale of the NCAC forensic evaluation model are described. Outcomes achieved by using the model for 2 years are documented. Also described is a multisite research project, which is currently under way, that involves more than 30 Children's Advocacy Centers across the United States. This project will further test the efficacy of the model and refine its practice.

When child sexual abuse is suspected, evaluations of children pose many challenges, and the field of child interviewing is fraught with controversy regarding the management of those challenges. The professional community, the courts, and the public have been bombarded with conflicting opinions and seemingly irreconcilable research findings. Some have suggested that most interviewers are biased, unprofessional, and engaged in a witch-hunt (Gardner, 1991). Others have argued persuasively that junk science has influenced the decisions of some courts and has driven professionals to defensively modify their practice (J. Braga & L. Braga, personal communication, March 18, 1997). In the midst of the debate carried out by scientists and partisan advocates alike, frontline practitioners must work everyday to gain accurate information from frightened children. It is also clear that emerging research, and efforts by organizations like the American Professional Society on the Abuse of Children (APSAC), have led to refinements in how interviews are conducted and the techniques and tools used. For those who must gather information about abuse allegations for use in civil or criminal court, it is imperative that they act in ways that build upon what is known about accurately gathering facts from children, and that they are cognizant of the expectations of the courts on how that information is obtained.

With these challenges in mind, an extended forensic evaluation model was constructed at the NCAC in Huntsville, Alabama. The model design combines clinical and investigative techniques, and legal experts were consulted to assure its applicability in the court system. Evaluators implemented the model for 2 years and documented the results. Based upon the analyses of these data (in effect a pilot project), the authors designed a multisite research project involving more than 30 Children's Advocacy Centers across the United States to further test the efficacy of the model and refine its practice. The overall goal of implementing this standard extended-evaluation protocol is consistent with the scientist-practitioner model, which is to base practice upon research and use research to enhance practice.

THE MULTIDISCIPLINARY ORIGINS OF THE MODEL

The NCAC forensic evaluation model was drafted to assist the Madison County Multidisciplinary Investigative Team in decision making on complex sexual abuse cases. The multidisciplinary investigative team is the heart of the NCAC, which originated in 1985. The team reviews and manages cases involving child

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sexual abuse and severe physical abuse. Evidence is collected through medical examinations by physicians, investigative interviews by child protective services (CPS) and law enforcement, and related investigative work by all members of the team.

In most cases, these efforts yield adequate information for decision making regarding prosecution and child protective issues. In some cases, however, the team needs additional information (during a 2-year pilot-study period, 26% of the cases reviewed at the formal team meetings fell into this category). In these types of cases, investigators have serious concerns that the children may have been abused (due to the presence of medical or other concerning evidence), but the children were unable or unwilling to talk freely about their experiences. Many researchers (Elliott & Briere, 1994; Lawson & Chaffin, 1992; Saywitz, Goodman, Nicholas, & Moan, 1991) have identified this unique subset of children for which initial investigative efforts yield unclear results. Elliott and Briere (1994) argue for a more extended series of interviews in these cases, and caution that cursory interviews with children may increase the likelihood of false negatives by truncating a potentially more complete and valid disclosure. In many communities, when there is medical evidence or other concerning evidence that a child may have been abused, but the child does not make a credible statement to investigators, the child is referred to therapy in the community to see what may emerge over time. Not all community therapists have had training in interviewing or forensic techniques, and they may approach the child using clinical techniques that are useful to the child's healing process, but that could also jeopardize future protective or prosecutorial actions in court. The forensic evaluation model was developed to standardize a process by which forensically trained therapists can assist in fact-finding when investigators would otherwise have to close a concerning case because of the lack of a credible statement from the child. The model provides therapists with a standard framework that combines clinical and forensic techniques. Therapists at the NCAC clinical program employ this model when the multidisciplinary team identifies and refers these complex cases. The multidisciplinary team uses the following criteria to identify cases that are appropriate for referral to extended forensic evaluation:

1. the child does not disclose abuse to investigators, but exhibits behaviors or other indicators strongly suggesting victimization;
2. the child does not disclose the full extent or nature of abuse during the initial investigative interview by law enforcement or child welfare agency personnel; or
3. when the information gathered in the initial investigative work needs further clarification.

TABLE 1: Frequencies of Subjects by Age

Age of Subjects	*Frequency*
2.5	1
3	8
4	5
5	5
6	5
7	7
8	4
9	3
10	6
11	2
12	2
13	1
14	1
16	1

Children referred for forensic evaluation range in age from 3 to 17, although very few are over the age of 11. See Tables 1 and 2 for a summary of ages and outcomes for children assessed during the pilot period. Evaluation funding comes from a variety of sources including state victims of crime funds, county CPS funds, and the general fund of the NCAC. Cases are documented in written clinical records, and evaluators update the multidisciplinary team any time new information emerges that could affect the ongoing investigation. A final written and verbal report of the evaluation outcome is provided to the investigative team.

Clinical and Investigative Roles

The appropriate use of clinically trained professionals in the fact-finding process is somewhat controversial. One concern is that therapists sometimes seek to inappropriately assume the fact-finding role of public agencies (M. Chaffin, personal communication, December 5, 1997). NCAC Therapists performing forensic evaluations function at the request of legal authorities (law enforcement, CPS, or the district attorney) to gather facts to assist decision making and legal proceedings. This role is described in the APSAC statement, *Therapist Roles and Responsibilities* (n.d.). The primary goal in these cases is to assist in the fact-finding process. This differs from the goals in typical clinical cases in which the therapist develops diagnostic impressions, formulates treatment plans, and carries out ongoing therapy to address clinical concerns.

Concerns have also been expressed in the literature that clinically trained professionals are often

TABLE 2: Age Category by Outcome

	Credible Disclosure	*Credible Nondisclosure*	*Noncredible Disclosure*	*Unclear*
Preschool	6	3	1	4
Primary school	14	4	3	7
Middle school	3	2	1	0
High school	1	0	1	1

unacquainted with the rules of evidence gathering in a criminal process (Mecker & Kaye, 1990). These concerns must be considered when clinically trained professionals participate in the fact-finding process. Therapists using the NCAC extended-evaluation model are trained on forensic issues and are immersed in the investigative process as ongoing members of the investigative team.

Some authors have expressed concern about blurred boundaries when a clinician acts in concert with law enforcement and child protection in a fact-finding process (Melton, 1994). Therapists who perform a forensic evaluation typically do not provide the ongoing therapy for the child; thus, the roles of therapist and objective evaluator are not mixed. Experience with the model has shown that children appear to make a fairly easy transition to a different therapist for ongoing therapy. The child is told at the beginning of the evaluation that they will only be seeing the evaluator for a limited number of sessions, so there is no expectation of an ongoing relationship.

THE EVOLUTION OF THE MODEL

The NCAC forensic evaluation model was initially designed as a 12-session protocol. The two following principles guided the design: (a) Some children need a sense of safety and a less pressured pace to be able to provide information that adults can use for protection and prosecution decisions, and (b) evaluators must obtain the information in a forensically sound manner. The model was implemented and a pilot project was launched to study its efficacy. The first analysis of the pilot project was to examine disclosure patterns from the first 24 children evaluated. For the purposes of that analysis, a disclosure was defined as any piece of new sexual abuse information that significantly contributed to the evaluator's ability to assist the team to confirm or disconfirm the suspicion of abuse.

The pattern of disclosures obtained on the first 24 children supported the Sorenson and Snow (1991) finding that some children tend to disclose over time. However, it was also determined that in 100% of those first cases in which disclosures were made, new disclosures occurred during the first 8 sessions. Those disclosures obtained from the 9th to the 12th sessions were enhanced reports of detail, rather than reports of new incidents. Due to these findings, the length of the model was decreased from 12 to 8 sessions for the remainder of the 2-year pilot period. In a pending larger multisite research project, evaluation length is being varied randomly between 4 and 8 sessions to assess the effects of evaluation pace on eliciting useful information (Table 3). Note that in all lengths of the protocol, the first session is an interview with the nonoffending caregiver, and the remaining sessions are with the child only. Thus, an 8-session evaluation involves only 7 with the child, and a 4-session evaluation involves 3 with the child.

THE COMPONENTS OF THE MODEL

Because the NCAC forensic evaluation model was designed to be conducted over time to give children the needed safety and nonpressured pace, it begins with sessions of rapport building, developmental evaluation, and social-behavioral assessment before directly addressing the more threatening topics pertaining to abuse. These are neither repetitive nor uncoordinated interviews that have been suggested by some to increase suggestibility, but rather, a series of coordinated contacts that spread a good forensic interview over multiple sessions. The components of the protocol are a structure, but not a cookbook, for evaluating children. The evaluator uses clinical judgment and discretion in tailoring each session to the emerging facts, the circumstances of the case, and the unique characteristics of the child.

Interviewing the Nonoffending Caregiver

An evaluator conducts the first session with the primary nonoffending caregiver and gathers an extensive history of the family and child. The caregiver then completes the Child Behavior Checklist (Achenbach, 1991) and the Child Sexual Behavior Inventory (Friedrich, 1990).

Caregiver support is critical to the success of fact-finding efforts when sexual abuse is suspected (Dempster, 1993; Lawson & Chaffin, 1992; Smith & Saunders, 1995; Stauffer & Deblinger, 1996). Therefore, the evaluator seeks to begin developing a cooperative relationship with the nonoffending caregiver at the onset of the forensic evaluation. An added benefit of involving the caretaker is to empower them and give them a role in the process. The evaluator conducts the session with the biological parent who is not suspected of having abused the child. In some

TABLE 3: 4- and 8-Week Versions of the Forensic Evaluation

	4-Week Version	*8-Week Version*
1	NOP interview, collect Achenbach and Friedrich data	NOP interview, collect Achenbach and Friedrich data
2	Developmental assessment, rapport building, social and behavioral assessment	Developmental assessment, rapport building
3	Inventory of touching knowledge; body-parts vocabulary; abuse-focused, nonleading questions and/or cognitive interview (depending on age)	Social and behavioral assessment
4	Abuse-focused, nonleading questions or cognitive interview to fill in information gaps; closure	Inventory of touching knowledge, body-parts vocabulary
5		Abuse-focused, nonleading questions or cognitive interview
6		Abuse-focused, nonleading questions or cognitive interviewing continues
7		Fill in information gaps
8		Body-safety and prevention education, closure

cases, a foster parent or a relative who has custody provides the information for the interview. A structured interview format is used to gather information pertaining to the child's history, family structure, care routines, accessibility to sexual information, family history, and the nonoffending caregiver's perspective on the allegations. An additional purpose of the interview is to educate the caregiver regarding the purposes of the forensic evaluation and to provide information on the caregiver's role in the process. The caregiver is asked to not question the child about the sessions and also to avoid questioning the child about the allegations. The caregiver is provided with a handbook for parents that describes the child protective system and legal system in lay terms, gives the parent information about normal reactions and behaviors of children, and helps normalize the fact that parents frequently have a variety of emotional reactions when sexual abuse allegations arise.

Rapport Building and Developmental Assessment

The second component of the protocol is devoted to rapport building and developmental assessment with the child. Establishing rapport and a comfort level for the child is critical, particularly in light of the literature regarding children's reluctance to disclose sexual abuse. Elliott and Briere (1994) found that 34% of children with strong external evidence failed to disclose abuse. Lawson and Chaffin (1992) found that 57% of children with sexually transmitted diseases failed to disclose. In a laboratory study (Saywitz et al., 1991), children exhibited reluctance to acknowledge even socially sanctioned genital touching by a doctor.

Rapport building in the first session with the child sets the tone for the experience. The evaluator asks the child what they know about why they are in the office. This allows the evaluation of any misperceptions the child may have. The evaluator places himself or herself physically at the same level or below the level of the child as much as possible. A matter-of-fact verbal tone is used, along with a nonthreatening empathic style. The child is given a tour of the facility and is shown where the caregiver will be during the session. The child is encouraged to talk about school activities, recreation, friends, teachers, and favorite TV shows as a means of rapport building and learning about the child's language and personal style. As the evaluator converses with the child, the child is asked to give a narrative description of a specific event, like a birthday or a visit to an amusement park, so that the evaluator can begin assessing their narrative abilities. The limits of confidentiality are explained in terms that the child can understand.

Another important feature of establishing the context is the discussion of the rules. These rules (Saywitz, Geiselman, & Bornstein, 1992; APSAC, in press) are designed to decrease demand characteristics of the situation and to assess for suggestibility. The evaluator discusses the following rules in age-appropriate language and models them as needed throughout the evaluation: (a) you know more than I about what happened; (b) always tell the truth; (c) no guessing; (d) if you do not know or do not remember, say so; (e) if I repeat a question, it doesn't mean the first answer was wrong; (f) if a question is too hard, we can come back to it later; (g) you can correct me if I get something wrong; and (h) you can tell me if you don't agree with me.

A developmental assessment conducted during the first session with the child addresses the following areas in age-appropriate ways: speech and language; measurement and time; social relatedness; knowledge of birth date; address, including city and state of

residence; understanding of prepositions; number concepts; kinship; perspective-taking abilities; knowledge of colors; vocabulary; understanding of feelings; and understanding of truth and lies. The evaluator uses this information as the evaluation progresses to help match activities and questioning techniques to the child's level, and to assess credibility of subsequent disclosures.

Social and Behavioral Assessment

The third component of the model focuses on social and behavioral assessment. The evaluator explores the children's behavioral functioning, self-understanding, self-esteem, and perceptions regarding their support system. There are two primary components to social and behavioral assessment in the protocol, (a) results of behavioral checklists and (b) results of assessment activities conducted with the child. The evaluator can use information gathered to formulate general treatment recommendations, if needed, at the end of the evaluation.

Behavioral Checklists

Three behavioral checklists are utilized in the protocol: the Child Behavior Checklist (Achenbach, 1991), the Child Sexual Behavior Inventory (Friedrich, 1990), and the Trauma Symptom Checklist for Children (Briere, 1996). Results of the checklists are considered along with all the other information gathered during the evaluation. Parents, teachers, and other caregivers provide their perceptions regarding the child's behaviors using the Achenbach and Friedrich scales. The Achenbach scale measures overall behavioral functioning and the Friedrich scale measures sexual behaviors specifically. Briere's instrument is a self-report instrument completed by children who are at least 8 years of age, and it measures trauma symptoms.

Assessment Activities Conducted With the Child

The evaluator conducts a series of assessment activities designed to evaluate the child's view of their family/support system, the child's self-esteem and self-understanding, the child's understanding and management of feelings, and the child's perceptions of secrets and rules.

Inventory of Touching Knowledge and Body-Parts Terminology

In the fourth component of the protocol, the topics of touching and body-parts terminology are addressed. The child's experiences of different types of touching are explored, and the evaluator learns the child's names for body parts. By this point in the evaluation, a good rapport has usually been established with the child, and the evaluator is familiar with the family constellation and the child's usual affective and behavioral style. Grounded in this understanding of the child, the evaluator is able to approach the more threatening and difficult topics containing sexual material.

Body-parts inventory is accomplished using a model so children can verbalize as well as demonstrate their knowledge. The purpose is to learn children's names for body parts so that the evaluator can use these words later if they begin to disclose abuse. Some of the common models or tools used for demonstration are (a) drawings without anatomical detail, (b) free-style drawing, (c) standardized anatomically detailed drawings, and (d) regular or anatomically detailed dolls when needed.

Discussion and exploration of the child's knowledge of types of touching follows body-parts inventory. The evaluator uses one of two formats (which were designed for different developmental levels) for discussion of positive, negative, and neutral touching experiences. Another useful technique to gain an understanding of a young child's experiences with touching is the Touch Continuum procedure (Hewitt & Arrowood, 1994). This technique involves simple drawing in which the child participates to review both positive and negative forms of touching in his or her life.

Abuse-Focused, Nonleading Questioning

During the fifth component of the evaluation, the evaluator employs abuse-focused, but nonleading questioning techniques and procedures based on the developmental level of the child. Before using abuse-focused questions, the evaluator talks to the child again about the rules designed to decrease coercion and suggestibility (e.g., "you know more than me about what happened," "no guessing"). Ceci and colleagues (Toglia, Ross, Ceci, & Hembrook, 1992) showed that suggestibility effects were drastically reduced when an interviewer was perceived by the child as less knowledgeable about facts. Error rates decreased from 33% to 18% when the interviewer presented himself or herself as less knowledgeable. The benefits of objectivity and imparting a lack of knowledge about the facts of the case has not escaped those who actually conduct forensic interviews (Reed, 1996; Sorenson, Bottoms, & Perona, 1997). Therefore, the evaluator reminds the child frequently of the rules designed to decrease coercion and suggestibility.

The complex issues of memory acquisition, storage, and retrieval have been widely studied in the

laboratory. One salient finding in the research literature is that preschoolers need different cues for retrieval than do school-age children (Fivush, 1993). Preschool children generally provide less quantity of information on free-recall tasks, and they require specific external cues to direct their attention to specific interview topics. Many school-age children also require some cues to direct their attention to the topic of abuse. Thus, focused questioning of children is an important means of gathering factual information. While focusing on specific topics, interviewers are encouraged to use open-ended invitations to talk and to encourage free-narrative accounts from the rapport-building stage on through to the details of any disclosure. When more close-ended questions are required, evaluators are trained to pair them with open-ended follow-up questions.

Abuse-focused questions are employed in the protocol to inquire about such topics as care routines, substance abuse in the family, and domestic violence. These techniques are based upon the work of others such as Walker (1994); Lamb, Sternberg, and Esplin (1994); and Saywitz and Camparo (1998) to be developmentally appropriate and nonsuggestive. Abuse is approached obliquely, without leading, using open-ended invitations. This style of questioning is intended to trigger the child's memory and elicit verbal descriptions of memories of any actual abuse without increasing suggestibility risks.

The risk of suggestibility is further minimized by limiting direct nonleading questioning of children during the evaluation. Although abuse-focused questions may be employed for two to three sessions, an evaluator would never spend the entire two to three sessions engaged in questioning the child. Rather, the evaluator has only a short time during these sessions to use abuse-focused questions before allowing the child to return to play activities or less emotionally charged subjects of conversation. Evaluators are taught that throughout the evaluation (and especially during focused questioning), it is critical to be alert for signs, such as overly compliant behavior, that a child may be trying to please. They are taught to proactively avoid coercion (e.g., by reinforcing the child to correct the interviewer if he or she gets something wrong) and to be alert for symptoms of coaching or false abuse reporting (e.g., disclosure language that is different from the child's normal level or disclosures that seem rote or memorized). In fact, they are taught to specifically assess for these potential factors throughout an evaluation and at the conclusion of the evaluation (see appendix). If any technique triggers a disclosure, the evaluator proceeds to the details of the disclosure using open-ended invitations to talk and follow-up questions.

School-aged children have the cognitive capacity to respond to more open-ended techniques for memory retrieval. Therefore, the cognitive interview (Saywitz et al., 1992) and narrative elaboration (Saywitz, Snyder, & Lamphear, 1996) procedures have proven useful when questioning school-age children about actual events. In the laboratory studies using these techniques with school-age children, open-ended techniques increased accuracy and quantity of detail by providing memory retrieval cues without being leading or suggestive (Saywitz et al., 1992; Saywitz et al., 1996). These techniques are employed during a forensic evaluation with school-aged children when a disclosure is made and further details are needed.

Body-Safety Information and Closure

The focus of the sixth component of the protocol is body-safety information and closure for the child. At the final session with the child, he or she is taught basic body-safety principles, whether or not there was a disclosure. If the child has made a disclosure, and is able to write, he or she writes a final clarification of what happened. If the child has made a disclosure and cannot write, he or she makes a final clarification statement, and the evaluator puts it in writing.

The child is taught four basic principles, your body is your own, you can say "no" to touching you do not like, you can tell if you get a touch you do not like, and you can keep telling if the first person you tell does not help. The primary tool for the final session is a short workbook that is used to summarize the forensic evaluation experience and to review the basic body-safety principles. The evaluator and client complete the workbook, and the child takes it home for future reference. A copy is kept for the clinical file.

Critical Evaluation of Information Gathered

The final step of the forensic evaluation protocol is to examine the results of the evaluation using a desk guide designed to critically evaluate the information gathered during the course of the forensic evaluation (see appendix). It should be noted here that not all interviewers are required to assess the credibility of children's statements, and in some jurisdictions, they are specifically requested not to assess credibility. Within the structure of the NCAC, forensic evaluators work as an arm of a multidisciplinary investigative team, which weighs all evidence (including the child's statement) when determining the veracity of sexual abuse allegations. The evaluator's opinion regarding the evaluation results becomes one part of the information in this decision-making process.

The desk guide used at the conclusion of a forensic evaluation has not been empirically studied and normalized, and it is not intended to be used as a test or a scale. It was constructed to help the evaluator structure and analyze the results of a forensic evaluation, and to be used as a tool, along with a variety of other evidence and information, during investigative team decision making regarding prosecution and protection issues. The guide is not designed to be used in court for legal decision making. The elements in the guide are drawn in part from the literature on credibility assessment (Faller, 1988; Pence & Wilson, 1994; Raskin & Yuille, 1988; Yuille, 1988). Some factors consistently examined in the literature are interview findings, external factors such as medical evidence, and linguistic production of the child's account. The elements in the desk guide are provided as a framework for analysis of the evaluation outcome, and are organized into the following eight categories: (a) confirming qualities of statements, (b) specific details obtained, (c) developmental factors, (d) emotional content, (e) behavioral checklist results (Achenbach, 1991; Briere, 1996; Friedrich, 1990), (f) corroborative information and confirmatory factors, (g) motivational factors, and (h) alternative explanations. The presence or absence of one or more of the factors does not dictate the results. The primary usefulness of a guide such as this is the discipline for critical analysis of children's disclosure developed by the user.

The issue of unusual or improbable elements in children's statements is addressed with this guide. Everson (1997) proposed a variety of explanations for these elements in children's abuse accounts, including threat incorporation, traumagenic memory distortion, the child's coping mechanisms, developmental limitations, interviewer errors, leading techniques, errors due to misused media, deliberate attempts by the perpetrator to confuse the child, and deceptive processes on the part of the child. Dahlenberg (1996) studied cases in which fantastic elements were present. She notes that "fantastic elements occurred most frequently in the accounts of children known to have been abused, and indeed were most common among children known to have suffered severe abuse. These findings directly counter the hypothesis that fantastic elements in children's accounts of abuse give reason to discredit the entire account" (p. 8). Dahlenberg suggests that the bias that can be produced by hearing fantastic elements should be countered by investigating the source and meaning of the elements. The desk guide described previously is one way of critically evaluating the meaning of these unusual elements. Embedded in the guide is a systematic process of evaluating the disclosure in terms of several categories described by Everson (1997), including developmental and emotional factors, motivational factors, and alternative explanations.

Evaluators who become accustomed to this type of analysis tend to find that they carry the awareness into the interviewing setting and incorporate the thought processes into practice. Such thinking is counter to the claim made by some critics (Ceci & Bruck, 1995) who suggest that interviewers are biased toward finding abuse and may even foster false allegations. A forensic evaluation is considered successful when it yields sufficient quality and quantity of information to help validate or invalidate suspicions of abuse. According to Reed (1996), "the primary purpose of investigations of suspected child maltreatment should be to arrive at valid conclusions about the 'truth' of the matter" (p. 104). This is an important orientation stressed to those evaluators trained on the use of the model.

METHOD

The forensic evaluation model was used to evaluate 51 children at the NCAC in Huntsville, Alabama, from March 1995 to February 1997. All children were referred by the Madison County multidisciplinary investigative team. All had received an initial investigative interview that did not yield a credible statement that could adequately support or refute the sexual abuse allegations. The mean age of the sample was approximately 7.5 years, with a range of 2.5 to 16 years of age. The sample was comprised of 63% females and 37% males. There were 67% Caucasian and 33% African American participants.

Evaluators were master's level therapists who received frequent in-service training and attended a minimum of two national conferences annually. Quality control measures included weekly individual supervision, clinical staffing of cases with peers, and case review by the multidisciplinary investigative team. Evaluators also received 2 full days of training in the protocol and a 225-page reference manual that was developed to supplement the training.

Outcomes of the evaluations were categorized using a consensus format. In each case, the evaluator and the evaluator's supervisor made an independent categorization using the desk guide as a framework for thinking about the case. Then they discussed their opinions and came to an agreement on the most appropriate category. Finally, each case was brought to the multidisciplinary investigative team. The categorization was discussed, along with all of the other evidence in the case, and decisions pertaining to fur-

TABLE 4: Evaluation Outcome Categories

	Disclosure	*Nondisclosure or Problematic Disclosure*
Credible	Cell 1: Credible disclosure Suspicion of abuse supported	Cell 2: Credible nondisclosure No or low index of suspicion remains
Noncredible	Cell 3: Noncredible disclosure Evidence of coaching or other factors decrease or remove suspicion of abuse	Cell 4: Unclear High index of suspicion remains, but no disclosure or problematic disclosure exists

ther child protective and prosecutorial actions were made accordingly. The team consensus regarding the child's statement was considered in the final categorization for the purposes of this study. A limitation to this methodology is the lack of data directly supporting the properties of the desk guide. This was partially overcome by using the consensus model described above and by using the desk guide, not as a scale, but simply as a framework for thinking and talking about the case. Evaluation outcomes were assigned to one of four cells (see Table 4).

Cell 1: Credible disclosure. The child made a credible disclosure. The final impression, based upon the entire body of information obtained, including history, interview, and assessment, is that the disclosure is credible.

Cell 2: Credible nondisclosure. The child made no disclosure of sexual abuse, and the evaluator is reasonably confident that the suspected abuse was unlikely to have occurred. Alternative explanations have been found for the initial suspicion that abuse may have occurred. For example, a child's initial description of an adult touching his or her genitals may have been found to be associated with an innocuous event, such as bathing or the application of medication.

Cell 3: Noncredible disclosure. The child made a disclosure, but the disclosure is not credible. Based upon the examination of the child's disclosure against credibility criteria, the consensus was that the initial allegations were inaccurate, and the abuse did not occur.

Cell 4: Unclear. The child made no disclosure, but confirmatory factors, behavioral indicators, or other factors continue to raise a high index of suspicion. Alternatively, the child may have made a partial disclosure, but the disclosure was too vague or problematic to validate suspicions of abuse, and a high index of suspicion remains.

RESULTS

The evaluation results from the 2-year pilot study are illustrated in Table 5. As a field-based pilot study, some limitations apply to these results. Both 12- and 8-session evaluations are included in this data. After the first 24 cases, when it was determined that the fact-finding mission was generally accomplished within 8 sessions, it was deemed clinically and forensically sound to decrease the length of the protocol to 8 sessions. Clinically, it was sound because earlier conclusion of the evaluation meant earlier placement in therapy, if needed. Forensically, it was sound because shorter evaluations decrease suggestibility challenges. From a research perspective, this mid-project change was perhaps less desirable, but the clinical and forensic realities took precedence.

TABLE 5: Outcomes of the Forensic Evaluation Pilot Project

	Disclosure	*Nondisclosure or Problematic Disclosure*
Credible	Cell 1: Credible disclosure $n = 24$ (47%)	Cell 2: Credible nondisclosure $n = 9$ (18%)
Noncredible	Cell 3: Noncredible Disclosure $n = 6$ (12%)	Cell 4: Unclear $n = 12$ (23%)

Another obvious limitation of the methodology is that there is no way in these cases to measure independently whether or not abuse took place. This is a limitation inherent in the work because the only people who can know for certain are the alleged offender, the child, or an eyewitness.

The outcome results were classified according to the four categories described previously.

Cell 1: Credible disclosure. Of the 51 evaluations conducted according to the protocol, 24 (47%) resulted in credible disclosures, supporting the validity of the sexual abuse allegations. Court outcomes and confirmatory factors associated with these cases are illustrated in Table 6. In 71% of the cases with credible disclosures, legal action was successfully pursued (4 cases in family court, 13 in criminal court). Recalling that children are placed in forensic evaluation when results of initial investigative efforts are unclear, the system may not have had this rate of legal and protective success had there not been a means for children to disclose in a nonpressured setting.

TABLE 6: Confirmatory Factors Associated With Credible Disclosures

Subject	*Witness*	*Medical Evidence*	*Confession*	*Declined Polygraph*	*Failed Polygraph*	*Indictment*	*Conviction*	*Family Court Intervened*	*CPS Safety Plan Initiated*
1			x			x	x		x
2		x						x	x
3	x		x			x	x		x
4	x		x			x	x		x
5	x		x			x	x		x
6	x		x			x	x		x
7								x	x
8		x		x					x
9			x						x
10		x	x						x
11		x				x	x		x
12				x					x
13						x	x		x
14	x				x	x	Pending	x	x
15	x				x	x	Pending	x	x
16						x	x		n.a.
17				Pending					n.a.
18						x	x		x
19									x
20		x				x	x		x
21						x	x		n.a.
22			x			x	x		x
23		x	x				Prosecution agreement		x
24									n.a.

Six of the nine confessions in this set of cases were obtained by confronting alleged offenders with specific details of children's statements obtained during forensic evaluations. Law enforcement officers, either in a traditional interview or in the course of a polygraph protocol, confronted the offenders with the details to obtain the confessions.

In all familial offender cases, protection measures were initiated by CPS. Medical evidence existed in 6 of the 24 cases (25%). Witness statements were obtained in 6 of the 24 cases (25%).

Cell 2: Credible nondisclosure. Nine (18%) cases were categorized as credible nondisclosures. In these cases, the conclusion of the evaluation was that abuse was unlikely to have occurred. In each case, an alternative explanation was found for the initial suspicion. In two cases, the child's initial description of an innocuous event, such as bathing or medication application, had been misinterpreted. In three cases, nonaggressive sexual acting out with peers was identified with no known adult involvement, and appropriate referrals and interventions were made. In two cases, the children were assessed as having general impulse-control problems, and the sexual acting out initially identified appeared related to poor impulse control rather than sexual abuse. These children were referred to mental health services.

Cell 3: Noncredible disclosure. Six cases (12%) were categorized as noncredible disclosures. Three of these 6 children were siblings, and the evaluation results strongly suggested coaching by an adult caregiver to make false allegations. In two cases that involved older children (two siblings who had extensive previous involvement with the child protective system due to abuse by caregivers), the initial allegations were recanted, and the children stated that they made the allegations to try to alter their placement with a relative. In one case, the child recanted the initial allegations during the evaluation, and it became clear that her initial allegations were actually a result of flashbacks related to post-traumatic stress symptoms from an abuse incident that had been investigated years earlier.

Cell 4: Unclear. Twelve (23%) cases were categorized as unclear because the children either made noncredible statements or no statements at all to clarify concerning evidence. In three of these cases, highly suspicious medical evidence (i.e., gonorrhea, severely attenuated hymen) was present, but the children did

not disclose information about sexual abuse. In one case, a teenager reportedly had no memory of abuse, but pornographic pictures of him during latency age existed and the alleged offender confessed. Three of the preschool children in this group were exhibiting highly sexualized behaviors that brought them to the attention of the system, but their developmental limitations in communication significantly affected the ability of the evaluator to confirm or disconfirm likelihood of abuse. The cases in this category are the most difficult to conclude. On a case-by-case basis, every effort is made to maintain some connection with a community professional with expertise in the concerning area. For example, in cases with medical evidence, the children are generally seen in follow-up sessions at the county health department, and the caregiver is provided with medical information. In cases with continued sexual behavior problems, the child is referred for therapy, and the caregiver is provided with information and support.

Variables Associated With Success

Exploration of variables that might be associated with success was done on 30 variables, including those describing the status of the child (e.g., age, gender, living arrangements, custody), the types of information available prior to the evaluation (e.g., source of allegations, reason for referral), variables associated with the status of the caregiver (e.g., history of substance abuse, domestic violence), and circumstances associated with the evaluation itself (e.g., number of sessions, standardized instrument scores). Because of the high number of variables tested, a Bonferroni correction was applied to the findings. Success was defined as an outcome that could be coded into Cells 1, 2, or 3. An outcome coded into Cell 4 was not successful for the purposes of the analysis. Not surprisingly, the one variable clearly associated with success was caregiver support. Support was coded as "supportive or somewhat supportive" or "neutral to unsupportive." A statistically significant relationship at the .05 alpha level (the Bonferonni correction resulted in an alpha of .002) was found between success and caregiver support ($\chi^2 = 12.538$, $df = 1$, $p < .000$, $\chi = .496$). Allegation status, coded for those children who came into the evaluation with indicators of abuse (e.g., sexual acting out) versus those who came into the evaluation having previously uttered some type of disclosure, was crossed with success. This variable showed significance at the .05 level without the Bonferonni correction, but lost its significance after correction ($\chi^2 = 7.515$, $df = 1$, $p < .006$, $\chi = .384$). A moderate strength of association was observed between allegation status and success.

DISCUSSION

The forensic evaluation process is initiated when the multidisciplinary team needs additional information with which to make prosecutorial and protective decisions. These decision-making processes are aided when a forensic evaluation yields results that fall into Cells 1, 2, and 3. With a Cell 1 outcome (a credible disclosure), abused children are identified, and the information from the forensic evaluation can be used by the system to justify protective measures and support prosecution and family court actions. When Cell 2 outcomes are obtained, the forensic evaluation process provides reasonable assurance that the child has not been abused, and referrals can be made to community agencies, if necessary, to address environmental or mental health concerns that may have initially led to suspicions of sexual abuse. When Cell 3 outcomes are obtained, the wrongfully accused may be vindicated, and the child is spared unnecessary protective or therapeutic interventions. In the pilot study, 77% of cases referred for forensic evaluation fell into Cells 1, 2, and 3. Thus, in the preponderance of cases, the purpose of the evaluation was accomplished.

The results regarding the variables associated with success of the evaluation (caregiver support and a prior disclosure of some type) are neither surprising nor new. It seems to be common sense that if a child has already shown a willingness to talk, even on a limited basis, about their experiences, they would be more likely to provide additional information. The finding regarding the importance of caregiver support during treatment and investigation in sexual abuse cases is a strong reaffirmation of what is already known in the field (Dempster, 1993; Lawson & Chaffin, 1992; Stauffer & Deblinger, 1996). Of special note is the statistically strong association between the support of the caregiver and the success of the evaluation. The statistical association between caregiver belief (a separate variable from caregiver support) and evaluation success approached significance (.073). Thus, evaluation success was clearly more strongly associated with caregiver support of the child than with caregiver belief of the allegations. This is an important lesson for investigators in law enforcement or CPS. Any action to support the caregiver so that she or he can support the child are worthwhile for the accurate determination of facts.

THE NCAC MULTISITE RESEARCH PROJECT

The existing research in the field is heavily dominated by analog studies with few studies on actual

practice. A much larger scale field study to evaluate the efficacy of the forensic evaluation protocol is now under way. Evaluators from sites (the majority of which are Children's Advocacy Centers) across the nation agreed to implement the NCAC forensic evaluation protocol in two forms, and collect data associated with the process and outcome of the implementation. The purpose of the research is to identify, for a specific population of high-risk children, effective strategies for eliciting useful information about the presence or absence of children's sexually abusive experiences given varying evaluation process lengths, children's and interviewers' unique characteristics and circumstances, and interviewers' techniques and tools.

CONCLUSIONS

Although in some jurisdictions only one child interview is permitted during sexual abuse investigations, it is quite clear that some subset of children referred to investigators will require more than one interview. Although the Huntsville team found that forensic evaluation was needed in 26% of the cases during the pilot study period, this percentage rate undoubtedly varies across situations and locations. Of that subset of cases in which veracity of allegations could not be established in one interview, 47% ultimately disclosed in a credible manner during forensic evaluation.

The study also addressed another nagging problem. Will the courts accept information obtained in the course of a multiple-interview model? In Madison County, Alabama, the answer thus far is yes. In no case did a civil or criminal court exclude the information obtained in this process. The structure and controls designed in the process have satisfied law enforcement, the district attorney, the child welfare agency, and the courts as forensically sound. In fact, of those cases in which credible disclosures were obtained during forensic evaluation, 71% were further substantiated by a court finding. These results demonstrate that some reluctant abuse victims will disclose in response to nonleading questions once trust and comfort are established. Without this process, it is clear that some actual abuse victims would have gone unprotected, and some offenders would have escaped accountability. The study also demonstrated that objective evaluators can play a role in determining when an allegation is not based on an actual abuse event, which in more than one case has lead to vindication of the inaccurately accused party.

The ongoing research will build upon these results, and shed additional light on the extended evaluation process and the process of disclosure. The NCAC forensic evaluation model was designed with careful attention to current research knowledge. Now scores of dedicated professionals and researchers have joined together. They have committed themselves to the adoption of the model, and to the expensive and painstaking task of collecting data to further refine practices, and perhaps more importantly, to advance knowledge.

APPENDIX
National Children's Advocacy Center—Forensic Evaluation Critical Analysis Guide

This guide is not an empirically derived scale. It is a desk guide, designed to assist the evaluator in analyzing the results of a forensic evaluation. It is intended to be used as a tool for making decisions with the obtained information. The presence or absence of any given element does not validate or invalidate allegations; rather, the elements are provided as a framework for analysis of the evaluation outcome. The factors are not designed to be used in legal decision-making in court.

Disclosure Factors:

- Child made a verbal disclosure of abuse
- Child provided a demonstration of abuse
  - With dolls
  - With anatomical drawings
  - With free-style drawings
  - With other
- Child provided a description of abuse to someone else
  - Another professional
  - A family member or friend
  - Other
- Child provided the majority of details in first person perspective
- Disclosure was somewhat unstructured without a rote quality

Attempts Were Made to Decrease Potential Coercive Elements:

- Evaluator clearly communicated to the child that the evaluator lacks knowledge about the child's experience
- Child demonstrated freedom to correct interviewer
- Child demonstrated freedom to say "I don't remember"
- Child demonstrated ability to refrain from guessing
- Child demonstrated freedom to disagree with the evaluator

Specific Details Recounted:

- Alleged offender clearly identified
- Specific chargeable offense identified
- Date identified within 2-month time frame
- Time of day identified

Identified where offense(s) took place
Provided sensory details
Provided unique or idiosyncratic details
Provided contextual details (i.e., decorations, pieces of furniture)
Described props (i.e., lotions, porn, photography, or gadgets)
Identified grooming behavior
Described use of force or threats
Described maintenance of secret (i.e., force, threats, coercion)
Described specifics of own clothing
Described specifics of alleged offender's clothing
Pattern of abuse is plausible
Core factors are identified consistently
Child provided quotes of statements made by self or alleged offender
Child described own or alleged offender's emotional state during the alleged offense
Child attempted to justify alleged offender's actions

Disclosure Is Consistent With Developmental Level:

Based on developmental assessment:
Sexual knowledge and/or terminology is beyond the typical developmental level for a child this age
General terminology describing alleged offense is consistent with child's typical language
Child verbalized understanding of truth and lies
Child verbalized understanding and accepted obligation to tell the truth
Child verbalized understanding of consequences of telling a lie
Details of time are developmentally appropriate
Details of location are developmentally appropriate
Details of acts described are developmentally appropriate
Identification of alleged offender is developmentally appropriate

Emotional Content:

In relation to the child's known affective style:
Child's manner appeared reluctant to disclose
Child's manner appeared withdrawn
Child's manner appeared guarded
Child exhibited embarrassment during disclosure
Child exhibited guilt during disclosure
Child exhibited anxiety during disclosure
Child exhibited disgust during disclosure
Child exhibited anger during disclosure
Child exhibited sexual arousal during disclosure
Child exhibited fear during disclosure
Child's affect was flat
Child's affect was congruent with the disclosure

Behavioral Checklist Results:

Significantly inappropriate sexual behaviors indicated on the Friedrich CSBI
Child has borderline or clinical scores on the Achenbach CBCL
Child has clinical scores on Briere's Trauma Symptom Checklist for Children

Corroborative Information/Confirmatory Factors:

Law enforcement has crime scene evidence
Alleged offender confessed
Alleged offender failed polygraph
Medical findings indicate possibility abuse occurred
Witness corroboration has been obtained
Child protection agency declared case "indicated" or "reason to suspect"
Other victims of alleged perpetrator have disclosed
Alleged offender has previously been investigated by law enforcement or CPS
Alleged offender has previously been convicted of child sexual abuse

Motivational Factors (evaluate case on the following factors):

Likelihood of possible secondary gain has been ruled out
Likelihood of coaching by caregiver has been ruled out
Child's explanation of timing of present disclosure has been explored
Other issues pertaining to motivational factors

Alternative Explanations (evaluate for the following factors):

Evaluator ruled out possibility of specific psychiatric disorder that impairs perceptions of reality
Evaluator ruled out possibility that a benign activity (i.e., bathing) was misinterpreted
Evaluator ruled out possibility of third party influence
Evaluator ruled out possibility of other dysfunction in child's life
Evaluator found adequate explanations for any existing unusual or improbable elements in the child's disclosure
Other issues pertaining to alternative explanations

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Connie Nicholas Carnes, M.S., L.P.C., is the clinical director for the National Children's Advocacy Center in Huntsville, Alabama. Ms. Carnes directs the Intervention Services Program of the NCAC and serves as clinical consultant to the Madison County multidisciplinary team. She has developed a forensic evaluation protocol for use in extended evaluation of children alleged to have been sexually abused, and a multisite national research program based on this protocol. She has 13 years of therapy experience, and has focused her practice on children for the past 8 years. She is an executive board member of the Alabama Professional Society on the Abuse of Children. She speaks and writes extensively about child abuse issues.

Charles Wilson, M.S.S.W., is the executive director of the National Children's Advocacy Center in Huntsville, Alabama. He was previously the director of Family Services for the State of Tennessee. Mr. Wilson has published numerous articles in the field of child abuse and is the coauthor of the book, Team Investigation of Child Sexual Abuse. *He is a past president of the American Professional Society on the Abuse of Children, and currently serves on the board of the Alabama Network of Children's Advocacy Centers. He is a nationally and internationally recognized speaker on child abuse issues.*

Debra Nelson-Gardell, Ph.D., L.C.S.W., is an assistant professor in the School of Social Work at the University of Alabama in Tuscaloosa. Trained in clinical social work at the master's and doctoral level at the Florida State University School of Social Work, she has presented at local, regional, state, national, and international conferences focusing on child maltreatment. Dr. Nelson-Gardell has been a social work practitioner for 20 years. She has a broad-based practice background and has worked as a treatment provider, supervisor, program evaluator, consultant, presenter, educator, and researcher in child sexual maltreatment intervention. Her areas of scholarship include child sexual abuse assessment and treatment, secondary traumatic stress disorder, child protection work, and program evaluation.