Peer Review and Telehealth in Child Abuse Medical Evaluations

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Peer review is a process by which professional peers oversee and review the work of others according to a set of accepted standards. The American Medical Association defines *medical peer review* as the process of improving quality and safety in health care organizations (American Medical Association, n.d.).

The purpose of peer review in any medical context is the improvement of quality of care for patients. The science of quality improvement in medicine has evolved to include methods and processes to measure improvements and document change. Standardization of medical practices and the development of care process models that reduce variability in practice have been demonstrated to improve care, reduce mortality morbidity, and decrease costs. In the field of child maltreatment, the same processes can also be applied to benefit children, providers, and society.

The specialization of medical providers in the assessment of child maltreatment is relatively new in medicine. Child Abuse Pediatrics, a board-certified subspecialty of pediatrics, was approved in 2006, and there have been two certifying examinations to date. Other medical professionals such as nurses have also become skilled through education and practice. Child sexual abuse evaluations are an important part of the practice of many providers. Medical findings can have a major impact upon the outcome of cases, and failure to appropriately diagnose significant findings may result in children being returned to abusive homes. When medical professionals indicate that findings are present that support a diagnosis of sexual abuse even though there aren't any such findings, significant legal and social consequences to families and individuals can result.

It is well recognized that the history of the events as recalled by the child is the single most important piece of evidence. However, much emphasis is placed upon the medical evaluation, although physical findings are rarely found in children examined non-acutely for sexual abuse. Several studies have attempted to address the issue of inexperience in assessing children suspected of being sexually abused. These studies show that an experienced examiner will provide more consistent and objective interpretation of examination findings (Sinal et al., 1997). Also often addressed is the concept that an examiner may be overly influenced by a child's description of the abuse and interpret an examination finding differently than if there were a limited history or less invasive contact. As knowledge evolves regarding both normal anatomy and the physical sequelae of abuse, the problem of overinterpretation of findings by less experienced examiners becomes apparent. The need for standardization of practice that includes peer review for the purpose of improvement in the quality of care is equally as important in child maltreatment as in any other medical practice (Adams, 1999).

Developing Standards for Medical Evaluations

Medical providers are strongly independent and care passionately about their patients. Specialized knowledge gained through practice and experience is important. However, evidence and objectivity must guide the practice. Reducing variability in interpretation of findings, and basing those interpretations on available literature, has long been the goal for researchers and clinicians. Joyce Adams developed classification systems for genital findings in sexual abuse throughout the 1990s in an attempt to organize anatomic, traumatic, and other findings into a paradigm based on research and case studies. These classification systems have been refined over the years as the knowledge base expanded. Classification systems were replaced by Guidelines in 2007 (Adams et al., 2007). The Guidelines have been periodically updated and are literature and expert consensus-based. Expert consensus provides guidance in interpretation of physical findings where literature is lacking (Adams, 2001). More recent studies have continued to demonstrate significant variability in how examinations are interpreted. This variability appears to be linked to level of training, profession, experience, and knowledge of the literature (Adams et al., 2012).

The National Children's Alliance (NCA), in recognition of improving the quality of care provided to children receiving medical examinations in CACs, has addressed the issue of variability through developing medical standards. Dr. Farst discusses the NCA's position in this issue of the *Advisor*, which points to the importance of peer review as central to both NCA's process and its support of a national peer review program for providers who are distant from expertise. The NCA application, myCase-Review, is a secure Web-based telehealth product in which

medical providers may submit images for review by a medical panel of board-certified child abuse pediatrics experts. Both the examiner and the reviewer are anonymous to each other. The images are evaluated based upon interpretability of the photos, technique of the examination, and interpretation of the findings. The use of programs such as myCaseReview satisfies the requirements of the NCA, but it does not go far enough in providing comprehensive assessment of the quality of examinations performed in CACs. Feedback to examiners followed by documented improvement against shared baselines would be ideal. A national focus toward quality standards should be a priority and would require more funding and resources than are currently available.

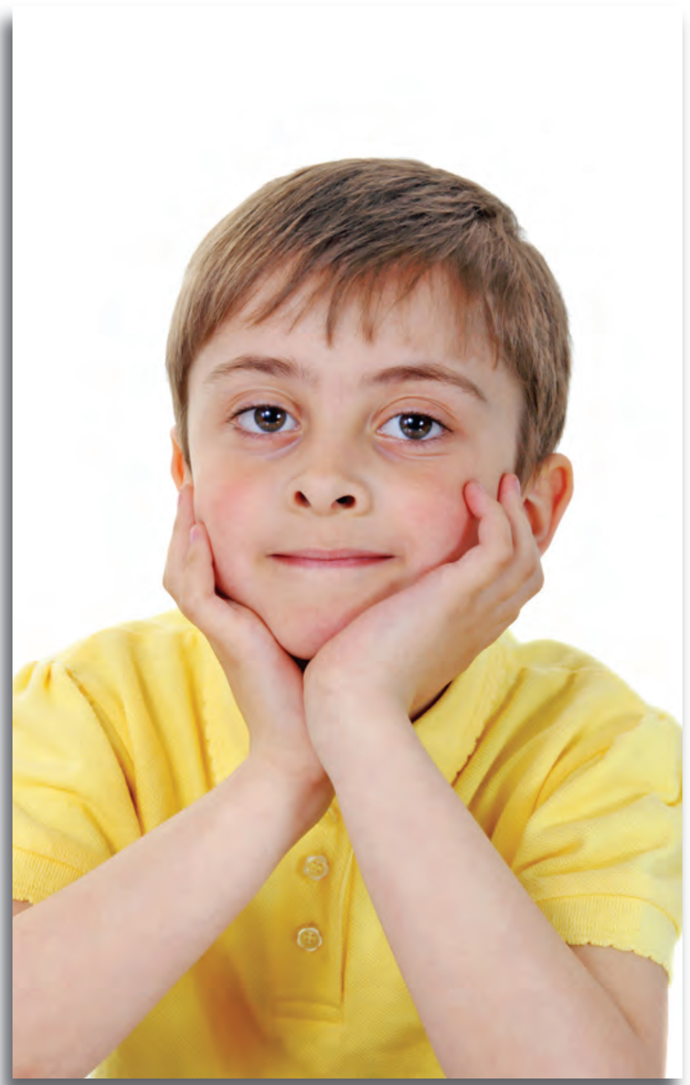
Standardization of peer review and quality improvement in child abuse medical evaluations continue to evolve as technology improves. It is critical to reduce variability by using common terminology in interpretation of anatomic findings, both normal and abnormal. This does not mean that medical providers do things exactly the same from patient to patient. There can be clinical variability based upon the patient's needs and presentation. However, individual clinical judgment alone can result in excessive variation from the standards of care. Any field relying on visual diagnosis understands this concept.

Goals of Peer Review

Regardless of practice venue, standards, and accreditation, the goal of all peer review is to improve quality of care and, ultimately, the best outcomes for patients and families. Providers and programs should develop or adopt processes that allow for peer review and quality improvement. Like NCA, many professional organizations, hospitals, and the public expect that medical programs have a process for peer review and oversight. Child abuse assessments should be no different than evaluating any other medical outcome that affects patients.

Ideally, a process of peer review should include all examiners at every level of experience. Studies of examiners who perform fewer than five examinations per month show that they perform poorly on evaluations designed to evaluate standard practice and assessment (Adams et al., 2012). There has been no well-defined number of examinations that makes an examiner an expert, and indeed an examiner who provides hundreds of examinations each year but has no quality peer review, receives little ongoing training, and has little assessment of processes may do as poorly as the examiner doing many fewer examinations.

Standardized methodology for peer review in child maltreatment is also evolving. Commonly, groups of examiners gather to review interesting cases, and this type of case conference is important for relationship building, mentoring, and education. However, true quality or peer review should involve a standardized process that includes evaluating progress and measuring quality. Few centers



have the capacity for 100% case review. The philosophy that all examiners should have all cases reviewed on an ongoing basis, regardless of experience, is a high standard that may not be practical in many settings. However, it does ensure the best possible outcomes, continued quality improvement and assurance, and ongoing education. In this way, problems with specific examiners may be detected for remediation and education; therefore, a minimum periodic, random peer review should be performed. Programs or centers without child abuse board-certified pediatricians or equivalently experienced specialists should consider sending diagnostic cases out for expert review, especially for non-acute findings.

Telehealth is a concept used much more broadly than traditional telemedicine because it is simply the use of technology to transmit information. In addition, it encompasses the broader concept of distance consultation. This can be as low tech as telephone consultation or as advanced as high-resolution cameras and moni-

tors with high-speed data transfer. This generally takes place "real time," placing patient, examiner, and clinician together "virtually." Other applications provide "asynchronous" consultation, in which the image and clinical information are accessed at different times. Both systems have advantages and disadvantages as well cost differences. Telehealth and telemedicine applications provide a format for peer review when examiners are geographically disparate. Inexperienced examiners can have access to higher levels of expertise regardless of location.

Telehealth in child maltreatment has been studied and found to be acceptable by both clinicians and patients (Frasier, Thraen, Kaplan, & Goede, 2012; Kellogg, Lamb, & Lukefahr, 2000; Thraen, Frasier, Cochella, Yaffe, & Goede, 2008). Due to the image-based nature of both physical and sexual abuse assessments, a variety of telehealth programs provide ideal platforms by which peer review and quality measures can be accomplished (MacLeod et al., 2009). Such applications may also have international applicability.

In sum, child maltreatment programs providing medical examinations need to develop a process of peer review that is designed to improve quality, consistency, and accuracy. High-quality photodocumentation, whether still or video, is the first element. Secure, HIPAA-compliant applications that protect a patient's privacy and the security of images are critical. Identification of expert reviewers can be accomplished through collaboration with local or regional centers. The ultimate goal is to provide the highest quality of care to children and families with concerns of abuse.

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