

## Safeguards Needed in Transfer of Patient Data

Task Force on Medical Informatics, Section on Computers and Other Technologies, Committee on Practice and Ambulatory Medicine

**ABSTRACT.** The intent of this statement is to provide practitioners with information to assist them in safeguarding the electronic storage and transmission of patient data. It lists safeguards that should be in place in pediatric practices that send facsimiles of patient data. Issues of protecting patient and provider confidentiality, maintaining the security of these data, and state and federal health data legislation are also addressed.

The electronic storage and transmission of data can benefit children throughout the United States. The efficiency and versatility of a computer-based medical record promise advances in the delivery of health care services to children in a more cost-effective and comprehensive manner. The American Academy of Pediatrics looks forward to the benefits that will be obtained from electronically based patient records.<sup>1</sup> Current research to establish a national immunization database registry, the development of clinical databases facilitating the treatment of children ingesting toxic substances, and the diagnosis of dysmorphism in children all illustrate the advantages of computerization.

The electronic storage and transfer of information is not without risk. The potential for losing these data exists, and a strict adherence to data backup must be followed. Other risks include patients' loss of privacy and confidentiality and the possible loss of physicians' autonomy and confidentiality. Pediatricians should be cognizant of these risks and protect their patients and themselves. Every pediatric practice should establish policies and procedures that protect the patient's record. Only those providers with a need to know specific medical information should be granted access to patient information, and that access should be limited to those portions of the patient's medical file that pertain to the provider's particular function. A log that tracks who has accessed the medical record should be maintained.

As health care providers and payers become more firmly committed to containing the costs of care, pediatricians are requested to submit more information about their patterns of practice and their patients. Hospitals and groups providing payments for care are eager to use data from the electronic record to profile and establish pediatricians' practice patterns, to identify patients' risk factors, and to secure

both patients' and pediatricians' compliance with service standards. The precise use of these data should be prospectively stated to both the patient and the pediatrician, and both should be protected from inappropriate electronic access to a record. To protect their patients, pediatricians must also know why individual groups need access to electronic data. In cases in which data are needed for research purposes, patients' personal identifying information should not be disclosed so that their privacy will be protected.

It is obvious that the use of electronic records and the electronic transfer of information may undermine the physician-patient relationship and jeopardize the security and privacy of both the patient and the physician. These issues may be exacerbated by the security problems inherent in the electronic transfer of information, whether by computer or fax. Specifically, these problems are: (1) anyone with access to the record system being able to read the record, and (2) the lack of security associated with computer software. A system must be capable of providing indelible and author-identifiable markings for all entries and modifications made to the medical record. Any transmission of information should be recorded in the patient's chart.

The following safeguards should also be in place in pediatric offices that send facsimiles of patient data:

- Obtain patient authorization for release of data.
- If the payer requires signing of a blanket permission, it may be to the practice's advantage to explain the implications of a blanket permission to the family, if time permits.
- A cover sheet stating that confidential data are being transmitted should be appended to all facsimiles.
- Pediatricians should understand that medical records sent via telefax result in a hard copy of the patient record being present in an unprotected state at the receiving end.
- A secured facsimile machine should be used, one that is preferably located in the pediatrician's private office. If possible, the pediatrician should know to whom the information is being sent and who is responsible for protecting the information.

Pediatric practices should maintain records of any transmissions and request the authorized receivers to sign and return attached receipts when the faxed data are received.<sup>2</sup> In addition, pediatric practices should have in place a process that details how the

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practice handles patient-related information to protect patient privacy. This involves receipt of medical records, as well as laboratory, consultation, and pathology reports.

Protecting the privacy of the patient has always been a basic tenet of the US medical system. Information imparted to a physician by a patient has been considered confidential. Most states prohibit the disclosure of patient-specific information from the medical record without the permission of the patient. Case law has upheld these principles. In addition, the privacy of the patient is further protected, because the storage and transfer of patient information must meet security and confidentiality requirements specified by state and federal licensure laws, state and federal regulations, and common law. The transmission of erroneous information about a patient may be construed as defamation. Patient-specific information may be disclosed without the permission of the patient only in situations that involve the following: response to certain court orders; compliance with statutory reporting laws, such as those pertaining to child abuse; reporting communicable diseases; reporting wound injuries allegedly sustained as a result of a criminal act; and cases in which patients represent a danger to themselves or others.

Issues of confidentiality and the need for further legislative safeguards are illustrated by a recent review of childhood immunization registries that revealed the following:

- Federal statutes protecting the confidentiality of immunization information do not exist.
- There are inconsistencies in the manner in which states address confidentiality as it applies to vaccine registries.
- Parental consent should be required for use of information for nonimmunization purposes.
- Both patients and parents could be potentially harmed by inappropriate access to sensitive health information.
- State and federal authorities should resolve the privacy and confidentiality issues to assure the public that registries will not invade a patient's or family's privacy.
- Privacy safeguards should eliminate inappropriate access to these data, provide strict penalties for unauthorized disclosure, and protect these data from court order or subpoena, in keeping with the usual standards applied to any medical information.<sup>3</sup>

Some agencies and institutions currently interested in obtaining data from patients' medical records have tried to circumvent the issue of confidentiality by separating "administrative" from "clinical" information. Although certain information such as demographic data may be purely administrative, the lines rapidly blur with major consequence. For example, if a pediatrician participating in an epidemiologic study reports to a hospital that a patient has a condition such as phenylketonuria, that information may then be used by an insurer to deny the family coverage. Disclosure of the results of a toxi-

cology screen could result in an adolescent being denied admission to college.

## RECOMMENDATIONS

The American Academy of Pediatrics advocates the establishment of national standards that define the elements and content of an electronic health care record and that set forth protocols for the transmission and sharing of information electronically. Because of the lack of uniformity in state laws, the Academy recognizes the need for the development of federal legislation to ensure the integrity, confidentiality, and privacy of the electronically recorded, stored, and transmitted data. Such legislation should establish guidelines for electronic transmission of medical information that will protect the privacy of patients and support the pediatrician-patient relationship.

In addition, the existing patchwork of state laws renders interstate transport of data difficult. For example, the payer in one state may demand information that another state would deem confidential. Because state laws may vary, pediatricians should include a clause in their managed care contracts that the laws in the state in which the pediatrician practices will prevail.<sup>4</sup>

Pediatricians should also be knowledgeable about both the local laws regulating the use and sharing of information from the patient record and the consequences of patient profiling as practiced by hospitals and managed care providers.

Pediatricians should recognize that the electronic transmission of patient-specific information should not be assumed to be secure. Therefore, care must be taken to protect the patient's right to confidentiality. Patient data must be safeguarded against tampering and unintentional modification or destruction. Providers should also establish a system to track and audit access to and alteration of patient information.

The electronic record has the capability of advancing the practice of medicine. It is the pediatricians' right and responsibility to ensure that the development of the electronic record and the transmission and sharing of these records both benefit children and their parents or guardians and protect patients' and pediatricians' rights to privacy.

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