

# Ethical participation of children and youth in medical education

RI Hilliard, CV Fernandez, E Tsai; Canadian Paediatric Society, Bioethics Committee



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Children and youth (referred to as 'children' in the present statement), whether actual patients or volunteers, frequently participate in medical education. The present position statement discusses the numerous ethical challenges that may arise including respect for persons, truth telling and confidentiality. The statement provides guidelines that may be helpful to educators from a wide variety of disciplines.

**Key Words:** *Children and youth; Ethics; Medical education; Paediatric patients; Respect for patients; Truth telling*

## BACKGROUND

Physician trainee encounters with patients may occur as part of routine health care or purely for educational purposes. Children may be seen in many different settings including university teaching centres, community hospitals, outpatient clinics or private physicians' offices. In many of these settings, clinical care and educational roles are inseparable and indistinguishable to parents and patients, especially for more advanced trainees. Physician trainees include medical students, residents and fellows. The latter two are medical doctors who typically have an educational license limiting their practice to supervised settings. All trainees have dual roles as learners to acquire knowledge, skills and attitudes, and as practitioners to provide important patient care.

The ethical issues in the practice of paediatrics are well known among paediatricians and are taught to paediatric clinical trainees. Similarly, ethical issues in medical research with children are also well articulated in numerous published guidelines (1-7). However, guidance on participation in medical education is largely focused on adults. Vinicky et al (8) have drawn an analogy between participation in medical research and in resident medical education, proposing that both require fully informed consent. Although Jagsi and Lehmann (9) discussed the ethics of medical education in terms of respect for individuals, beneficence and distributive justice, they did not comment on the inclusion of children. Lowe et al (10) commented on patients' participation in medical education, again without any reference to children; they concluded that "there does not appear to be any wholly convincing argument that patients have an obligation to participate in medical teaching". It is possible that patients participate in medical training largely out of altruism rather than obligation.

## La participation éthique des enfants et des adolescents à la formation en médecine

Les enfants et les adolescents (désignés les « enfants » dans le présent document), qu'ils soient de véritables patients ou des volontaires, participent souvent à la formation en médecine. Le présent document de principes traite des nombreux défis éthiques qui peuvent survenir, y compris le respect de la personne, l'énonciation de la vérité et la confidentialité. Il fournit des directives qui peuvent être utiles aux éducateurs dans de nombreuses disciplines.

Guidance in the literature regarding the participation of children in medical education is scarce. The University of Oxford (Oxford, United Kingdom) developed guidelines for medical students when examining patients younger than 18 years of age (11). The guidelines provide clear directions: maintain an honest, open and polite approach respecting patients' sensitivities and autonomy; protect students from being vulnerable to misunderstandings; and do not impose requirements that would interfere substantially with the learning experiences of medical students. Three issues were identified as being particularly problematic: the availability of parents at the time of proposed examinations; consent by parents/patients for examinations, particularly for intimate examinations; and the need for chaperones. While many Canadian medical schools now have codes for the ethical conduct of clinical teaching encounters that include faculty and student responsibilities, confidentiality, informed consent and managing ethical concerns, the codes do not specifically mention children (12,13).

## ETHICAL CHALLENGES IN MEDICAL EDUCATION

Several ethical issues with respect to training medical students and residents merit particular attention and will be addressed in the present position statement. These issues are reflected by medical students (14-18) and residents (8), and include challenges regarding truth telling, informed consent, respect for persons and confidentiality.

Some ethical principles, however, may conflict in practice. Medical education programs have a responsibility to society to train clinically competent and professional physicians. For trainees to gain adequate clinical experience, some advocate that patients should participate in medical education programs and that this responsibility should be shared by everyone in society (9). The

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Correspondence: Canadian Paediatric Society, 2305 St Laurent Boulevard, Ottawa, Ontario K1G 4J8. Telephone 613-526-9397, fax 613-526-3332, websites [www.cps.ca](http://www.cps.ca), [www.caringforkids.cps.ca](http://www.caringforkids.cps.ca)

educational activities benefit the student and ultimately society, although they may not directly benefit the child who is helping the student learn. These broader societal benefits must be balanced with the rights of individual patients and families, retaining a principle of nonmaleficence. There are also issues of distributive justice relevant to medical education, in which limits should be set for the number of times a child with 'good findings' should be expected to volunteer for educational activities.

Respect for persons is an important ethical principle in clinical and research activities that is also integral to medical education (19-21). Considerations relevant to children include respect for developing autonomy through assent or, as appropriate, fully informed consent, and beneficence and nonmaleficence in weighing the best interests of the child. Informed consent by the parent/guardian or by the mature child is key to the ethical participation of children in medical education, and can be accomplished through explicit verbal consent; rarely, written consent will be required. The child or his/her parent/guardian must be fully informed of what is proposed and give voluntary, noncoerced consent. For a younger child who is not considered fully competent, his/her assent is required and dissent should be respected. This last condition is particularly germane to encounters with a purely educational goal. A further element of respect that must be considered is that of fulfilling a professional responsibility of confidentiality. Educators should be aware that teaching events not directly related to the ongoing care of the patient may result in disclosure of the child's identity, either overtly or by the rare nature of the condition.

#### ETHICAL CHALLENGES ARISE IN TWO DISTINCT CONTEXTS

Paediatric medical education program activities can be broadly divided into educational activities inherently part of patient care and educational activities distinctly separate from patient care. It is recognized that this distinction is somewhat artificial at times.

##### **Educational activities that are part of patient care**

Traditionally, clinical training for medical students and residents has taken place in university teaching hospitals, where they are members of the health care team. The patient and family's roles, rights and responsibilities in a teaching hospital setting are typically provided through posted notices or information pamphlets at the time of registration. However, it is increasingly common for medical students, residents and fellows to be taught in the community hospital or a private physician's office. We believe that in all settings, children and families should be made aware that care may be provided by medical trainees under the supervision of a responsible staff physician (22-25). All trainees should clearly explain their role and supervisory context on the team to the child, parents or guardians.

In most cases, trainees should only perform their role with implied consent from a child or parent. Some patients and parents may explicitly request that students not be involved in their care. Although children and parents have the right to make such requests, there should be a clear discussion of the implications and limits of this refusal because trainees often play a critical role in in-house and on-call coverage.

Contrary to the Oxford recommendations (11), we do not propose any absolute guidelines regarding whether there should be a chaperone present at all times when a medical student is examining a patient. However, we do recommend that a parent be present for most encounters, unless there is clinical urgency, the clinical situation dictates exclusion of a parent or the patient is a mature adolescent. Intimate examinations (eg, rectal, pelvic or genital) by junior

trainees should be completed with appropriate supervision by experienced clinicians; attention should be paid to obtaining consent for the examination. All trainees and physicians should be sensitive to the impact of intimate examinations on children and adolescents using appropriate verbal and physical interactions, including draping and other allowances for privacy and confidentiality. These considerations, including use of a chaperone when appropriate, are essential in demonstrating respect for the paediatric patient.

**Performing a procedure:** The performance of a procedure for the first time or by inexperienced trainees has received special attention in the medical literature (26-28). These procedures do not generally require formal written consent, but trainees should not proceed without appropriately informing the parent and/or child. We must be honest and truthful with patients and families. The supervising physician (whether a senior trainee or staff physician) should obtain consent and explain how the trainee will perform the procedure. As an example, supervisors could say that the student/resident will be performing the procedure under "my direct supervision and instruction". Consent should be sought in a non-coercive manner, providing adequate time and opportunity to decline. Emergency situations may arise that present an exception to this rule, but these should not constitute the norm. Trainees should be supervised until they demonstrate competence in performing a procedure and even when considered competent, should have access to assistance, if required.

##### **Educational activities that are separate from patient care**

**Clinical skills teaching:** In most academic centres, patients are involved in clinical skills education independent of regular patient care. In such situations, the medical faculty involved in the teaching or a designated education liaison should ask for consent, and clearly explain the nature of the teaching session and what will be expected of the patient and family. Sometimes, the patient or family will provide only limited consent, which must be respected.

For interactions that have solely educational purposes, more attention should be paid to the assent or dissent of the child. In choosing patients for clinical skills teaching, both consent from the parent and age-appropriate assent from the child are necessary. In general, children should not be used for teaching purposes if they are reluctant or have refused. This differs from patient care for which procedures are often appropriately performed on young children who may not assent. Dilemmas arise when performing a clinical examination with an uncooperative, fearful or crying young child because these are commonly encountered clinical scenarios that the trainee must eventually learn to handle. The trainee should strive to be respectful of and sensitive to the feelings of the patient, and should seek guidance from the parent and clinical supervisor regarding the appropriateness of continuing the examination. These situations and those that involve potentially painful manoeuvres are excellent opportunities for supervisors to model and teach good clinical skills that are also transferrable to the setting of routine clinical care.

**Education sessions and clinical teaching rounds:** Education programs often conduct teaching sessions during which patients are discussed to share knowledge about the diagnosis or management of specific diseases. These may be informal teaching sessions on the wards or the clinic, or more formal teaching sessions in a classroom or seminar room. For privacy and confidentiality, only relevant nonidentifying details necessary for the educational discussion should be presented. Although consent is not required, we recommend that students or residents inform children and families when they plan to present the case in a teaching session.

Trainees should be taught and reminded of their professional obligation to maintain privacy and confidentiality even in the educational setting. Parents are often interested in the outcomes of any discussion, and their trust might be eroded if they heard that their child was discussed without their knowledge. If photographs with identifying characteristics are to be used for teaching purposes, informed consent and assent of the child should be obtained regarding how and when the pictures will be used.

When paediatric cases with photographs or videotapes are published or presented for medical educational purposes, the child or parent/guardian should provide written consent. Journals are increasingly requiring evidence of consent for any case reports that are published.

**Examinations and evaluations:** A newer issue is the burden on children (as real or simulated patients) participating in medical school or certifying examinations (29,30). The use of children during the past two decades as standardized patients (SPs) (31-35) to teach and assess clinical skills, particularly in an objective, structured clinical examination (OSCE) (36-41), has resulted in new challenges. Concerns have been expressed about the impact that portraying the part of a sick or troubled child could have on the child SP (42,43). Although acting as an SP may be associated with positive benefits for teenagers, such as job skills acquisition and satisfaction in making an important contribution to society, acting as an SP in an emotionally charged scenario may cause some discomfort, embarrassment or emotional stress (44). An opportunity for debriefing should be provided in these circumstances.

One must also consider the burden imposed by repeated interviews or examinations in young children, even if the intervention is not, in itself, onerous. The faculty member involved should clearly explain the request and ask for consent and age-appropriate assent. Children must not be used in any examination if they are reluctant or dissent. Medical education programs should have a mechanism to monitor the appropriateness of and the overuse of patients.

**OSCEs:** OSCEs are used as part of training programs, and for medical school and certifying examinations. Children, whether actual patients or volunteer SPs, and/or their parents should provide informed consent with the option to withdraw from the OSCE if tired, distressed or uncomfortable. Consent should be obtained by the faculty administering the OSCE, the SP trainer, the program director or an administrative assistant. Additional discussions among paediatricians, educators and ethicists are needed with respect to using children who are too young or incapable of expressing assent when their parents provide consent. Administrators of the OSCE must be aware of the expectations of the child in that OSCE station, and how the child might become uncomfortable, tired, bored or inappropriately examined. In addition, to be fair to the candidate, the child should be able to perform consistently throughout the examination period. The well-being and comfort of the child should always be paramount. If other SPs are remunerated for their participation in an OSCE, children should also be compensated. The nature of the compensation should not be undue or coercive.

## RECOMMENDATIONS

The following are recommendations for individuals and institutions involved in the education of medical trainees with respect to the ethical participation of children in medical education.

### General recommendation

- Institutions and physicians should inform parents and children about their rights and expectations in clinical settings where medical education is a component.

### Trainees and patient care

- Paediatric medical education programs should ensure that children and families are aware that care may be provided by medical students, residents and/or fellows. Such care should always be provided under the supervision of a responsible staff physician. When indicated or appropriate, children and families should also be informed that they may be asked to participate in other aspects of an education program.
- All trainees should clearly explain their specific roles to parents/guardians and children (as appropriate for age).
- Patients and parents have the right to request that trainees not be involved in their care, although the attending physician should discuss with patients and families the feasibility and limits of such a request.
- All trainees and supervising physicians should be honest and truthful with patients and families about the skill development stage of the trainees. When inexperienced students or residents are performing procedures, they should be appropriately supervised. The supervising physician (whether a senior trainee or staff physician) should explain how the procedure/intervention will be performed, and explain that teaching or instruction may occur during the procedure. This recommendation also applies to procedures performed under sedation or general anesthesia.
- Chaperones are not explicitly required for physical examinations but should be strongly considered for intimate examinations.

### Educational activities apart from patient care

- When children, parents and families are being used for teaching clinical skills to trainees, either the faculty or resident involved in the teaching or a designated educational coordinator should ask for informed consent from the child (if capable of providing consent), or from the parent/guardian with assent from the child. The trainees and teacher should respect any refusal or limitations of consent provided by the parent.
- When cases are discussed for teaching purposes, it is important for privacy and confidentiality that only relevant nonidentifying clinical information be presented in the session. In general, although consent is not usually required, we recommend that students or residents inform children and families when they plan to present the case in a teaching session.
- If identifying photographs or videotapes are to be used for teaching purposes, informed consent and/or assent of the child must be obtained and documented, and the child or parent must be provided with information regarding how the images will be used. Written consent is generally required to publish case reports.
- Trainees should be taught and reminded that they have a professional obligation to maintain privacy and confidentiality of patient information, whether learned clinically or as part of educational teaching.

### Evaluations and examinations

- When children, parents or families are being used for evaluation purposes, the faculty member involved in the evaluation should clearly ask for informed consent and assent, as appropriate.
- When children, whether actual patients or volunteer SPs, are being used in an OSCE, they or their parents should provide informed consent and/or assent as appropriate. The well-being

and comfort of the child should always be paramount and he/she should have the option to withdraw or be withdrawn from participating in the OSCE. Administrators of OSCEs should always be aware of the impact that portraying a sick or troubled child has on the volunteer child, and should provide appropriate limits and counselling.

- If other SPs are remunerated for their participation in an OSCE, children should also be compensated in a manner that does not constitute undue inducement.

A handout to print and share with parents and caregivers, titled "Children and teens in medical education: What parents need to know", is available at [www.caringforkids.cps.ca](http://www.caringforkids.cps.ca).

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#### APPENDIX: EDUCATIONAL LETTER TEMPLATE

##### To Our Patients, Parents and Families:

Welcome to (the name of our clinic / institution / hospital). We are a teaching centre linked with the University of \_\_\_\_\_. You and your child may be seen and examined by one of the trainees in our medical education program. It is a very important part of their training to become excellent doctors. The medical trainee you see may be at one of the following stages:

- Junior medical student.
- Senior medical student (sometimes called a clinical clerk).
- Resident: a medical doctor who is training to be a family physician or specialist, such as a paediatrician or family doctor.
- Subspecialty resident (sometimes called a fellow): a doctor who is training to be an expert in a specific specialty, such as paediatric infectious disease.

All trainees should provide their name and clearly explain their role. All trainees are supervised by a responsible staff paediatrician. You have the right to know his/her name and to meet this physician responsible for the care of your child.

##### Our Request of You:

We hope that you will contribute to our medical education program. We will ask your consent and your child's agreement for any of these areas. There are three main types of medical education that you and your child may be asked to take part in. These include the following:

- Regular clinical care.
- Teaching specific skills separate from clinical care.
- Examinations to test the competence of the trainee.

You have the right to ask not to have trainees take part in your child's clinical care. Where possible, we will respect this request. Please discuss this with your child's physician. You or your child may not want to take part in teaching separate from clinical care or in examinations. We will respect this request and it will not affect the medical care your child receives.

##### Our Commitment to You:

We strive to treat you and your child with dignity and courtesy at all times. We will also respect you and your child's privacy.

Thank you for your cooperation and understanding.

*(Optional – signed by the paediatrician responsible for the clinic or office)*

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#### BIOETHICS COMMITTEE

**Members:** *Drs Susan Albersheim, British Columbia Children's Hospital, Vancouver, British Columbia; Kevin Coughlin, St Joseph's Hospital, London, Ontario; Pascale Gervais, Laval University Hospital Centre, Sainte-Foy, Quebec (Board Representative); Robert I Hilliard, The Hospital for Sick Children, Toronto, Ontario; Thérèse St-Laurent-Gagnon, Centre de réadaptation Marie-Enfant, Montreal, Quebec; Ellen Tsai, Kingston General Hospital, Kingston, Ontario (Chair)*

**Principal authors:** *Drs Robert I Hilliard, Toronto, Ontario; Conrad V Fernandez, Halifax, Nova Scotia; Ellen Tsai, Kingston, Ontario*

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