

Adverse events related to virtual care

CANADIAN PAEDIATRIC SURVEILLANCE PROGRAM

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REPORTING INFORMATION

(To be completed by the CPSP)

Report number:

Month of reporting:

Province:

Today's date:

Please complete the following sections for the case identified above. If the information requested below is not readily available, please leave it blank. Respondents are only expected to provide information that is available to them, and are not expected to obtain missing information that is not available to them in the patient's medical record. **Strict confidentiality of information will be assured.**

CASE DEFINITION FOR ADVERSE EVENTS RELATED TO VIRTUAL CARE

Report any patient less than 18 years of age (up to their 18th birthday) presenting with a new adverse event (AE) associated with harm that the reporting physician suspects is related to virtual care.

As defined in the Canadian Virtual Care Lexicon¹ the execution of virtual care may be:

Synchronous: Use of technology to enable individuals or care teams to provide patient care in live/real time (e.g., phone, video)

Asynchronous: Use of technology to enable individuals or care teams to interact with patients through methods that do not require real-time interactions (e.g., electronic or voice messaging, patient toolkits, patient review of personal health records)

Inclusion criteria

Report ONLY the following types of AEs suspected to be related to virtual care:

- *Misdiagnosis:* The limitations of virtual care in patient assessment results in incorrect, missed, or delayed diagnosis
- *Emergency without the ability to respond:* The virtual care provider identifies an emergency clinical or social situation but is not able to provide timely emergency care

Examples of AEs are provided below to help illustrate the case definition. This list is not comprehensive and participants are encouraged to report ANY events that they feel satisfy the case definition.

Misdiagnosis:

- Lack of physical examination during virtual assessment led to:
 - Unrecognized weight loss and deterioration in patient with eating disorder, requiring hospitalization
 - Delayed diagnosis of brain tumor in patient with precocious puberty
 - Late presentation to emergency department with bilateral acute otitis media and mastoiditis in patient thought to have upper respiratory tract infection on initial virtual assessment
 - Late presentation to the emergency department requiring hospitalization and/or exchange transfusion for a neonate with hyperbilirubinemia not detected on initial virtual assessment
 - Late presentation of traumatic brain injury from child maltreatment in an infant with bruising, which would have triggered evaluation for maltreatment during virtual assessment for colic
- Inability to speak with adolescent in private virtually led to:
 - Late diagnosis of sexually transmitted infection and ultimately pelvic inflammatory disease
 - Lack of full disclosure of symptoms of depression and late diagnosis requiring hospitalization

Emergency without the ability to respond:

- Active suicidal ideation during virtual assessment necessitating hospital admission but inability to connect with caregivers, followed by presentation to the emergency department with acetaminophen overdose requiring treatment
- Acute clinical deterioration (e.g., hypotension, decreased level of consciousness due to progression of sepsis) recognized during virtual care encounter with no possibility of providing supportive care (and the planned virtual care delayed the patient/family seeking in-person acute care)

Exclusion criteria

- AEs not deemed to be related to virtual care
- Near miss: A patient safety incident that did not reach the patient and therefore no harm resulted
- No-harm incident: A patient safety incident that reached the patient but no discernible harm resulted
- Event due to connectivity issues that interfered with patient care but did not result in harm
- AEs related to breach of privacy

¹ *Virtual Care in Canada: Lexicon*. CHIEF Executive Forum. Digital Health Canada. c2022. Available from: <https://digitalhealthcanada.com/wp-content/uploads/2022/06/Virtual-Care-National-Lexicon-v-JAN2521.pdf>

Month seen: _____

SECTION 1 – ROLE OF REPORTING PHYSICIAN

- 1.1 What was your role in the patient's care?
- ☐ Involved in BOTH the virtual care encounter suspected to have led to the AE AND the encounter in which the AE was identified and/or managed
 - ☐ Involved ONLY in the encounter in which the AE was identified and/or managed

SECTION 2 – PATIENT DEMOGRAPHIC INFORMATION

- 2.1 Month/year of birth: ____ / ____
MM YYYY
- 2.2 Sex assigned at birth: ☐ Male ☐ Female ☐ Intersex ☐ Unknown
- 2.3 Gender: ☐ Male ☐ Female ☐ Non-binary ☐ Unknown
- 2.4 First 3 digits of patient's postal code: ____ ____ ____
- 2.5 Patient- or family-reported population group(s) (select all that apply):
- | | | | |
|--|--|--|--|
| <input type="checkbox"/> Arab | <input type="checkbox"/> Black | <input type="checkbox"/> Chinese | <input type="checkbox"/> Filipino |
| <input type="checkbox"/> Japanese | <input type="checkbox"/> Korean | <input type="checkbox"/> Latin American | <input type="checkbox"/> White |
| <input type="checkbox"/> First Nations | <input type="checkbox"/> Inuit | <input type="checkbox"/> Métis | <input type="checkbox"/> Unknown/Did not ask |
| <input type="checkbox"/> Southeast Asian
(e.g., Vietnamese, Cambodian, Laotian) | <input type="checkbox"/> South Asian
(e.g., East Indian, Pakistani, Sri Lankan) | <input type="checkbox"/> West Asian
(e.g., Iranian, Afghan) | <input type="checkbox"/> Other, specify: _____ |
- 2.6 Born in Canada: ☐ Yes ☐ No ☐ Unknown *If No, specify year of arrival in Canada, if known: _____*
- 2.7 Insurance status: ☐ Provincial/territorial health plan ☐ Interim Federal Health Program ☐ Unknown
☐ Other, specify: _____

SECTION 3 – COMORBIDITIES

- 3.1 Did the patient have any pre-existing comorbidities (select all that apply)?
- ☐ Medical complexity (defined as meeting ALL four of the following criteria: 1) chronic condition, 2) functional limitation, 3) high health care utilization, 4) high health care needs at home)
 - ☐ Dependent on medical technology (defined as requiring AT LEAST ONE of the following: 1) feeding tube, 2) ventilator, 3) tracheostomy)
 - ☐ Neurodevelopmental disability
 - ☐ Mental health condition
 - ☐ Other, specify: _____

SECTION 4 – DETAILS OF THE AE

- 4.1 What type of AE occurred?
- ☐ Incorrect diagnosis; explain: _____
 - ☐ Missed diagnosis; explain: _____
 - ☐ Delayed diagnosis; explain: _____
 - ☐ Emergency without the ability to respond; explain: _____
- If Emergency without the ability to respond:*
- 4.1.1 Were emergency services activated (e.g., call to 911)? ☐ Yes ☐ No ☐ Unknown
- 4.1.2 Was the patient directed to go to the emergency department using personal transport?
☐ Yes ☐ No ☐ Unknown
- 4.2 In which care modality was the AE identified? ☐ Scheduled in-person encounter ☐ Unscheduled in-person encounter
☐ Scheduled virtual encounter ☐ Unscheduled virtual encounter
- 4.3 In which clinical setting was the AE identified?
- ☐ Emergency department/acute care
 - ☐ Mental health/psychiatric care
 - ☐ Developmental/behavioural care
 - ☐ Primary care
 - ☐ Consultant/subspecialist medical care; specify clinical area: _____
 - ☐ Other, specify: _____

- 4.4 What was the severity of the AE?
☐ Temporary harm ☐ Possible permanent harm ☐ Confirmed permanent harm ☐ Death
- 4.5 Who initially identified the AE? ☐ Patient ☐ Parent/caregiver ☐ Reporting physician
☐ Other health care provider; specify type of provider: _____ ☐ Other, specify: _____
- 4.6 What level of care was required to manage the AE (select all that apply)?
☐ Virtual care encounter ☐ In-person office/clinic visit ☐ In-person urgent care visit
☐ Emergency department visit ☐ Admission to hospital ward ☐ Admission to intensive care unit
☐ Additional laboratory/diagnostic imaging tests ☐ Surgery, specify: _____
☐ Other, specify: _____
- 4.7 What actions were taken to manage the AE (select all that apply)?
☐ Disclosed to patient/family/caregiver ☐ Monitoring/intervention/procedure/medication; specify: _____
☐ Other, specify: _____
- 4.8 Was there any formal reporting of the AE (select all that apply)?
☐ Local/institutional safety reporting system ☐ Provincial/territorial physician college
☐ Canadian Medical Protective Association ☐ Medicolegal complaint (initiated by family/caregiver)
☐ Other, specify: _____ ☐ None ☐ Unknown
- 4.9 Was the incident reported to the care provider involved in the virtual care encounter suspected to have led to the AE?
☐ Yes ☐ No ☐ Unknown ☐ Not required; I was involved in the virtual care encounter suspected to have led to the AE
☐ Not required; Care provider involved in the virtual care encounter suspected to have led to the AE is aware of the AE
- 4.10 Which of the following factors may have contributed to the AE?
- 4.10.1 Inappropriate modality (fully assessing and/or caring for the patient was not possible): ☐ Yes ☐ No ☐ Unknown
If Yes, select all that apply: ☐ Lack of physical exam ☐ Inability to discern non-verbal cues
☐ Inability to ensure privacy ☐ Other, specify: _____
- 4.10.2 Technical difficulties: ☐ Yes ☐ No ☐ Unknown *If Yes, select all that apply:*
☐ Technical difficulties for the care provider during the virtual care encounter
☐ Technical difficulties for the patient/family/caregiver during the virtual care encounter
☐ Technical difficulties with execution of patient management (e.g., prescription not received by pharmacy; written instructions/requisitions not received by family), specify: _____
☐ Other, specify: _____
- 4.10.3 Communication issues: ☐ Yes ☐ No ☐ Unknown *If Yes, select all that apply:*
☐ Language barriers ☐ Hearing/speech limitations ☐ Interpreter-related issues, specify: _____
☐ Other, specify: _____
- 4.10.4 Equity issues: ☐ Yes ☐ No ☐ Unknown *If Yes, select all that apply:*
☐ Insufficient access to technological infrastructure (e.g., no internet access, no access to device/phone) to fully participate in virtual care ☐ Other, specify: _____
- 4.10.5 Other: ☐ Yes ☐ No ☐ Unknown *If Yes, describe:* _____
- 4.11 From your perspective, if care had been provided in person, would this AE have happened?
☐ Yes; explain: _____
☐ No; explain: _____
☐ I don't know; explain: _____

SECTION 5 – VIRTUAL CARE ENCOUNTER SUSPECTED TO HAVE LED TO THE AE

If you were NOT involved in the virtual care encounter suspected to have led to the AE, proceed to question 6.1.

- 5.1 Why was the patient encounter suspected to have led to the AE held virtually (select all that apply)?
☐ Virtual care had already (pre-COVID-19) been established as the usual care modality
☐ Virtual care was provided in lieu of in-person care due to COVID-19 restrictions
☐ Virtual care has replaced in-person care post-COVID-19
☐ Virtual care was provided in lieu of in-person care due to distance from physician care
☐ Virtual care was optional and provider selected it
☐ Virtual care was optional and patient/family/caregiver selected it
☐ Other, specify: _____

- 5.2 What type of virtual care was used in the encounter suspected to have led to the AE?
☐ Synchronous ☐ Asynchronous ☐ Combined, specify: _____
If Synchronous, what was the format? ☐ Phone or audio-only call ☐ Videoconference
- 5.3 In which clinical setting did the virtual care encounter suspected to have led to the AE occur?
☐ Emergency department/acute care
☐ Mental health care/psychiatric care
☐ Developmental/behavioural care
☐ Primary care
☐ Consultant/subspecialist medical care, specify clinical area: _____
☐ Other, specify: _____
- 5.4 Was the virtual care encounter the first time you met the patient? ☐ Yes ☐ No ☐ Unknown
- 5.5 What was the reason for the virtual care encounter suspected to have led to the AE?
☐ Routine care (e.g., well-child visit), specify: _____ ☐ New health issue, specify: _____
☐ Follow up for existing health issue, specify: _____ ☐ Other, specify: _____
- 5.6 Other than yourself, who was involved in the virtual care encounter suspected to have led to the AE (select all that apply)? ☐ Patient ☐ Parent/caregiver(s) ☐ Other, specify: _____
- 5.7 From your perspective, could the AE have been prevented within a virtual care modality?
☐ Yes; explain why: _____
☐ No; explain why: _____
☐ I don't know; explain why: _____
- 5.8 Despite the AE, do you think virtual care was an appropriate way to provide care in this circumstance? (e.g., living remotely, no other option for care)?
☐ Yes; explain why: _____
☐ No; explain why: _____
☐ I don't know; explain why: _____

SECTION 6 – FURTHER INFORMATION

- 6.1 Are you willing to be contacted by the Canadian Paediatric Surveillance Program for further information on this questionnaire? ☐ Yes ☐ No

SECTION 7 – REPORTING PHYSICIAN

- 7.1 Which of the following best describes your practice?
☐ General paediatrician ☐ Paediatric subspecialist, specify: _____
☐ Other, specify: _____
- 7.2 In the past month, what proportion of your total clinical encounters has been virtual?
☐ 0–10% ☐ 11–40% ☐ 41–60% ☐ 61–90% ☐ 91–100%
- 7.3 Practice setting (select all that apply):
 a) ☐ Urban ☐ Suburban ☐ Rural/Remote
 b) ☐ Academic ☐ Non-academic
 c) ☐ Emergency department ☐ Intensive care unit ☐ Inpatient hospital ward ☐ Outpatient
☐ Other, specify: _____

First name _____ Surname _____
 Address _____
 City _____ Province/territory _____ Postal code _____
 Telephone number _____ Fax number _____
 E-mail _____ Date completed _____

Thank you for completing this form.

Note: Details from this questionnaire are only for the purpose of this CPSP study. In the interest of quality improvement, you are encouraged to report this adverse event through your local safety reporting system.