

## Telesimulations to address the ethical implications of teleconsultation with student nurse practitioners

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### Abstract

**Context:** Teleconsultations are now essential in the clinical practice of nurse practitioners (NPs). At the Faculté des sciences infirmières (FSI) of the University of Montreal, teleconsultation, and ethical implications of telemedicine, were little addressed in the curriculum of future NPs. Eight telesimulations have been developed for NP students in mental health, primary care, and adult care. Telesimulation is an innovative simulation modality perfectly suited to the learning outcomes of this activity.

**Objective:** NP students had to intervene in a professional, safe, and respectful manner during a simulated teleconsultation. Each scenario focused on a clinical situation specific to each of the NP specialties, and included an ethical challenge related to the remote interaction, which had to be properly managed during the teleconsultation.

**Description:** Eight telesimulation scenarios on ethical issues in teleconsultation were created for the three NP programs. The telesimulations were carried out with online embedded participants representing a patient or a family member or other. NP students had to assess the person's health condition and formulate recommendations adapted to the clinical situation, while managing an ethical issue, such as a risk of breach of confidentiality, a validation of consent or a technological problem compromising the security of personal data. Those telesimulations were offered as a formative activity to all NP students of the three clinical specialties, at the end of year 1 and 2 of the programs (n=115 students). They took place entirely online, via Zoom, over a period of eight days.

**Impact:** The design and implementation of those telesimulations required complex logistics and raised pedagogical and organizational challenges. However, the students recognized that they were better equipped to carry out this type of professional consultation. They also mentioned the need to include more simulations across the curriculum. In addition to meeting a learning need for future NPs, the development of these telesimulations has also enabled content experts and facilitators new to simulation to experiment this pedagogy with the coaching of nurse educators expert in simulation.

# Telesimulations to address the ethical implications of teleconsultation with student nurse practitioners

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## Context

Teleconsultations are now essential in the clinical practice of nurse practitioners (NPs). Regulatory bodies have issued guidelines and recommendations to regulate the use of teleconsultations by health professionals (Collège des médecins du Québec, 2022; Conseil interprofessionnel du Québec, 2016; Ordre des infirmières et infirmiers du Québec, 2020). Telesimulation has proven to be a well-suited simulation modality to address the ethical implications of telemedicine with NP students.

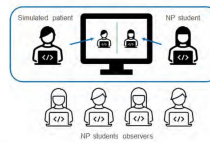
## Objective

NP students had to intervene in a professional, safe, and respectful manner during a simulated teleconsultation. Scenarios began with a clinical situation specific to each of the NP specialties, and an ethical challenge related to the remote interaction had to be properly managed during the teleconsultation.

## Description of the innovation

Eight telesimulation scenarios were created for our three NP programs: Primary care, Adult health and Mental health. These telesimulations take place entirely online, via Zoom, over a period of eight days, as a formative learning activity for all NP students (n=115) at the end of year 1 and year 2 of their program.

"Telesimulation is a process by which telecommunication technologies and simulation resources are utilized to provide education, training or assessment to learners, at an off-site location." (McCoy, et al., 2017, p. 133)



In groups of 5 students, the activity went as follows:



## Scenarios and embedded ethical issues

All scenarios had the same premise: The patient has a planned teleconsultation appointment with the NP to follow-up on recent lab results or on a change of medication. The NP initiates the call.

It was expected that the NP student:

- clearly identify themselves as healthcare professionals
- validate the identity of the interlocutor
- state the nature of the call and obtain consent for the clinical interview
- obtain consent for the use of the telecommunication technology

Then each scenario raised a specific ethical issue, adapted to 1<sup>st</sup> year and 2<sup>nd</sup> year students (S1 or S2).

Primary care program (diabetes follow-up)	Adult health program (chronic kidney disease follow-up)
<p>S1 : Patient answers the call while being in a store.</p> <p>Avoid a confidentiality breach</p>	<p>S1 : Patient is hard of hearing; his daughter takes the call.</p> <p>Make sure of patient's consent</p>
<p>S2 : Patient mentions a rash on his genitals and wants to send a picture via text messaging.</p> <p>Manage inappropriate graphic content</p>	<p>S2 : Patient is furious because his daughter gives information that he didn't want to reveal to the NP.</p> <p>Maintain trust and therapeutic relationship</p>
Mental health and Primary care programs (follow-up for S1 schizophrenia / S2 depression)	Mental health program (follow-up for S1 schizophrenia / S2 depression)
<p>S1 : Patient refuses to open his camera and talks indistinctly to someone else than the NP.</p> <p>Avoid hasty conclusions (behavior mimics psychotic symptoms)</p>	<p>S1 : Patient is suddenly being very evasive and avoids looking at the camera.</p> <p>Avoid hasty conclusions (behavior mimics psychotic symptoms)</p>
<p>S2 : Hints of psychologic violence from husband emerge from the patient's discourse.</p> <p>Ensure patient's safety</p>	<p>S2 : Patient refuses to open her camera and verbalize suicidal ideations.</p> <p>Maintain trust to keep the communication open and ensure patient's safety</p>

## Impacts of the activity

For the pedagogical team
<ul style="list-style-type: none"> <li>• Validation of a replicable way to offer remote simulations</li> <li>• Enabled content experts to experiment simulation pedagogy with the coaching of experts in simulation</li> </ul>
For the NP students
<ul style="list-style-type: none"> <li>• Expressed confidence in carrying out this type of professional consultation</li> <li>• Voiced the need to include more simulations across the curriculum</li> </ul>

## Take away messages

Advantages of telesimulation
<ul style="list-style-type: none"> <li>• Accessibility (no distance or location limitations)</li> <li>• Realism (replication of a real teleconsultation)</li> <li>• Relevance for effective communication learning</li> </ul>
Challenges with telesimulation
<ul style="list-style-type: none"> <li>• Entirely online coordination</li> <li>• Technological problems (anticipate, prevent and react)</li> <li>• Planning the sound and visual environment around the simulated patient to convey realism</li> </ul>

**References**  
 Collège des médecins du Québec (2022). Télé-médecine. <http://www.cmq.org/qaq/fr/telemedecine.aspx>  
 Conseil interprofessionnel du Québec (2016). Quel rôle à la décision - Téléproque et gestion du dossier numérique en santé et en relations humaines. Groupe de travail sur la télésanté du Conseil interprofessionnel du Québec. <https://cicq.ca/wp-content/uploads/2016/07/04/QualiteDesSoinsEtDesServicesSant%C3%A9%20-%20Innovation%20-%202016-10-06.pdf>  
 McCoy, C.E., Savagh, J., Arabah, R., & Yarris, L.M. (2017). Telesimulation: an innovative tool for health professions education. *AEM education and training*, 1(2), 132-136. <https://doi.org/10.1002/aem.12015>  
 Ordre des infirmières et infirmiers du Québec (2020). La COVID-19 : directives pour la pratique à distance à l'intention des infirmières et IPS. <https://www.cicq.org/qaq/fr/directives-pour-la-pratique-a-distance-a-l-intention-des-infirmieres-et-ips>