

Using Videoconferencing in Practice: NOSM Health Sciences Competency Checklist

The NOSM Health Sciences learner develops competence in videoconferencing (VC) / Telepractice (TP)ⁱ as a potential communication and/or service delivery strategy demonstrating the knowledge, attitudes and skills required. The following checklist has been developed as a “Self Directed” learning tool that guides competency development for both learners and health professionals with limited experience with VC and TP.

There are eight competencies to be achieved: two (2) minimum competencies which focus on non-patient activities and six (6) advanced competencies that prepare the user for application to clinical practice. This tool is intended to be followed in sequence as each learning activity builds on the previous experience.

Minimum Competencies

1. Identify potential professional and ethical issues related to the use of videoconferencing (VC) and telepractice (TP) for your discipline. Be familiar with relevant legal and ethical principles and professional codes of conduct relating to security, confidentiality, consent and privacy of patient related data and information. Be knowledgeable of own regulated profession’s VC guidelines.
2. Knowledge of effective VC delivery in educational, administrative and/or clinical practice. This may include VC etiquette/professional behaviour, communication skills, powerpoint and speaker guidelines, hosting and moderating an event.

Advanced competencies are intended to support learners and their preceptors with access to Videoconference (VC) facilities for clinical service delivery, to gain the knowledge, skills and experience necessary to begin to deliver clinical services via Telepractice (TP).

3. Identify and describe how you might address the issues you may face in preparing to deliver clinical service via VC specific to your discipline and area of practice (consent, confidentiality, audio/visual, communication, training, physical space, equipment, etc.).
4. Identify components and VC options best suited for the intended service delivery (point-to-point, continuous presence, screen layout choices, computer interface options (data pushing), and peripheral devices: ELMO (document camera), AMD camera, tele-stethoscope, video-otoscope, etc.).
5. Knowledgeable of the booking, operating and troubleshooting requirements for various VC equipment components utilized in TP service delivery (e.g. document cameras, zoom/pan, camera adjust, etc.).
6. Awareness of the potential barriers, limitations, and complications as they relate to both human and technological factors and how to compensate for these factors.

7. Identify and address the experiential (comfort and experience with technology), cultural, language and/or disability (hearing, vision, mobility) factors to be considered to ensure and maximize safe and efficient VC / TP service delivery.
8. Implement appropriate evaluation such as outcome measures or benchmarks, goal attainment to ensure quality/accuracy/efficiency of service is delivered (i.e. checks re: whether what you are doing by VC / TP is working/having the desired impact/outcome).

Notes:

1. This checklist is used to assist the learner and clinical teacher/preceptor to plan the placement activities and schedule.
2. This checklist is set up to be a self-directed learning activity.
3. Some activities will not be applicable or available. Discussion, role-play, case study, and assignments can serve as an alternative to actual hands-on completion of the learning activities listed below.

MINIMAL COMPETENCIES	Completed
1. Identify potential professional and ethical issues related to the use of VC / TP. Be familiar with relevant legal and ethical principles and professional codes of conduct relating to security, confidentiality, consent and privacy of patient related data and information. Be knowledgeable of own regulated profession's TP guidelines.	
1.1 Gains knowledge of own regulated profession's TP guidelines.	
<u>Learning Activities:</u>	
<ul style="list-style-type: none"> • Completes required reading(s): <ol style="list-style-type: none"> 1. College Position Statement 2. Provincial / National Association Position Statement 3. Department / Facility Policies 	
<ul style="list-style-type: none"> • Discusses guidelines with preceptor and practice implications. 	
1.2 Gains knowledge of the professional and ethical issues of VC / TP.	
<u>Learning Activities:</u>	
<ul style="list-style-type: none"> • Participates in VC events as assigned following the procedures of the host agency. Event and date: _____ Event and date: _____ Event and date: _____ Event and date: _____ 	
<ul style="list-style-type: none"> • Reviews and discusses agency procedures with preceptor, professional colleague and/or fellow learner. 	
<ul style="list-style-type: none"> • Reviews and discusses with preceptor any agency-specific TP guidelines (if different from procedures). 	
1.3 Applies knowledge of professional and ethical issues of TP and own profession's scope of practice.	
<u>Learning Activities:</u>	

<ul style="list-style-type: none"> Reviews and discusses relevant documentation (e.g. charting) with preceptor, professional colleague and/or fellow learner. 	
<ul style="list-style-type: none"> Documents own TP activities as per agency procedures and profession's TP guidelines. 	
<p>2. Knowledge of effective VC delivery in clinical practice and/or continuing education. This may include VC etiquette/professional behaviour, communication skills, powerpoint and speaker guidelines, hosting and moderating an event.</p>	
2.1 Gains knowledge of educational and administrative uses of VC.	
<u>Learning Activities:</u>	
<ul style="list-style-type: none"> Completes required readings in the OTN Resource Library relating to education uses of VC: http://otn.ca/en/members/resource-library: "Educational & Administrative Events," specifically: <ol style="list-style-type: none"> VC Etiquette VC presenter guidelines Power point guidelines Presenting in an event 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<ul style="list-style-type: none"> Reflects and discusses practice implications with preceptor, professional colleague and/or fellow learner. 	
2.2 Gains knowledge re: preparation for clinical uses of VC telepractice.	
<u>Learning Activities:</u>	
<ul style="list-style-type: none"> Completes required readings in the OTN Resource Library relating to clinical uses of VC: http://otn.ca/en/members/resource-library: "Guidelines," specifically: <ol style="list-style-type: none"> OTN Clinical Training Manual Patients & Families Brochure Privacy Door Hanger Clinical Consult Etiquette Consent Guidelines (Also review your college guidelines for consent) Consent to participate Site Readiness Tool 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<ul style="list-style-type: none"> Reflects and discusses practice implications with preceptor, professional colleague and/or fellow learner. 	
2.3 Applies knowledge of educational, administrative, and clinical use of VC.	
<u>Learning Activities:</u>	
<ul style="list-style-type: none"> Provide <u>one</u> example for each VC use: <ol style="list-style-type: none"> Educational event: _____ Administrative event: _____ Clinical: _____ 	
<ul style="list-style-type: none"> List and describe 3 strategies you would use to maximize the effectiveness of <i>your participation</i> in an educational event you might receive. Strategy 1: _____ 	

Strategy 2: _____ Strategy 3: _____									
<ul style="list-style-type: none"> List and describe 3 strategies you would use to maximize the effectiveness of an education session <i>you would deliver</i> via VC. Strategy 1: _____ Strategy 2: _____ Strategy 3: _____ 									
<ul style="list-style-type: none"> List and describe 3 strategies that you would use to maximize the effectiveness of your participation during an administrative use of VC (e.g. meeting, etc.) Strategy 1: _____ Strategy 2: _____ Strategy 3: _____ 									
ADVANCED COMPETENCIES	Completed								
3. Using the resources in the OTN Resource Library (http://otn.ca/en/members/resource-library) and discipline specific literature that you find, identify and describe how you might address the issues you may face in preparing to deliver clinical service via telepractice specific to your discipline and area of practice (consent, confidentiality, audio/visual, communication, training, physical space, equipment, etc).									
<u>Learning Activities:</u>									
3.1 Describe a specific service delivery context in which you would like to explore (ex. pediatric articulation assessment, seating assessment, cognitive testing, etc.). Include details re: population and location of the clients/patients you may want to target.									
3.2 List and address the <i>physical</i> issues that you will need to address prior to this delivering service (seating, camera angle/use, mic location/type, lighting, sound proofing, etc.):									
<table border="1" style="width: 100%;"> <tr> <td style="width: 25%;"><i>Issue:</i></td> <td><i>Plan to address:</i></td> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	<i>Issue:</i>	<i>Plan to address:</i>							
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List your sources:									
Review and summarize 1-2 current (within 2-3 years of publication) discipline specific papers/resources that address issues specific to your intended service delivery / discipline.									
3.3 List and address the <i>administrative</i> issues that you will need to address prior to delivering service (booking, communication with sites / clients, documentation, etc.):									
<table border="1" style="width: 100%;"> <tr> <td style="width: 25%;"><i>Issue:</i></td> <td><i>Plan to address:</i></td> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	<i>Issue:</i>	<i>Plan to address:</i>							
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List your sources:									
3.4 List and address the <i>training</i> issues that you will need to address prior to delivering service (in-house staff, distant site family members/assistants, etc.):									
<table border="1" style="width: 100%;"> <tr> <td style="width: 25%;"><i>Issue:</i></td> <td><i>Plan to address:</i></td> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	<i>Issue:</i>	<i>Plan to address:</i>							
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List your sources:		
3.5 List and address the <i>clinical</i> issues that you will need to address prior to delivering service:		
<i>Issue:</i>	<i>Plan to address:</i>	
List your sources:		
Additional Learning Activities / Resources for this section:		
<ul style="list-style-type: none"> Complete required readings in OTN Resource Library (Policies_General): http://otn.ca/en/members/resource-library View applicable webcasts from the 2012-13 NOSM Telepractice series: http://www.nosm.ca/rssresources/ Identify other clinicians working with a similar population/context and engage in discussion re: issue & how to address list. Meet with your local OTN site coordinator to review and discuss the issues and strategies you have identified. Discuss findings with preceptor, professional colleague or fellow learner; refine plans above as necessary. 		
4. Identify components and VC options best suited for the intended service delivery (point-to-point, continuous presence, screen layout choices, computer interface options (data pushing), peripheral devices: ELMO (document camera), AMD camera, tele-stethoscope, video-otoscope, etc).		
4.1 Gains knowledge of VC components and options.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> Reviews OTN telemedicine resource guide: (Peripheral Equipment) https://training.otn.ca/shared/portal/private/index.html Identify three VC components and the clinical application that it would be appropriate for. 		
Component:	Potential Application / Use:	
Sources:		
4.2 Applies knowledge of VC components and options.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> Demonstrates use of 1-2 components appropriate for targeted clinical activity. Evaluates the component for intended use (i.e did it do what you needed, is this the best tool for the job, what is an alternate, etc.). 		
5. Knowledgeable of the booking, operating and troubleshooting requirements for various VC equipment components utilized in TP service delivery (e.g. document cameras, zoom/pan, camera adjust, et.c).		
5.1 Gains knowledge of booking requirements.		
<u>Learning Activities:</u>		

<ul style="list-style-type: none"> • Reviews site specific booking policies. 		
<ul style="list-style-type: none"> • Reviews OTN guidelines: (See “Scheduling”) http://otn.ca/en/members/resource-library 		
5.2 Gains knowledge of operating requirements.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Develops usage tips for 3 components you have gained experience with. 		
Component:	Usage Tips:	
5.3 Gains knowledge of troubleshooting requirements.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Develops one page ‘trouble shooting’ resource for a primary component to be used. 		
5.4 Applies knowledge of booking, operating and troubleshooting requirements.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Books a ‘test’ session via OTN between 2 test sites/studios (even if both in-house). • Uses a minimum of 1 component during test session. 		
6. Awareness of the potential barriers, limitations, and complications as they relate to both human and technological factors and how to compensate for these factors.		
6.1 Gains knowledge of human and technical issues in VC telepractice.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Journals about the barriers and limitations during VC experience (reflective practice exercise). 		
7. Identify and address the experiential (comfort and experience with technology), cultural, language and/or disability (hearing, vision, mobility) factors to be considered to ensure and maximize safe and efficient TP service delivery.		
7.1 Gains knowledge of the key factors to ensuring safe and efficient VC telepractice.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Interviews a client/patient who has received VC service to better understand their perspective on safety and efficiency. 		
7.2 Applies knowledge to ensure safe and effective VC telepractice.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Define safety re: VC (what creates ‘safety’) • Define effectiveness re: VC (list desired outcomes) 		
8. Implement quality control measures to ensure quality/accuracy/efficiency of service is delivered. (ie. Checks re: whether what you are doing by Telepractice is working/having the desired impact/outcome).		
8.1 Monitors VC telepractice, evaluates the achievement of planned objectives, the process of implementation and the outcomes achieved.		
<u>Learning Activities:</u>		
<ul style="list-style-type: none"> • Discuss the impact of the process on patient/client/audience (i.e. ease, perceptions). 		

<ul style="list-style-type: none"> • Evaluate patient/client/audience satisfaction with the achievement of the planned objectives/delivery of services. 	
<ul style="list-style-type: none"> • Discuss the impact of the outcome (e.g. improved service delivery). 	
<ul style="list-style-type: none"> • Evaluate the process in relation to resource utilization. 	
<ul style="list-style-type: none"> • Redefine goal(s) as needed. 	
8.2 Determines need for further monitoring, intervention or planning of the process.	
<u>Learning Activities:</u>	
<ul style="list-style-type: none"> • Sets up process if further monitoring and evaluation is needed. 	
<ul style="list-style-type: none"> • Determines if other follow up action is required. 	
<ul style="list-style-type: none"> • Documents follow up action required. 	

**THANK YOU FOR ACCESSING THE “USING VIDEOCONFERENCING IN PRACTICE”
NOSM HEALTH SCIENCES COMPETENCY CHECKLIST.**

**TO IMPROVE THE CHECKLIST, WE ARE VERY INTERESTED IN YOUR FEEDBACK.
PLEASE COMPLETE A SHORT EVALUATION AT:**

[NOSM Competency Checklist Feedback Survey](#)

ⁱ *Videoconference (VC) telepractice competency* is the ability to share in real-time video and audio information between two or more people at different locations and may include clinical care and consultations, education for professionals and consumers, and transfer of data or information between health care organizations. (Source: Johnson et al. (2001). Interactive videoconferencing improved nutrition intervention in a rural population. JADA; 101 (2): 173-4)