



NIMHANS

Telenursing Practice Guidelines



Editors

P.Vijayalakshmi, B.V.Kathyayani, Nirmala M Hatti,
K.Reddemma, Narayana Manjunatha,
C Naveen Kumar & Suresh Bada Math

2020

NIMHANS

Telenursing Practice Guidelines



College of Nursing & Telemedicine Centre
National Institute of Mental Health and Neuro Sciences,
(Institute of National Importance)
Bengaluru – 560029

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Telemedicine Society of India
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2020

Editors

Dr. P.Vijayalakshmi, ^{PhD}

College of Nursing, National Institute of Mental Health and Neuro Sciences,
(Institute of National Importance), Bengaluru – 560 029

Email:- pvijayalakshmireddy@gmail.com, vijayalakshmiporeddy@yahoo.co.in

Phone: - 0802699 5818

Dr. B.V.Kathyayani, ^{PhD}

Professor & Principal, College of Nursing,
National Institute of Mental Health and Neuro Sciences,
(Institute of National Importance), Bengaluru – 560 029

Ms. Nirmala M Hatti, ^{MSc(N)}

I/C Head of Clinical Services, National Institute of Mental Health and Neuro
Sciences, (Institute of National Importance), Bengaluru – 560 029

Dr.K.Reddemma, ^{PhD}

Former Senior Professor& Dean

National Institute of Mental Health and Neuro Sciences, (Institute of National
Importance) & Nodal Officer, National Consortium for Ph.D in Nursing, St Johns
College of Nursing, Sarjapur Road, Bangalore - 560 034

Dr. Narayana Manjunatha, ^{DPM, MD}

Associate Professor of Psychiatry, Department of Psychiatry,
Consultant, Tele-Medicine Centre, National Institute of Mental Health and Neuro
Sciences, (Institute of National Importance), Bengaluru – 560029

Dr. C Naveen Kumar, ^{DPM, MD, MAMS}

Professor of Psychiatry, Head, Community Psychiatry Unit,
Consultant, Centre for Disaster Management, Forensic Psychiatry, Legal Aid Clinic &
Tele-Medicine Centre, Department of Psychiatry, National Institute of Mental Health
and Neuro Sciences, (Institute of National Importance), Bengaluru – 560029

Dr. Suresh Bada Math, ^{MD, DNB, PGDMLE, PGDHRL, PhD in Law (NLSIU)}

Professor & Head of Forensic Psychiatry Services,
Head of Tele-Medicine Centre and Unit-V (Psychiatry),
Consultant, Community Psychiatry, Department of Psychiatry,
National Institute of Mental Health and Neuro Sciences, (Institute of National
Importance), Bengaluru – 560 029

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Correspondence:

Dr. P.Vijayalakshmi PhD
College of Nursing, National Institute of Mental Health and Neuro Sciences,
(Institute of National Importance), Bengaluru – 560 029
Email:- pvijayalakshmireddy@gmail.com, vijayalakshmioreddy@yahoo.co.in
Phone: - 0802699 5818



NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES

INSTITUTE OF NATIONAL IMPORTANCE

P.B. 2900, Bengaluru - 560 029 (India)

Dr. G. Gururaj
MBBS, MD, FAMS
Director
Sr. Professor of Epidemiology

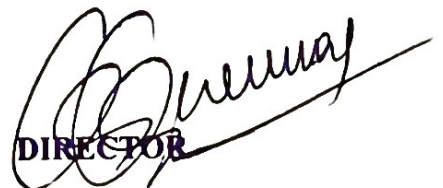
Off : 91-80-26564140, 26561811
26565822, 26995001 / 2
Res : 91-80-26540258
Fax : 91-80-26564830 / 26562121
Email : epiguru1@gmail.com
guru@nimhans.ac.in

MESSAGE

Telecommunications technology has a profound impact on contemporary health care practice. Telemedicine is a modern scientific approach to address the needs of rural and urban populations who live in distant, inaccessible and remote areas. Nurses are the largest contingent of the healthcare workforce. They play a critical role in almost every sphere of healthcare such as primary, secondary and tertiary levels of care. Nurses being frontline health care professionals are the first point of contact to provide the necessary care. However, the acute shortage of nurses poses serious challenges to meet the health care needs of the community. In this context, telenursing is a novel initiative to provide more efficient and accessible health care.

Telehealth and technology today allow nursing professionals to reach their patients and interact with them using audio, visual accessories and telephones. Globally, telenursing is an emerging and rapidly expanding area for professionals and offers unlimited opportunities for its members. Yet, in India telenursing is not well established. Telenursing enables nurses in overcoming some of the challenges such as access to care, cost-effective delivery and unequal distribution of health care providers.

I appreciate and congratulate the teaching faculty from the College of Nursing for investing enormous efforts in bringing out these guidelines. These guidelines will help the nurses by offering practical advice in rendering safe and quality nursing care using telecommunication technologies especially in pandemic situations like COVID-19. I strongly hope that these guidelines will get improvised as we move forward in implementation across the nation for bringing significant improvements in health outcomes.


DIRECTOR



**THE TRAINED NURSES' ASSOCIATION OF INDIA (TNAI)
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Message

Under Ayushman Bharat, the Government of India is committed to address the health care needs of its population through various initiatives such as 'e-Sanjeevani'. India being a developing country, nurses provide basic health care services at the rural level. Hence, they are the primary contact person for patients or family members. They act as a liaison between patients and health care services.

Telenursing is a novel field that uses innovative technologies to offer safe, effective and ethical care in a timely manner. Telenursing recently became an essential component in the delivery of primary care to the clients during the COVID-19 pandemic. It will be an excellent career option for the nurses of 21st century. In this context, I am glad to know that College of Nursing, NIMHANS in collaboration with Telemedicine Centre, Department of Psychiatry, is coming out with a practice guideline for telenursing practice in India.

I am happy to note that these guidelines are set out in simple terms, for easy implementation. I urge the state government authorities and all concerned to use these guidelines as a framework to provide holistic nursing services to reach out to the whole population. I congratulate the editorial team for their enormous efforts in bringing out these comprehensive guidelines and I wish them all the success in their future endeavours.

Prof (Dr).Roy K George

National President TNAI

Academic Director , Baby Memorial Hospital

Kozhikode, Kerala



Telemedicine Society of India

Telemedicine Society of India HQ

Registered under Societies Registration Act, 1860.

Regd. Office: Room No.303, 2nd Floor, School of Telemedicine & Biomedical Informatics (STBMI)
SGPGIMS, Raibareli Road, Lucknow. Uttar Pradesh-226014. India.

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Message

Information and communication technology have led to a global revolution in the healthcare system. In India, two-thirds of its population predominantly live in a rural area with immense health care needs. Congruently, India has an acute shortage of health care providers. The Indian government is committed to strengthening the healthcare system and lays a significant focus on the use of telemedicine services, especially in the Health and Wellness Centres at the grassroot level wherein the nurses can connect the patients and their families to the appropriate health services to receive timely and the best possible care.

Telenursing is an emerging field that uses innovative technologies to improve the standards of nursing. However, it doesn't alter the nature of professional practice. Telenursing ensures that nurses are more ubiquitous and have a greater involvement in primary care. I am glad to know that the College of Nursing has developed comprehensive guidelines in collaboration with the Telemedicine Center, Department of Psychiatry, NIMHANS, Bengaluru to offer practical advice to nursing professionals in India. I am sure that these guidelines provide a clear direction to the registered nurses to enhance their ability to provide safe, competent, compassionate and ethical care. However, it is important to note that these guidelines will require ongoing updates in response to the ever-changing nature of technology.

The Union Health Ministry's eSanjeevani OPD platform has completed five lakh teleconsultations within six-months since its launch on April 13 with the last one lakh consultations being done in a record time of 17 days. The eSanjeevani OPD services have enabled patient-to-doctor telemedicine in the midst of the COVID-19 pandemic. I appreciate and congratulate all the stakeholders for their relentless efforts in bringing out these guidelines. I also look forward to the early and effective implementation by the nurses across the nation. This tele-nursing guidelines from NIMHANS will be play the catalyst role in taking the much-needed healthcare to the rural area through Health and Wellness centres across the country reaching the unreachable.

Maj. Gen. (Dr.) Ashok Kumar Singh (Retd.)
President
Telemedicine Society of India

Contact: Telephone +91 522 2668838, +91 522 2495530

Fax: +91 522 2668893 email: contact@tsi.org.in, hon.secretary.tsi@gmail.com & joint.secy.tsi@gmail.com

Website: www.tsi.org.in

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Abbreviations

ALS	: Advanced Life support
ANM	: Auxiliary Nurse Midwife
ASHA	: Accredited Social Health Activist
BLS	: Basic Life Support
CHC	: Community Health Center
EMS	: Emergency Medical Services
HWC	: Health & Wellness Center
ICN	: International Council of Nurses
INC	: Indian Nursing Council
MLHP	: Mid-Level Health Provider
PHC	: Primary Health Center
RANM	: Registered Auxiliary Nurse Midwife
RMP	: Registered Medical practitioner
RN	: Registered Nurse
SHC	: Sub Health Center
SMS	: Short Message Service
SOP	: Standard Operating Procedure
VoIP	: Voice over Internet Protocol
WHO	World Health Organization

NIMHANS-TELENURSING PRACTICE GUIDELINES

BACKGROUND

Telemedicine (healing from a distance) is an emerging field in India. India is a developing country with 138 crores of the population having limited health care facilities. Furthermore, two-thirds of its population lives in remote rural areas and are unable to access health care services. In this context, telemedicine is a boon for health care providers in bridging the treatment gap between rural and urban India. Under the health initiative Ayushman Bharat, the Indian government is committed to providing comprehensive health care services to citizens in every corner of the country through Health & Wellness Centers (HWCs). Health and Wellness Centers are digitally connected with hubs at district hospitals and medical colleges to enable the access of specialist services from hubs to the patients.

The ‘e-Sanjeevani’ is a telemedicine service that is implemented under the Ayushman Bharat health initiative at the Health and Wellness Centers. The ‘e-Sanjeevani’ is gradually shaping into a parallel stream for the Indian healthcare delivery system as it is equally accepted by both patients and health care providers. Congruently, ‘e-Sanjeevani OPD-Stay Home OPD’ app-enabled teleconsultation between patients and doctors in the midst of the COVID-19 pandemic has been a welcome initiative. This teleconsultation platform not only contained the spread of COVID-19 infection by ensuring physical distancing but also helped the patients in receiving essential health care services.

At the Sub-Center level, Health & Wellness Centers are led by Mid-level health providers (MLPs) who may be a registered nurse or an Ayurveda practitioner. Nurses being a major workforce in the health care system help offer health care services to people in rural areas. In rural India, people are neither able to access nor afford their health care requisites such as specialist’s opinion and tertiary care services. In this context, nurses who work at Health & Wellness Centers play an important role in enabling this disadvantaged population to receive appropriate health care through telemedicine consultation. Hence, telenursing needs to be integrated into the health care system to enhance and not replace existing healthcare services.

Globally, telenursing offers unlimited opportunities to its members to propel the nursing profession forward. Yet, in India telenursing is not well established. Few initiatives of telenursing in India include; conducting webinars to create awareness among nursing professionals during the COVID-19 pandemic, the Indian Nursing council uses telenursing for the Ph.D. program since 2006, the Department of Nursing at NIMHANS has been training and

conducting patient case discussions with District Mental Health Program (DMHP) nurses in Karnataka and Bihar through telenursing since 2017 and PGIMER Chandigarh is educating nurses from Nepal and Afghanistan. Hence, there is an urgent need to establish telenursing as a regular practice, given that it saves time, is cost-effective, and is accessible in emergency times such as the Covid-19 pandemic.

According to the recent telemedicine practice guidelines by the Indian Medical Council, telehealth can transform the health care system and provides equal access to quality of care to all. Furthermore, in the case of a pandemic like COVID-19, it is the need of the hour for people to consult health care professionals through the internet or videoconferencing for various reasons. Thus, telenursing shall have a significant impact on overcoming some of the health care challenges such as access to care, cost-effective delivery, and unequal distribution of health care providers.

Currently, there are no legislations or guidelines that exist in India on the practice of telenursing. The current guidelines were developed based on professional norms and standards to enable nurses to practice telenursing in Indian settings.

Purpose

The purpose of this document is to provide general guidelines to registered nurses about the use of telehealth technology. These guidelines would help registered nurses in identifying their roles and responsibilities to provide professional, safe, compassionate, competent and ethical care. This guideline is developed keeping in mind both private and public health establishment.

These telenursing guidelines were developed based on the Code of Ethics and Professional Conduct for nurses in India. Therefore, it provides a clear direction for registered nurses to practice telenursing within their professional boundaries. In these guidelines, the terms ‘Nurse’ and ‘Registered Nurse’ are used interchangeably.

These guidelines would also help nurses on how to collaborate with specialist doctors, professional colleagues, and other health care team members in offering the best possible care, on time. These guidelines act as a framework to enable nurses to adhere to ethical and professional norms and direct them to be accountable for the care offered by them. However, these guidelines should be used in conjunction with other national clinical standards, protocols, policies, and procedures.

1. TELENURSING: DEFINITIONS AND APPLICATIONS

1.1. DEFINITIONS

1.1.1. Telehealth

The World Health Organization (WHO,2016) defines telehealth as

“Delivery of health care services, where patients and providers are separated by distance. Telehealth uses information and communications technology (ICT) for the exchange of information for the diagnosis and treatment of diseases and injuries, research and evaluation, and for the continuing education of health professionals. Telehealth can contribute to achieving universal health coverage by improving access for patients to quality, cost-effective, health services wherever they may be. It is particularly valuable for those in remote areas, vulnerable groups, and aging populations.”

1.1.2. Telemedicine

World Health Organization (1998) defines telemedicine as

“The delivery of health-care services, where distance is a critical factor, by all health-care professionals using information and communications technologies for the exchange of valid information for the diagnosis, treatment, and prevention of disease and injuries, research and evaluation, and the continuing education of health-care workers, with the aim of advancing the health of individuals and communities.”

1.1.3. Telenursing

According to the International Council of Nurses (ICN,2009), telenursing is

“the use of telecommunications technology in nursing to enhance patient care. It involves the use of electromagnetic channels (e.g. wire, radio, and optical) to transmit voice, data, and video communications signals.”

1.1.4. Registered Nurse (RN)

For the purpose of these guidelines, a “Registered Nurse and Midwife” is defined as

“an individual who has completed minimum General Nursing and Midwifery (GNM) course or BSc in Nursing course (BSc N) and has enrolled in the State Nursing Council or Indian Nursing Council under the Indian Nursing Council Act, 1947”.

1.1.5. Registered Auxiliary Nurse & Midwife (R.ANM)

For these guidelines, a “Registered Auxiliary Nurse and Midwife” (R.ANM) or “Junior Health Assistant” is defined as

“an individual who has completed the Auxiliary Nurse Midwifery course and have enrolled in State Nursing Council and Indian Nursing Council under the Indian Nursing Council Act 1947”.

1.2. SCOPE

These telenursing practice guidelines will be published under the INC Act, 1947. These guidelines are developed to enable nurses and midwives in India in adopting and utilizing the telenursing concept in their professional practice to provide optimal care.

- These guidelines are intended for Registered Nurses and Registered Auxiliary Nurse & Midwives (RN&R. ANMs) under the INC Act 1947.
- These guidelines were developed based on the professional norms and standards of practice recommended by the Indian Nursing Council, Trained Nurses Association of India, and the International Council of Nurses. The review of other relevant telemedicine practice guidelines was taken into consideration.
- Telenursing like telemedicine includes all channels of communication with the patient that leverage Information Technology platforms, including Voice, Audio, Text & Digital Data exchange.
- These guidelines also can be utilized to educate health care workers in various aspects to update their knowledge.

Exclusions

The guidelines exclude the following:

- Data management systems involved; standards and interoperability.
- Use of digital technology and artificial intelligence to carry out specific nursing procedures (Insertion of intravenous infusions, conducting deliveries, etc).
- Provide for consultations out of the professional boundaries
- Provide for tele-consultations outside the jurisdiction of India

1.3. QUALIFICATIONS REQUIRED TO PRACTICE TELE NURSING

At the National Institute of Mental health and Neuro Sciences Bengaluru, the registered Nurses must undergo an online course/training on the practice of telenursing.

- 1.3.1. Registered Nurses are entitled to provide telenursing consultation to patients from across India both in private and public health establishments.
- 1.3.2. Registered Nurses who practice telenursing shall uphold *the same professional and ethical norms, laws and clinical standards* consistent within the scope of professional organizations (i.e., as outlined in various policy documents such as the Indian Nursing Council Act, Code of ethics and professional standards for nurses in India and position statements by Trained Nurses Association of India).
- 1.3.3. Understanding the core principles which are discussed in these guidelines enables the nurses to sustain professional, legal, and ethical integrity in offering telenursing care.

2. TECHNOLOGY AND MODE OF COMMUNICATION

2.1. TECHNOLOGY USED IN TELE NURSING PRACTICE

Telenursing has evolved as an important branch of telemedicine. The essential technology tools required for Telenursing include:

2.1.1. Dedicated Office Mobile /Landline number and Email ID

It is preferable to consider having a dedicated work phone/ office mobile line number/ professional social media account/Email ID to provide telenursing services. This helps the nurses in communicating with their clients effectively.

2.1.2. Internet Connection

Secure and dependable internet connectivity is a prerequisite for a successful telenursing experience. A range of healthcare-related activities such as video conferencing, accessible health care records, emails, uninterrupted communications, and so on, are largely based on network performance. It is advisable to have at least two internet service providers to ensure incessant communication with patients or health care providers. A wired connection through an ethernet cable is less prone to interruptions. However, Wi-Fi technology has improved a lot. Yet individuals have to remember not to move away from the range of the router. A general rule of thumb in Wi-Fi networking is that Wi-Fi routers operating on the 2.4 GHz band which can reach up to 150 feet indoors and 300 feet outdoors. But this further reduces, if there are concrete walls and acoustic walls (soundproof walls). Therefore, it is necessary to be within the range of a Wi-Fi router to provide telenursing services and if required, install a Wi-Fi range extender.

2.1.3. Computer system

A computer system comprises of two major elements namely hardware and software. Computer hardware is the collection of physical parts that can be recognized easily such as a keyboard, monitor, mouse, etc. In contrast, computer software is a set of instructions to perform specific operations. For example, computer programs, online documentation, digital media, etc. However, both computer hardware and software require each other, and neither can function independently.

2.1.4. Hardware

The most common types of hardware used in Telenursing consultations include, desktop and laptop computers and tablets.

2.1.4.1. *Desktop computer*

A desktop computer is a personal computer, consisting of a Central Processing Unit (CPU), keyboard and a mouse. This type of computer is not portable due to its size and power requirements.

2.1.4.2. *Laptop computer*

A laptop computer has the same hardware components but is integrated into a single portable unit.

2.1.4.3. *Tablets and mobile devices*

Tablets, such as iPads, are often used in emergency services and other healthcare areas. Health care professionals (doctors and nurses) were the early adopters of tablets and smartphones due to their portability and advanced features. The majority of health care consumers are also able to use mobile phones effectively for video and audio conferencing with health care providers. Mobile technology allows an instant connection between the consumers and healthcare professionals to provide convenient care regardless of the location.

2.1.5. Software

Nurses may choose software applications that are simple, easily adaptable, and can provide uninterrupted communication with their clients. It is also important to choose the software applications which are most commonly used by the general public. Telemedicine practice guidelines (2020) and telepsychiatry operative guidelines (2020) also suggested the use of social media such as WhatsApp, Skype, Facebook, and so forth which are popular among the general public.

2.1.6. Digital camera

Digital camera technology allows a simple, inexpensive telenursing experience. It is an essential component of telenursing consultations. Thus, it is essential to have high-end, high-resolution digital cameras as they allow nursing professionals to take clear images

and share them with specialists at different locations. The way nurses present themselves on camera is extremely important during video consultations. Therefore, the camera has to be placed at eye-level. Active listening and maintaining eye contact (looking at the camera) is important to build rapport with the patients. If nurses are taking notes on history collection or complaints, it is necessary to keep the patients informed, lest that behavior be mistaken as distraction on part of the nurse.

2.1.7. Infrastructure

The infrastructure of the teleconsultation room should create an environment that allows nursing professionals to use technology in offering care to patients in remote areas.

2.1.7.1. *Location*

The room should be set up in a quiet location to avoid noise exposure. It is important to remember that, sound can be easily picked up by microphones and create difficulty in hearing for the remote participants. Preferably, the room should be situated away from noisy hallways, waiting rooms or restrooms and air-conditioners, to enable better sound quality. If possible, it is wise to select a windowless room to obtain better image quality and ensure privacy. Rooms with windows should have curtains or screens.

2.1.7.2. *Room size*

The teleconsultation room should be large enough as it affects the camera's field of view. This distance between the two walls may vary according to the type of clinical service being provided. Sometimes nurses would like to focus on the full view of the patient or only the relevant body part. So, the nurses need to select the room size accordingly.

2.1.7.3. *Room design*

The room should be designed in such a way to allow the nursing staff to enter and exit easily without disrupting the consultation process. There should be a facility to indicate any technical problems that exist during telenursing consultation.

2.1.7.4. *Location of windows*

The clients or nursing professionals should not sit with their back against the window as this causes backlighting and reduces image quality. If this is not possible, curtains should be fixed to reduce the backlighting effect. It is also recommended to use light blue or light grey colors on the walls to reduce the impact of lighting.

2.2. MODE OF COMMUNICATION

According to telemedicine guidelines (2020), Video, Audio, or Text (chat, messaging, email, fax, etc.) are the primary modes of communication. However, each one of these modes has their respective strengths and weakness with respect to offering appropriate nursing care. It is therefore important to understand the strengths, benefits as well as limitations of different technologies.

STRENGTHS AND LIMITATIONS OF VARIOUS MODES OF COMMUNICATION

Mode	Strengths	Limitations
VIDEO: Telemedicine facility, Apps, Video on chat platforms, Facetime etc.	<ul style="list-style-type: none"> Closest to an in person-consult, real-time interaction Patient identification is easier Nurses can see the patient and discuss with the caregiver and specialist doctors Visual cues can be perceived Inspection of the patient can be carried out 	<ul style="list-style-type: none"> Is dependent on the high-quality internet connection at both ends, else will lead to a sub-optimal exchange of information Since there is a possibility of abuse/misuse, ensuring the privacy of patients in video consults is extremely important
AUDIO: Phone, VOIP, Apps etc.	<ul style="list-style-type: none"> Convenient and fast Unlimited reach Suitable for urgent cases No separate infrastructure required Privacy ensured Real-time interaction. 	<ul style="list-style-type: none"> Non-verbal cues may be missed Not suitable for conditions that require a visual inspection (e.g. skin, eye, tongue examination), or physical touch Patient identification needs to be clearer, greater chance of imposters representing the real patient
TEXT BASED: Specialized Chat-based Telemedicine Smartphone Apps, SMS, WhatsApp, Google Hangouts, Facebook Messenger	<ul style="list-style-type: none"> Convenient and quick Documentation & Identification may be an integral feature of the platform Suitable for urgent cases, or follow-ups, consult with nurse colleagues, specialist doctors, and others No separate infrastructure required, Can be real-time 	<ul style="list-style-type: none"> Besides the visual and physical touch, text-based interactions also miss the verbal cues Difficult to establish rapport with the patient. Cannot be sure of the identity of the health care providers or the patient
ASYNCHRONOUS: Email Fax, recordings, etc.	<ul style="list-style-type: none"> Convenient and easy to document No specific app or download requirement Images, data, reports readily shared No separate infrastructure required More useful when accompanied by test reports and follow up and second opinions 	<ul style="list-style-type: none"> Not a real-time interaction, so just one-way context is available, relying solely on the articulation by the patient Patient identification is document-based only and difficult to confirm Non-verbal cues are missed There may be delays because the health care providers may not see the mail immediately

VoIP-Voice over Internet Protocol, **SMS**-Short Message Service (*Adopted from Telemedicine Practice Guidelines 2020*)

3. ETIQUETTE FOR TELENURSING PRACTICE

This section deals with expected professional behaviors in telenursing practice. The list given below is not exhaustive, rather, it includes some primary considerations for a successful telenursing consultation.

Do's	Don'ts
The RN Should	The RN should not
Environment	
Test the equipment (camera, internet microphones, speakers, etc) before a teleconsultation. Know where to get technical assistance.	Clutter the teleconsultation room.
Always have an alternate communication channel.	Worry if technology fails.
Ensure privacy.	Conduct telenursing consultation in noisy and open areas
Adjust the camera at eye level.	Look at the patient's face. Eye to eye contact is made with the patient by looking at the camera.
Ensure adequate light to visualize the patients.	Sit next to windows
Professional attire	
Wear comfortable and neutral-colored clothes	Wear bright or fluorescent colored clothes.
Effective communication	
Use a pleasant and normal tone of voice.	Shout or mumble to self.
Greet the patient, introduce self, and identify the person to whom they are speaking.	Blindly proceed with the teleconsultation. Identify the patient with valid documents.
Inform the clients about the telenursing process and communication issues before their initial telehealth encounter.	Give long explanations.
Listen actively without interrupting the clients	Speak to patients while they are talking (wait about two seconds).
Offer factual information.	Make premature conclusions concerning patients' health conditions.
Speak in lay language.	Use complicated medical terms.

Engage the patient. Nod and use open and attentive body language such as leaning towards the camera	Show any signs of stress or impatience as these facial expressions may not encourage patients to express themselves.
Observe for verbal, emotional and behavioral cues that can convey important client information (e.g., tone of voice, background noise, body language)	Eat, drink or chew gum during a telehealth session
Ask open-ended questions in a logical sequence to elicit patient-related information	Use closed-ended questions
End the conversation with appropriate pleasantries. Example: thank you, have a nice day, wish you speedy recovery...	Order or suggest to the patients
Professional Responsibility and Accountability	
Seek help and share knowledge.	Perform activities with which she/he is not competent.
Be accountable for the care they provide including errors	Be accountable for the care provided by other health care providers
Identify learning needs as technology is ever-changing in the health care field.	Ignore the technological advancements in telenursing practice.
Be clear about professional roles and responsibilities and be consistent with standards and guidelines.	Give inappropriate advice.
Report unsafe or unprofessional behavior of their professional colleagues to the authority.	Make excessive self-disclosure/secretive behaviour in their practice
Be aware of professional responsibility when using social media (Facebook, WhatsApp, videoconferencing, etc.).	Disclose any information or upload photos/videos of patients without their consent
Act as an advocate on behalf of their clients and ensure that their(patients') rights and interests are protected.	Disregard patients' health-related decisions even if those choices are detrimental to their health.
Maintain professional boundaries with their patients.	Receive any form of gift, favor, or gratification for providing necessary care.
Respect other health team members.	Encourage bullying and other types of negative workplace interactions.
Legal & ethical considerations	
Ask the patients how they would like to be addressed.	Address patients with pet names or short names without their consent.
Ensure the presence of family members especially while visual physical examination by the RMP.	Proceed for visual physical examination (especially when opposite genders are involved)

	without obtaining the consent of patient/family members.
Maintain confidentiality of patient-related information. Inform the client that other health care team members who are directly involved in their care will have access to personal health information.	Disclose patient-related information without his/her consent to any third-party including family members.
Listen to patients' concerns and involve them in treatment decisions.	Give suggestions or make decisions for the patient.
Empower the patients by providing appropriate information on their health condition.	Bombard patients with unnecessary information.
Ensure that the patient understands what they are consenting to undergo.	Assume that patients understand the medical terms in the consent form.
Safeguard that passers-by, casual intruders, and unauthorized personnel are not present in the area where audio or visual images are received.	Be inattentive to the patients.
Documentation	
Ensure that documentation is done at the end of each telenursing consultation.	Document the care provided by other health care providers.
Confirm that documentation reflects the nursing process.	Delete patient-related information.
Follow the principles of documentation (accurate and relevant, complete, up to date, organized logically and sequentially).	Use inappropriate (not widely accepted) abbreviations.
Ensure that documentation of patient care begins with date and time and ends with nurses' signature, RN/RM registration number and designation.	Document without nurses' signature and designation.

4. GUIDELINES FOR TELENURSING PRACTICE

Telenursing consultations need to be structured to provide optimal care to the patients. The following elements need to be considered before beginning any telenursing consultation (adopted from telemedicine guidelines, 2020).

1. Context
2. Identification of RN and Patient
3. Mode of Communication
4. Consent
5. Assessment and communication of the patient related information with RMP
6. Patient Management
7. Professional accountability and responsibilities of the registered nurse

4.1.CONTEXT

Registered nurses should exercise their clinical skills and professional judgment to decide whether a telenursing consultation is appropriate in a given situation or an in-person consultation is needed in the interest of the patient.

In this phase, the RN should make a cursory assessment of the patients and communicate with the RMP. After discussing with the RMP, the RN helps patients in deciding what type of care they need. Standard protocols need to be developed to help the RN in making decisions for the patients. However, protocols won't replace the training on telenursing. Whatever the context or situation, the registered nurse should *uphold the same standard of care as an in-person consultation*.

4.2. IDENTIFICATION OF THE REGISTERED NURSE AND THE PATIENT

4.2.1. In telenursing consultation, both patients and nurses need to know each other's identity.

4.2.2. Nurses should verify and confirm the patient's identity by name, age, gender, address, email ID, phone number, registered ID, or any other identification as may be deemed to be appropriate. There should be a checklist or a form to acquire the details of the patients.

4.2.3. The RN should ask for valid documents to confirm their age, height, and weight of the patients and explain to them the necessity of the same for prescribing medications by the RMPs. The nurses should confirm that adults are present with children during teleconsultation (below 18 years of age).

4.2.4. The RN should obtain consent from the patient/family member to transmit the patient-related data to the RMPs and other health team members.

4.2.5. The RN should display the registration number accorded to him/her by the State Nursing Council/Indian Nursing Council, in all electronic communication (WhatsApp/ email, etc.) and receipts.

4.3. MODE OF TELENURSING

4.3.1. The most commonly used modes of communication are Video, Audio, or Text (chat, images, messaging, email, fax, etc.). Their strengths, limitations, and appropriateness as detailed in Section 2.2 need to be considered by the nurses.

4.3.2. Mode of communication should be based on the patient's symptoms and preferences of the health care providers. There may be situations where a real-time consultation would be better to understand the context than an asynchronous exchange of information by the RN to the RMP. Therefore, the mode of technology can be decided by the health care providers depending upon the situation and patients' needs.

4.4. PATIENT CONSENT

Patient consent is necessary for teleconsultation. The consent can be implied or explicit depending on the following situations:

4.4.1. If the patient initiates the telemedicine consultation, then consent is **implied** (the patient has initiated the consultation).

4.4.2. Explicit patient consent is needed if:

- A Registered Nurse, Health worker, Registered Medical Practitioner (RMP) or a family member initiates a Telemedicine consultation.

- 4.4.3.** Explicit consent can be recorded in any form. The patient can send an email, text, or an audio/video message or consent form (Appendix-4). The patient also can state his/her intent on phone/video to the registered Nurse (e.g. “Yes, I consent to avail consultation via telenursing” or any such communication in simple words) and this must be saved in the patient’s records.

4.5 ASSESSMENT AND COMMUNICATION OF THE PATIENT RELATED INFORMATION WITH RMP

Registered nurses must collect adequate patient-related information to communicate with the RMP which enables the RMP to make appropriate decisions for the patient.

4.5.1. Patient’s Information

- The RN should collect patients’ history based on protocols and guidelines (SOPs). Auxiliary Nurse Midwives (ANMs) and other community health workers (ASHAs, Anganwadi teachers, etc) may not have adequate capacity to analyze the patient’s problems. Hence, they need to undergo a brief training on identification of the patient’s problems and how to communicate the same with the RMP in the higher center such as Primary Health Center or Community Health Center.
- The RN should make a detailed assessment of the patients based on the written protocols. This information can help the RMPs to rule out emergencies and positive patient outcomes.
- If in case physical examination or in-person consultation is critical for the patient, RN should facilitate the same with the RMP.
- The registered nurse should maintain all patient records including case history, investigation reports, images, treatment prescribed by the doctors, and care offered by nursing professionals, etc.

4.6. PATIENT MANAGEMENT: CLINICAL CARE, HEALTH EDUCATION& COUNSELLING, MEDICATION

4.6.1. Nursing management of the patient includes:

- Clinical care
- Providing *information and Health Education* related to the disease condition
- Offering necessary *Counselling* related to specific clinical condition; and/or
- *Reinforcing* about treatment regimen as prescribed by the doctor

4.6.2. Clinical care

- The RN often initiates teleconsultation with the RMP to provide the best possible care to the patients either at Health & Wellness Centers or in a community setting.
- The RN should offer nursing care to the patients as per the suggestions given by the RMP.
- Few of the nursing care activities include:
 - Monitoring the vital signs
 - Distribution of medicines as prescribed by the RMP
 - Wound dressing
 - Suture removal
 - Administration of IV fluids and medicines,
 - Facilitates referral to other health team members such as physiotherapists, speech therapists, dietitians, social workers as suggested by the RMP, etc.

4.6.3. Health education

The RN should

- Educate patients on lifestyle changes, diet, stress management techniques, etc.
- Use educational videos to educate patients to take care of themselves. For example. How to inject insulin for themselves, changing a colostomy pouch system, etc.
- Empower the patients by providing necessary information about the disease condition, so that they can make informed decisions, cope effectively with their illnesses, and assume greater responsibility for their health.

4.6.4. Counselling

- The RN should provide information about the disease condition, importance of medication adherence, follow-up visits, investigations that need to be done before the next visit with RMP and emotional support to patients and family members, etc.

4.6.5. Reinforcement of self-administration of medicines

- The RN should provide information about dose and route, time, frequency of the medications as prescribed by the RMP.
- The RN should distribute the medicines that are available at Health and Wellness Centers as per the prescription given by the RMP.
- The RN also should enquire with the RMP, if he/she has any concerns about the dose, route, side effects of the medicines.

In some cases, if RMPs have given standing orders to continue the medications and permitted the nurses in remote areas to distribute the medications according to their written order. The RN should confirm with the RMP the same and then distribute the medications as per the prescription. In telenursing practice

- It is necessary to develop written protocols and standards for telenursing practice regarding medication management.
- Nurses are legally liable for wrong advice, medication errors, etc
- Nurses need to update their knowledge on medications including the action, side effects, and interactions, etc.

4.6.6. Issue a Prescription and Transmit

- The RN should transmit or receive prescription in various digital format such as photo or scan the digital copy of a signed prescription or e-Prescription issued by the registered medical practitioner to the patient via email or any messaging platform.
- The RN should give a printed copy, if possible and explain the medications including action, duration, and side effects.
- In case the RN is transmitting the e-prescription directly to a pharmacy, he/ she must **ensure the explicit consent** of the patient that entitles him/her to get the medicines dispensed from any pharmacy of his/ her choice.

4.6.7. Documentation

RNs should document the care provided to the patients in their health records.

4.7. PROFESSIONAL ACCOUNTABILITY AND RESPONSIBILITIES OF THE REGISTERED NURSE

4.7.1. Nursing Ethics, Data Privacy & Confidentiality

4.7.1.1. Principles of nursing ethics, including professional norms for protecting patient privacy and confidentiality as per the INC Act, shall be binding and must be upheld and practiced.

4.7.1.2. Registered Nurse would be required to fully abide by the Indian Council Act 1947 (Professional Conduct, Etiquette and Ethics) and with the relevant provisions of the IT Act, Data protection and privacy laws, or any applicable rules notified from time to time for protecting patients' privacy and confidentiality and regarding the handling and transfer of such personal information regarding the patient. This shall be binding and must be upheld and practiced.

4.7.1.3. Registered Nurses will not be held responsible for breach of confidentiality if there is reasonable evidence to believe that the patient's privacy and confidentiality have been compromised by a technology breach or by a person other than RN. The RNs should ensure that a reasonable degree of care is undertaken while hiring such services.

4.7.1.4. Misconduct

The registered nurses are legally liable if their actions willfully compromise patient's care or privacy and confidentiality, or violation of prevailing laws. Some examples of misconduct in telenursing practice include:

- RNs insisting on Telemedicine, when the patient is willing to travel to a facility and/or requests an in-person consultation.
- RNs misusing patient images and data, which are especially private and sensitive (e.g. RN uploads an explicit picture of the patient on social media etc).
- RNs issuing prescription

- RNs giving inappropriate advice out of their professional boundaries.
- RNs are not permitted to solicit patients for telenursing through advertisements or inducements.

5. FRAMEWORK FOR TELENURSING PRACTICE

This section describes the framework for practicing telenursing either in the public or private health sector in the following scenarios:

1. Consultation between a registered nurse and registered medical practitioner at a SHC (Sub health Center) Health & Wellness Center
2. Consultation between a registered nurse and registered medical practitioner at a PHC (Primary Health Center) Health & Wellness Center
3. Consultation between a registered nurse and registered medical practitioner in a community setting
4. Consultation between a registered Nurse and registered medical practitioner in an emergency
5. Other situations

Essential considerations

- The **professional judgment** of registered nurses should be the guiding principle for all telenursing consultations. A registered nurse is well positioned to decide whether a technology based consultation is sufficient or a collaborative video consultation with RMP or an in-person consultation with RMP is needed. Nurses shall exercise professional discretion and not compromise on the quality of care.
- The **mode of communication** (video, audio, text) in a teleconsultation will be based upon the professional discretion and judgement of the RN to decide the best mode of communication to provide care
- The RN should not proceed with the consultation if patients are not interested or request an in-person consultation.
- The RN should remember that both **patients and nurses have the right to choose** to discontinue the teleconsultation.
- Telenursing consultation should not be anonymous. Both, the patient and the RN need to know each other's identity.

5.1. CONSULTATION BETWEEN REGISTERED NURSE AND REGISTERED MEDICAL PRACTITIONER AT A SHC (SUB HEALTH CENTER) HEALTH & WELLNESS CENTER

This section of guidelines deals with stepwise instructions to be followed in the process of teleconsultation between a registered nurse and a registered medical practitioner either in the private or public health sectors.

Proposed set up:

- The HWC at the Sub Health Centre level is accessible to the rural population within 30 minutes.
- This SHC Health and Wellness Center would be led by a Mid-Level Health Provider (MLHP). MLHP could be either an RN or an Ayurveda practitioner.
- These centers act as the first point of referral for the health care needs of the patients to PHC level Health and Wellness centers.
- If patient can afford, nurses can initiate teleconsultation with the RMPs in private health care set up also.

5.1.1. Teleconsultation process

The flow of the process is summarized in Flowchart-1 and the steps are detailed below.

1. Start of Consultation between patient and registered nurse

- The patient visits a health and wellness center at the Sub Health Centre level and approaches the registered nurse.

2. Patient identification and consent

- If the patient is visiting the HWC for the first time, then the registered nurse should enquire about the details of the patient such as name, age, address, email ID, phone number as per the protocols and guidelines.
- If the patient is visiting HWC for follow-up or with new health complaints, patient can be identified with previous health records.

- The RN should obtain consent from the patient for teleconsultation with the RMP through audio, video, or text mode.

3. Quick assessment by the RN

- The RN should inquire about the purpose of the visit and the health complaints of the patients.
- The RN should assess the patient's condition using the assessment forms which includes key details of the patient: age, gender, chief complaints, emotional status and previous medical history.
- The RN should further inquire about the presence of symptoms that require emergency interventions (Appendix 3).
- This key relative information helps the RN to communicate with RMP and to decide whether the patient requires immediate interventions.

4. In case of emergency, the following steps would be undertaken:

- If the patient requires immediate interventions, the RN should provide first aid/ immediate relief measures as suggested by the RMP and guide the patient for a referral to the nearest health care facility either govt (PHC or CHC) or private.
- The RN should document the same in the patient's record.

If the patient's condition does not require emergency intervention, the following steps would be undertaken:

5. Exchange of Information for Patient Evaluation

- If necessary, the RN must validate the patient information by the family members/caregivers. *The patient/caregiver shall be responsible for the accuracy of information shared with the nurse.*
- The RN should communicate the patient-related information (complaints, previous medical history, treatment, lab reports, etc) with the RMP at PHC or CHC.
- The RN should facilitate telemedicine consultation with the RMP. If the patient requests an in-person consultation with the RMP, the RN facilitates the same.

6. Start of a Teleconsultation with a registered medical practitioner

- The RN should initiate the teleconsultation for the patient with the RMP and communicate patient-related information.
- The RN should request consent from the patient or caregiver to switch on to video consultation if necessary.

7. Patient Identification (by RMP)

- The RMP also should confirm the patient's identity to his/her satisfaction by asking the patient's name, age, address, email ID, phone number, or any other identification that may be reasonable.
- The RMP should make her/his identity known to the patient.

8. Patient Consent (by RMP):

- RMP should confirm the patient's consent to continue the consultation

9. Patient Management

- The RN should identify patients' actual or potential problems and communicate the same with the RMP.
- Based on the needs of the patient and suggestions from the RMP, the RN should refer the patients to other health professionals.

The following activities would be carried out by the Registered Nurse:

Clinical care

The RN should

- Obtain e-prescription from the RMP
- Distribute the medicines as per the prescription provided by the RMP
- Facilitate referral to other health team members as per suggestions by RMP
- Provide nursing care based on the needs of the patient. Few of the nursing procedures include but not limited to
 - Monitoring vital signs
 - Wound dressing
 - Suture removal

- Administration of IV fluids or Injections as per the prescription provided by the RMP

Health Education & Counselling

The RN should

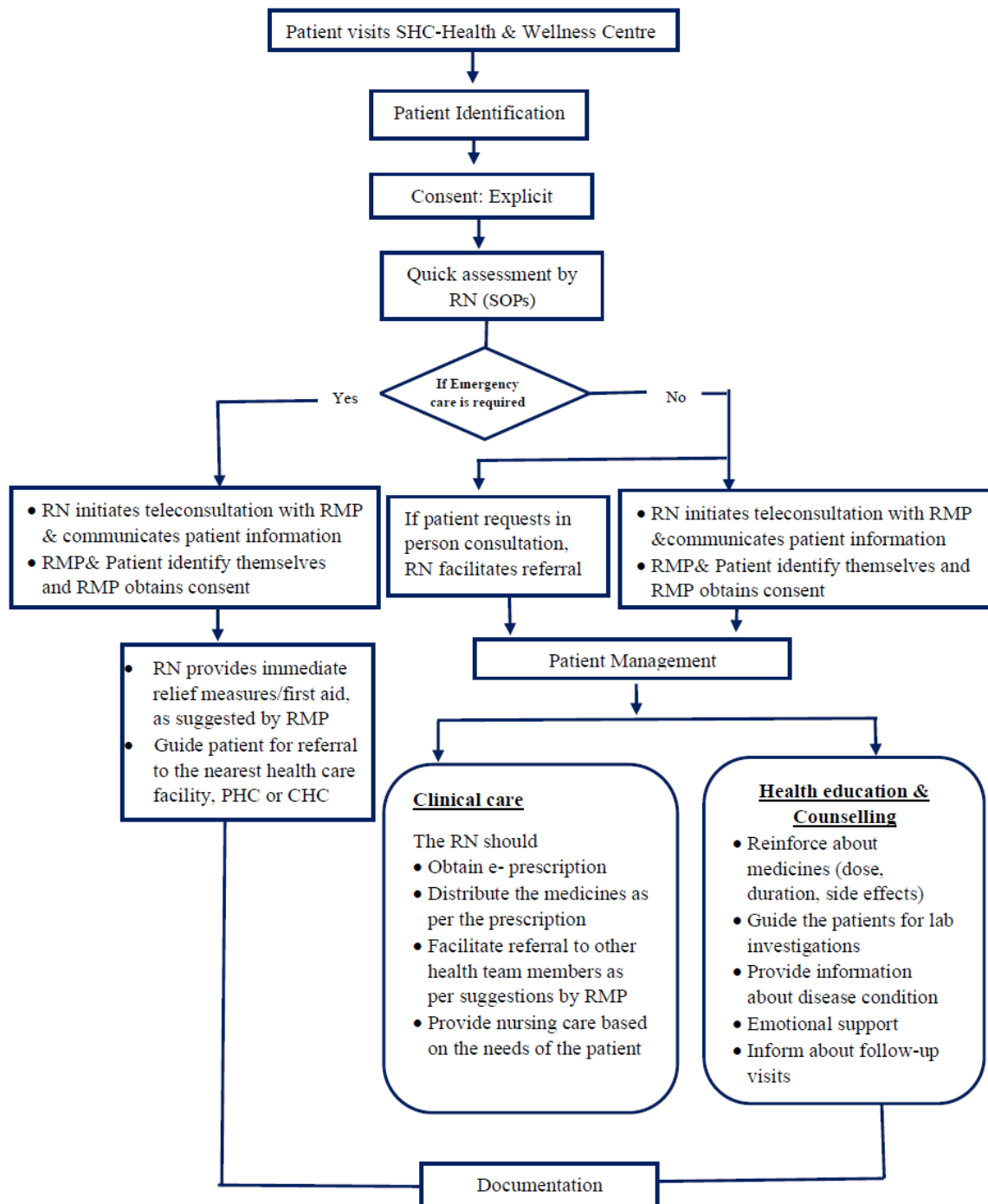
- Provide information about the disease condition
- Reinforce medicines (dose, duration, side effects)
- Guide the patients for lab investigations for the next visit
- Educate about lifestyle changes including diet, sleep, exercise, relaxation methods, and so on.
- Listen to patients' concerns and provide support as necessary
- Clarify the concerns of the patients/family members if any
- Empower the patients to take care of themselves by providing necessary information
- Inform about a follow-up visit

10. Documentation

- The RN should document the same in the patient's health record.

The RN may **advise** the patient/caregiver to call him/her back if the symptoms worsen, or new symptoms arise or if there is any other problem; the RN may follow-up with the patients himself/ herself if required.

Flow chart 1. Consultation between a registered nurse and registered medical practitioner at SHC Health & Wellness Centres



5.2. CONSULTATION BETWEEN THE REGISTERED NURSE AND REGISTERED MEDICAL PRACTITIONER AT A PHC (PRIMARY HEALTH CENTER) HEALTH & WELLNESS CENTER

Health and Wellness Centers at the PHC level led by registered medical practitioners and are responsible for comprehensive health care services delivered through SHC HWCs and through the PHC itself.

5.2.1. Proposed Set up

- The RN at a PHC or from a Health & Wellness Center either in the public or private health establishment can initiate and coordinate the telemedicine consultation for the patient with an RMP at a higher center at the District or State or National level.

5.2.2. Teleconsultation process

The flow of the process is summarized in Flow chart 2 and the steps are detailed below:

1. Start of consultation between patient and registered nurse

- The patient visits the PHC or Health and Wellness Center or to a private health establishment and approaches the RN.

2. Patient identification and consent (By RN)

- If the patient is visiting the HWC for the first time, then the registered nurse should enquire about the details of the patient such as, name, age, address, email ID, phone number as per the protocols and guidelines (SOPs).
- If the patient is visiting the HWC for follow-up or with new health complaints, patient can be identified with previous health records.
- The RN should obtain consent from the patient for teleconsultation with the RMP through audio, video, or text mode.

3. Quick assessment by the registered nurse

- The RN should assess the patient's condition based on the key information which includes; age, gender, chief complaints and previous medical history.

4. In case of emergency, the following steps would be undertaken:

- If the RN suspects that the patient requires emergency intervention, she/he should facilitate in-person consultation of the patient with RMP and provide immediate relief measures/first-aid as suggested by the RMP. The RN should guide the patient/family member to the nearest Govt or private health care facility.
- If in case the RMP is not available at PHC HWC, the RN may initiate teleconsultation with the RMP either from public or private health establishment.
- The RN must communicate patient-related information with the RMP and provide immediate relief measures/first-aid as suggested by the RMP. The RN should guide the patient/family member to the nearest Govt or private health care facility.

If the patient's condition does not require emergency intervention, the following steps should be undertaken:

5. Exchange of information for patient evaluation

- The RN should facilitate in-person consultation of the patient with RMP at PHC or at Health & Wellness Center.
- The RN must communicate the patient-related information (complaints, previous medical history, treatment, lab reports, etc) with RMP.

If in case, RMP is not available at PHC HWC, then the following steps should be taken:

6. Start of a Teleconsultation with the registered medical practitioner

- The RN should initiate the teleconsultation for the patient with the RMP and communicate patient-related information.
- The RN should request consent from the patient or caregiver to switch on to video consultation if necessary.

7. Patient Identification (by RMP)

- The RMP also should confirm the patient's identity to his/her satisfaction by asking the patient's name, age, address, email ID, phone number, or any other identification that may be reasonable.

- The RMP should make her/his identity known to the patient.

8. Patient Consent (by RMP):

- RMP should confirm the patient's consent to continue the consultation

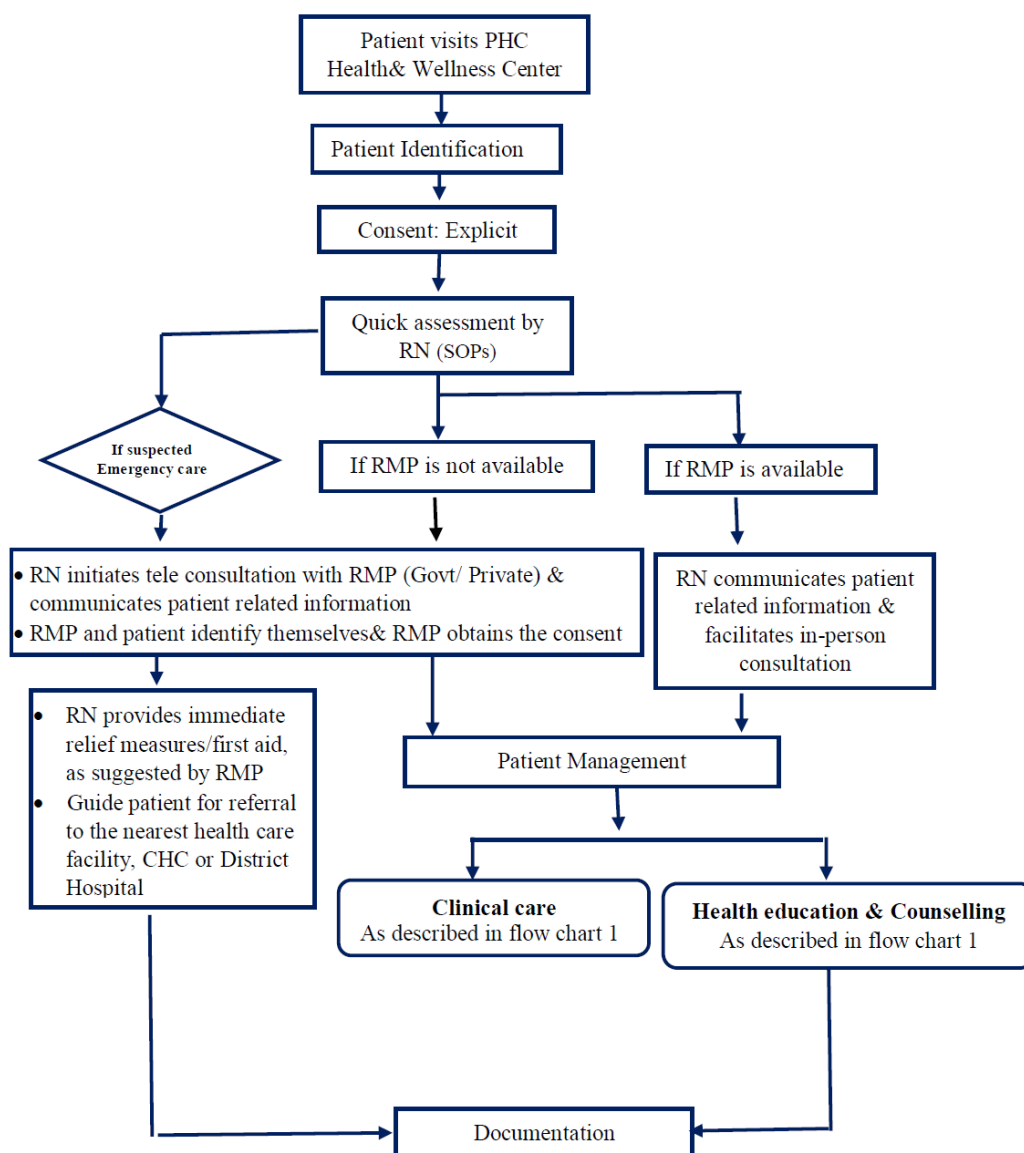
9. Patient Management by the RN

- The nursing management of the patient as enunciated in the scenario of consultation between the registered nurse and registered medical practitioner (5.1.1)

10. Documentation

The RN should document the same in the patient's records with his/her signature, time and date.

Flow chart 2. Consultation between a registered nurse and registered medical practitioner at a PHC Health & Wellness Center



5.3. CONSULTATION BETWEEN THE REGISTERED NURSE AND REGISTERED MEDICAL PRACTITIONER IN A COMMUNITY SETTING

Registered Nurses and Registered Auxiliary Nurse Midwives (RANMs) often make home visits and are aware of the health status of the people living in their respective areas.

5.3.1. Proposed setup

- This section discusses the consultation between RANM/RN and RMP in a community setting which includes health camps, home visits, mobile medical units, or any community-based interaction either from public or private health sector.

5.3.2. Teleconsultation process

The flow of the process is summarized in Flow chart 3 and the steps are detailed below:

1. Patient identification

- If the RN is visiting the patient for the first time, he/she should enquire about the details of the patient such as name, age, address, email ID, phone number as per the protocols and guidelines (SOPs).
- If in case the RN is visiting the patient for follow-up, then he/she should identify the patient from patient's health record.

2. Consent (By RN)

- The RN should obtain consent from the patient/family members to assess physical and mental health status of the patient and for teleconsultation with the RMP if necessary.

3. Quick assessment by RN

- The RN should introduce himself/herself and get the required information about the purpose of the visit.
- The RN should assess the health status of patients and inquire for any new complaints based on the protocols and guidelines.
- If no new complaints, the RN should provide routine nursing care to the patient based on the needs of the patient as described in section 5.5.1.

4. In case of emergency, the following steps should be undertaken:

- If the patient requires immediate intervention, the RN should obtain consent from the patient/family member.
- The RN should provide first aid/ immediate relief measures as suggested by the RMP and guide the patient for a referral to the nearest health care facility either govt (PHC or CHC) or private.
- The RN should document the same in the patient's record.

If the patient's condition does not require emergency intervention, the following steps should be undertaken:

5. If the patient requires evaluation by the RMP, the following steps should be undertaken:

- If the patient has new complaints or requests teleconsultation with RMP or if the RN has any doubts regarding patient care such as dose of the medication, presence of side effects of the medicines, etc, then the RN should initiate teleconsultation with the RMP.
- The RN should request consent from the patient or caregiver to switch on to video consultation if necessary.

6. Start of a Teleconsultation with the registered medical practitioner

- The RN should initiate the teleconsultation through audio, video, or text mode with RMP for the patient and communicate patient-related information with the RMP.

7. Patient Identification (by RMP)

- The RMP also should confirm the patient's identity to his/her satisfaction by asking the patient's name, age, address, email ID, phone number, or any other identification that may be reasonable.
- The RMP should make her/his identity known to the patient

8. Patient Consent (by RMP):

- RMP should confirm the patient's consent to continue the consultation

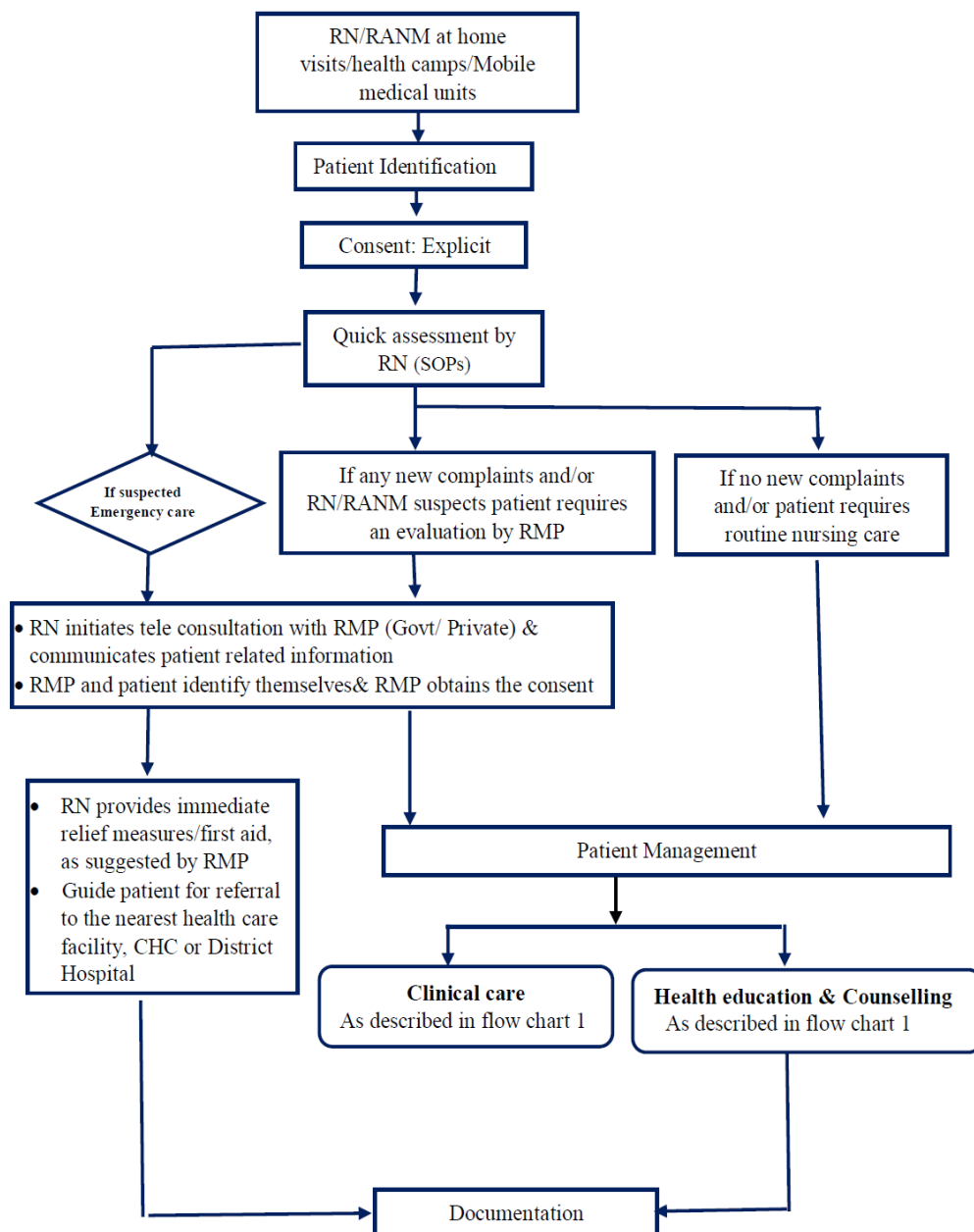
9. Patient Management by the RN

- The nursing management of the patient as enunciated in the scenario of consultation between the registered nurse and registered medical practitioner (5.1.1)

10. Documentation

The RN should document the same in the patient's records with his/her signature and date.

Flowchart 3. Consultation between a registered nurse and registered medical practitioner in a community setting



5.4. CONSULTATION BETWEEN THE REGISTERED NURSE AND REGISTERED MEDICAL PRACTITIONER IN EMERGENCY

This section describes teleconsultation between a registered nurse and a registered medical practitioner in a prehospital emergency.

5.4.1. Proposed set up

- The comprehensive Emergency Medical Services (EMS) model in India is “108 Ambulance Service” to provide pre-hospital emergency care from event occurrence to evacuation to an appropriate health care facility within 20 minutes.
- It is recommended that the telemedicine device (microphone, speakers, a screen, and a 360° view camera) to be securely fixed to the ceiling of the ambulance. It allows bidirectional audio-visual communication between the registered nurse and registered medical practitioner.
- The ambulance should be well-equipped with emergency medicines and cardiac monitor and defibrillator to provide Basic Life Support (BLS), or Advanced Life support (ALS) depending on the patient’s condition.

5.4.2. Teleconsultation process

The flow of the process is summarized in Flow Chart 4 and steps are detailed below.

- In case of an emergency (Road Traffic Accident, heart attack, stroke, seizures, breathing difficulties, pregnancy, and any other medical emergencies), the patient or the bystander should initiate a call to a three-digit emergency number ‘108’.
- A specially trained communication officer receives the call at the call center. On receipt of the call, he/she would collect critical information related to the place, location, landmark, number of individuals involved, and the type and seriousness of emergency.
- Depending upon the criticality, an ambulance will be dispatched and the call center should locate the nearest health care facility to provide primary care for the patients.

1. Communication of the information with the RN

- The call center staff should alert the EMS at a nearest health care facility and communicates the patient related information with the RN.

2. Patient identification and consent (By RN)

- The RN should confirm the patient's identity by asking his/her name, age, address, email ID, phone number, or any other identification that may be reasonable.
- The RN should obtain verbal consent from the patient/bystander to proceed with the teleconsultation.

3. Start of telenursing consultation

- The nurse should initiate teleconsultation either with the patient or bystander. Real-time video communication can be ideal to assess the situation of the patient. This enables the RN to arrive with expectations regarding the types of injuries or situations they may encounter.
- The RN should give pre-arrival instructions to the caller/bystander based on the needs of the patient after communicating the patient information with the RMP.

4. On-scene triaging of patients

- The RN should assess the scene for the patient's safety.
- The RN must assess the adequacy of Airway, Breathing, Circulation, Disability (ABCD), level of consciousness, the extent of external bleeding, and any other health emergencies.

5. If incase RMP is available at a nearest health care facility, the following steps should be undertaken:

- If incase a health care facility (Govt or private) is nearby and the RMP is available, then the RN should communicate patient information with the RMP through audio, video, or text messages after obtaining consent from the patient/bystander and provide immediate relief measures or first aid as suggested by the RMP and accompany the patient to the nearest health care facility.

6. If incase RMP is not available and/or health care facility is faraway, the following steps would be undertaken:

- The RN should initiate teleconsultation with the RMP after obtaining consent from the patient/bystander.

7. Patient identification (By RMP)

- The RMP should confirm the patient's identity to his/her satisfaction by asking the patient's name, age, address, email ID, phone number, or any other identification.
- The RMP should make his/her identity known to the patient/ bystander.

8. Consent by Registered Medical Practitioner

- RMP should confirm the patient's consent to continue the consultation

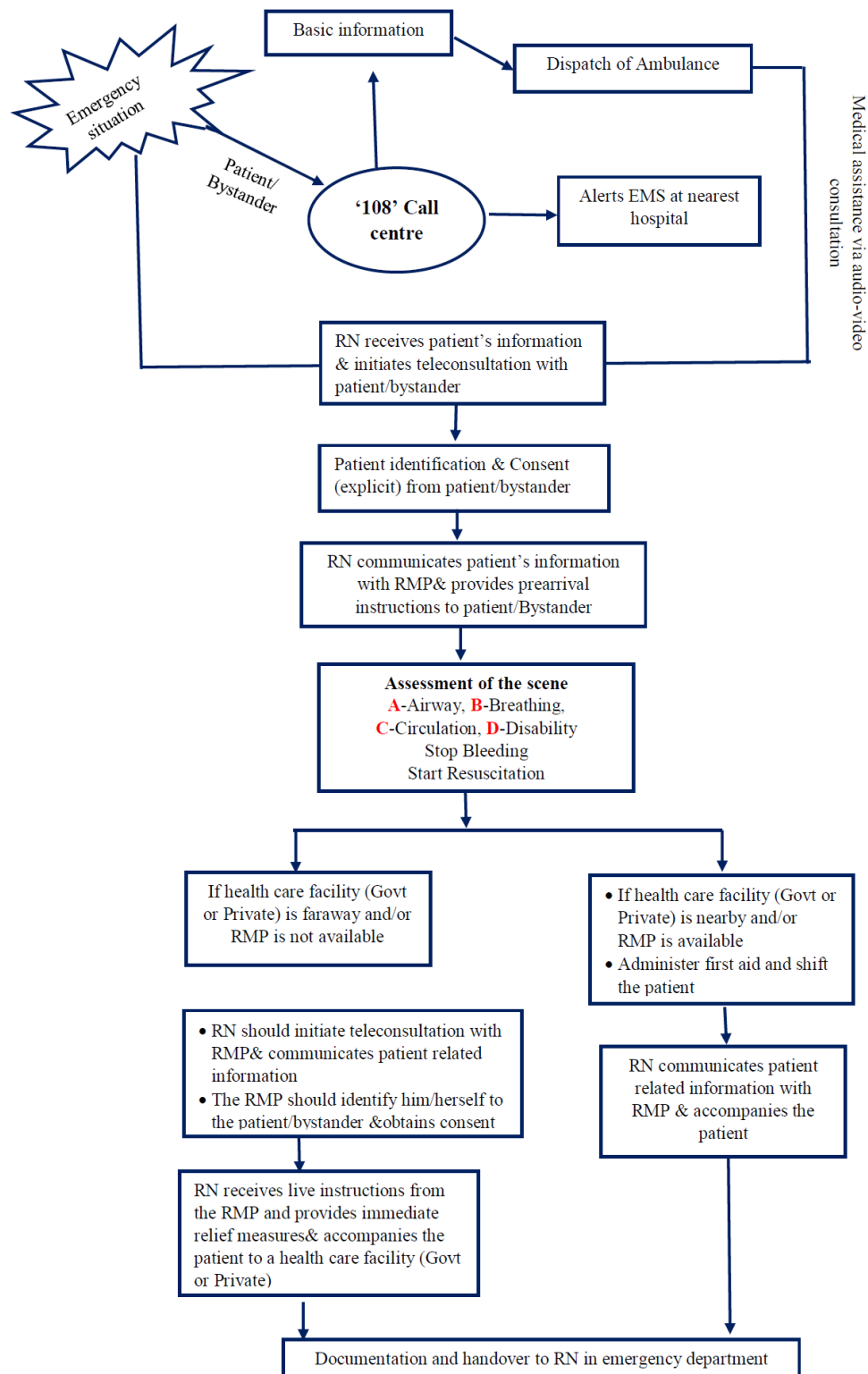
9. Patient Management

- The RN should initiate a bidirectional video consultation with the RMP which enables him/her to visualize the scenario, talk to the patient/bystander, and help the RN in establishing the priorities for immediate care. If video consultation is not possible, he/she can use an alternate mode of communication (audio, voice, or text).
- The RN should communicate patient-related information such as blood pressure, respiration, oxygen saturation, level of responsiveness, and any other health-related information. If possible, the RN can send and transmit the patient-related data through technological devices.
- The RMP should give live instructions to the RN to perform basic procedures, administration of medications, and transferring of the patient to the nearest facility.
- In certain instances, if the patient requires tertiary care and may benefit from bypassing the nearest health care facility, then the patient may be transported to the closest specialized hospital.

10. Documentation and handover to RN at the emergency department

- The RN should make necessary documentation including the reason for referral, history, drug allergies, procedures performed, drug administration, and the response of the patient to the treatment.
- The RN should inform the patient/bystander about the identity of the receiving nurse and the RMP who will be involved in providing patient care.
- The RN should communicate patient-related information along with documented charts.

Flowchart 4. Consultation between a registered Nurse and registered medical practitioner in an emergency



5.5. OTHER SITUATIONS

Telenursing provides an array of opportunities to the nurses as they provide health care services across the lifespan. The following are the few situations where the nurses can provide telenursing services to various stakeholders.

1. E-Home visits

The RN should make e-home visits to patients who are immobilized or live in remote areas and with chronic illnesses. The RN can visit several patients in a short period (10-12 patients per day). The activities of the RN include:

- The RN should assess the physical and mental health of the patients and can make a timely referral if needed.
- The RN should remind about lab investigations before the next visit, the due date for the next visit, etc.
- The RN should monitor regularly whether patients are adhering to medications. If not, he/she reinforces the importance of medication adherence.
- The RN empowers the patients in taking care of themselves by providing adequate information.

2. Post-hospitalization

- The RN should make e-home visit preferably in the first 12 -24 hrs. after the discharge from the hospital.
- The RN should guide the patients in taking care of the postoperative wounds with aseptic techniques.
- The RN should encourage the patients in self-reporting of the symptoms.
- The RN can include discharge summary advice as educational videos in the patient's language which can increase discharge advice compliances. It is also advised to include a contact number for telenursing consultation in the discharge summary sheet so that patients can consult nursing professionals for the required care.

3. Maternal and Child health nursing care

The RN should educate antenatal and postnatal mothers on nutrition, self-care, mental health, exclusive breastfeeding, preparing first-time mothers when to go to the hospital and how to reduce labor-related anxiety, etc. The RN can form support groups to provide education and share their experiences.

4. Geriatric nursing care

- The RN should educate elderly people on how to use mobile phones to report their complaints with health care providers.
- The RN should assess for chronic illnesses, age-related disabilities and offer support as necessary.
- Providing care at home and triaging with RMP through telemedicine, as and when required

5. Mental health

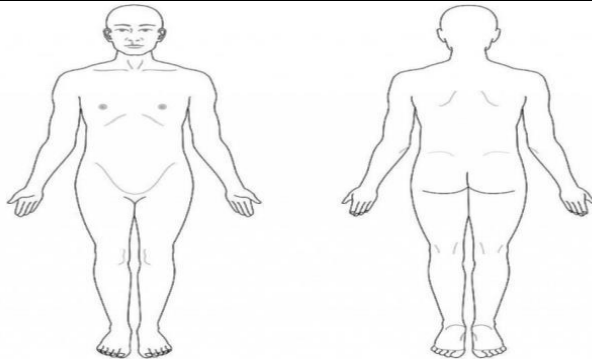
- The RN should help the patients with suicidal ideas and depression by building trusting relationships.
- The RN should motivate the patients in the cessation of tobacco consumption, alcohol relapse, and adherence to antipsychotic treatment.

CONCLUSION:

This document on Telenursing guidelines is an attempt to equip the most critical healthcare professionals in providing care through the use of technology that would help basic healthcare facilities reach the unreached thus far. They would play a pivotal role in Health & Wellness Centers which is an ambitious plan by the Government of India in providing care for rural India. This guideline is for both public and private health establishments.

Annexures

Appendix-1

Telenursing Documentation Form (Optional)	
Name of the patient: Name of the Mother/Father/ Guardian:	
Gender: M F DOB: Age:	Phone number Alternate number Email id:
Caller: Patient/others If others, Relationship with the patient: Date Time	Address: City: Pin Code: State:
Height: Weight:	Vital signs (if possible) Temperature Pulse Respirations Blood pressure
LMP (If applicable):	Pregnancy: Breastfeeding: Y N Immunization: Y N Next Due Date
Chief complaints (Duration)	
Key symptom History (Based on the symptoms Appendix 3)	
Family History of medical illness: Diabetes/Hypertension/Hyperthyroidism/Tuberculosis/Other	
Personal history Medical diagnosis (If applicable) <ul style="list-style-type: none"> Currently on treatment Y N Allergies Y N Recent Hospitalization Y N H/O substance abuse Y N H/O Domestic violence Y N 	If yes Name of the drug, dose, frequency, route, last visit to a specialist doctor If yes Food, Medication, Environment, Others If yes The reason, DOA, DOD, current health status If Yes Elaborate If Yes Elaborate
Use the diagram to mark, if there are any injuries/pain/symptoms to help the doctor understand and localize the patient's problems:	
Impression:	
Patient's willingness to follow the advice Y N	If No Precautions explained Y N

Appendix-2

Follow -up Telenursing Documentation Form (Optional)	
Patient Name:	ID No:
Mother/Father/Guardian Name:	Age DOB Gender
Height: Weight:	Vital signs (if possible) Temperature Pulse Respirations Blood pressure
Diagnosis:	
Review of signs and symptoms	
Assess for new symptoms	
Medication adherence Y N Review the medications with patient/family member Medications updated in EHR Y N Reinforce the importance of medication adherence with patient/ family member	If No Reason Name of drug Dose Route Side effects
Laboratory Investigations	If required before consulting the physician, provide guidance and advice
Date of appointment with physician:	
Preferred mode of telenursing consultation:	Preferred time
Time call ended	
Signature of the RN Date:	

Appendix 3

‘Red flag’ symptoms for emergency referral

- **Chest pain**
 - Chest discomfort often described as the feeling of squeezing or tightness
 - Radiating pain to the neck, jaw, and left arm.
 - It can be associated with palpitations, breathlessness, nausea, vomiting, dizziness, or sweating.
- **Loss of Consciousness for any reason**
 - Dysfunction of the heart, orthostatic hypotension, falls, seizures
- **Shortness of breath**
 - Intense chest pain
 - Need for air or air hunger
- **Unusual bleeding**
 - Blood in Vomitus (Peptic ulcers, gastric cancer, oesophageal cancer)
 - Blood in the stool (rectal cancer, colon cancer)
 - Blood in the urine (Kidney stones, Kidney infections, Bladder cancer)
 - Coughing up blood (lung cancer, pulmonary edema, tuberculosis, pneumonia, trauma to the lungs)
 - Post-menopausal bleeding (cervical cancer)
 - Bleeding disorders
- **Unexplained weight loss (loss of more than 5% of body weight unintentionally within 6-12 months)**
 - Health conditions such as hyperthyroidism (high thyroid hormone levels), diabetes mellitus, food intolerances, malabsorption, cancer, heart failure, and intake of certain medications.
- **Sudden and severe headache**
 - May be associated with nausea, vomiting, or loss of consciousness.
 - Life-threatening conditions such as bleeding in the brain due to the rupture of an artery, a blood clot in the brain, meningitis or extremely high blood pressure
- **High or Persistent fever above 103°F**
 - Urinary tract infection, pneumonia, endocarditis
 - Leukemia or lymphoma
- **Symptoms of stroke**
 - Severe headache
 - Sudden confusion
 - Sudden weakness or numbness of the face, hands, and legs

- Sudden blurring or loss of speech, seizures
- Dizziness and loss of coordination
- Severe Abdominal Pain
 - A sudden or severe abdominal pain is most often an emergency. It could be due to Rupture of an aneurysm of the abdominal aorta
 - Perforation of the stomach or intestines
 - kidney stones
 - Inflammations like appendicitis, diverticulitis, and cholecystitis, or ischemia of the intestines (reduced blood flow to the intestines).
- Suicidal thoughts and behaviours

Note: *When assessing the severity of the symptoms, age, gender and associated medical illnesses to be considered*

Appendix-4
INFORMED CONSENT FORM

I Mr/Ms/Mrs _____ S/o _____
would like to state that, I have understood the information provided regarding telemedicine. I
hereby give my informed consent for the use of telenursing consultation in my health care. At
present, I am located at _____

I understand that I have the right to withhold or withdraw my consent to the use of
Telenursing in the course of my care at any time, without affecting my right to future care or
treatment in any manner.

I hereby authorize Mr/Ms/Mrs _____ S/o _____ and
related to me as _____ (relationship) to represent me.

He/she will represent and participate in my healthcare through telemedicine in the
course of my diagnosis and treatment. I understand and accept that there are risks and
benefits in assigning a representative for my healthcare.

Signature of patient's Representative _____ Date: _____

Signature of patient _____ Date: _____

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Reviewers

We thank the following experts for reviewing the draft guidelines and for their constructive suggestions

- Dr Sailaxmi Gandhi, Professor& Head, Department of Nursing, National Institute of Mental Health and Neuro Sciences (Institute of National Importance), Bengaluru.
- Dr. Prasanthi Nattala, Additional Professor, Department of Nursing, National Institute of Mental Health and Neuro Sciences (Institute of National Importance), Bengaluru.
- Dr. Radhakrishnan G, Associate Professor, Department of Nursing, National Institute of Mental Health and Neuro Sciences (Institute of National Importance), Bengaluru.
- Dr Deepak Agrawal, Professor, Department of Neurosurgery, All India Institute of Medical Sciences, New Delhi.
- Dr. Chethan Basavarajappa, Assistant Professor, Department of Psychiatry, National Institute of Mental Health and Neuro Sciences (Institute of National Importance), Bengaluru.
- Dr.Paridhijah, Executive Director, Foundation for research and health systems, Bengaluru.
- Dr.Hemalatha, Principal, Universal College of Nursing, Bengaluru.
- Dr Shobha Rani, National Forensic Mental Health Service,Central Mental Hospital, Dundrum, Dublin.
- Ms. Metilda Robin, Senior Nursing Officer, All India Institute of Medical Sciences, New Delhi.
- Prof. Girijamba Devi, Principal, AECS Maruthi College of Nursing, Bengaluru.
- Mr.James Paul, Senior Nursing Officer, Telemedicine Centre, National Institute of Mental Health and Neuro Sciences (Institute of National Importance), Bengaluru.

