3 Application of Telemedicine in the Management of Cancer

3.1 Introduction

The burden and spectrum of disease in India has witnessed a major transition from predominantly infectious diseases and malnutrition to Non-Communicable Diseases (NCD), during the last two decades. Among the NCDs, cancer is emerging as a significant public health problem in India due to life style and environmental factors. As per the recent National Cancer Registry Programme (NCRP) report 2020, cancer burden in India was 1.26 million cases in 2016, 1.39 million in 2020 and expected to increase to 1.57 million cases by 2025 (17). Despite significant progress made in the field of health care a number of challenges related to cancer management still need to be addressed. Major areas of concern are limited health care infrastructure, resource constraints and shortage of oncology workforce. Access and affordability to health care is a major issue of concern for a significant proportion of Indian cancer patients. Recently many major health care policy initiatives were implemented by the Government of India for capacity building, increasing access and affordability through government sponsored health insurance schemes. There is a need to explore innovative methods, including leveraging technology to further strengthen cancer care services in India. Telemedicine is one of the promising options with great potential in the field of oncology.

3.2 Aims & Objectives

- To prepare cancer specific, scientifically acceptable, logistically feasible, ethically and legally tenable, patient centric and user-friendly guidelines for practicing telemedicine in cancer care.
- To facilitate mainstreaming of telemedicine in consonance with Govt of India digital health initiative and telemedicine guidelines issued by MCI, MOHFW
- To prepare a generic framework for telemedicine suitable for any cancer and subsequently expand to a tailored guideline for specific cancers.
- To develop guidelines for telemedicine feasible for implementation by majority of the cancer centres including private and government hospitals from rural and urban areas with currently available technologies and resources.
- To protect and safeguard the interests of patients as well as doctors.

3.3 Challenges of Telemedicine in Cancer

- Unlike other NCDs cancer comprises a diverse group of diseases involving different organ systems.
- The clinical presentation and trajectory of the disease course varies widely depending on stage of presentation and organ system involved.
- Most of the cancers in the current era are treated with a multidisciplinary treatment approach involving surgical, medical, radiation and palliative care specialities.
- Due to lack of structured referral system, cancer patients can present to diverse types of healthcare setups for diagnosis and treatment.
- Majority of the cancer treatments take few months to complete and there is a need for life long follow-up and surveillance (18).

3.4 Benefits of Telemedicine in Cancer Care

- Telemedicine has the potential to improve access and affordability (mainly reducing costs involved in follow-up visits and surveillance) of cancer care in India.
- One of the main goals of telemedicine is to reduce unnecessary hospital visits of patients to decrease patient burden and avoid overcrowding of hospital premises. This will result in better utilization infrastructure and human resources for productive activities.
- Strengthening primary and secondary level healthcare setups for early detection, referral and post treatment follow-up of cancer patients at local level.
- Less financial burden for the patient and family members due to decreased number of hospital visits (19).
- **Facilitate multidisciplinary tumor board consultations and seeking expert opinion for management of difficult and rare cases.**

3.5 Scope of Telemedicine consultations in Oncology

Telemedicine can be utilized across cancer care continuum starting from prevention, screening, diagnosis, treatment and rehabilitation to palliative and end of life care.

There are certain hospital visits where physical presence of the patient is mandatory and a good proportion of hospital visits related to awareness, education, counselling and follow-up can be shifted to a telemedicine platform.

Based on need for Tele Consultation

a) Prevention & Screening
    i. Screening (Review of reports eg. Mammogram)
    ii. Health Education
    iii. Health Awareness
    iv. Genetic Counselling
b) Diagnosis
    i. Ordering investigation
    ii. Review of reports
c) Treatment
    i. Virtual tumour board for treatment planning
    ii. Pre-treatment counselling (after first physical visit)
        1. Surgery
        2. Systemic therapy
        3. Radiation therapy
        4. Palliative care
d) Follow-up & Rehabilitation
    i. Post treatment surveillance for long term effects of treatment & relapse of disease
    ii. Physical & psychological rehabilitation of cancer patients

e) Referral
    i. Primary or secondary care setup to tertiary care centre for treatment.
    ii. Tertiary care centre to secondary or primary care setup for follow-up
f) Second opinion
    i. Diagnosis – pathology & radiology review
    ii. Treatment related consultations for expert opinion
g) Palliative Care & End of Life Care

3.6 Specialty wise Telemedicine Guidelines for Cancer

This section deals with specific issues related to various specialities dealing with cancer. A general framework for managing any type of cancer is presented with description of clinical scenarios where telemedicine can be used and where it should not be used. Section related to follow-up, referral and second opinion of cancer patients is common to all specialities and has been presented at the end of specialty wise sections.

3.7 Surgical Oncology

Surgery plays a major role in the diagnosis and management of cancer patients and significant number of cancer patients require some kind of surgical intervention during the course of treatment. **Physical presence is needed for any surgical intervention** but there is an immense potential of telemedicine especially in fields related to surgical education, treatment planning, perioperative surgical consultations, counselling, post - surgery follow-up and rehabilitation.

3.7.1 Clinical Scenarios Where Telemedicine can be used

First consultation

- A patient may contact a surgeon on a telemedicine platform for his complaints and share his investigations and treatment records. Based on the complaints of the patient and available investigations, surgeons may decide to recommend further investigations and / or fix a hospital visit appointment for clinical evaluation on a telemedicine platform.
- Once the diagnosis and staging are confirmed the surgeon may discuss the case through a virtual tumor board to decide the appropriate management plan in the best interest of the patient.

Follow-up consultations

For cancer patients planned for surgery, the following interactions can be managed through telemedicine platform to reduce hospital visits by the patient-

Preoperative counselling

- The patients and the primary caregivers must be explained in detail regarding the type and extent of surgery, expected outcomes including the possibility of complications using images and videos.

- Discussion regarding the expenses involved for surgery and various financial aid and insurance options that are available can also be discussed over teleconsultation.

Anaesthesia review and assessment

- The patient who is scheduled for surgery can have an online consult with the anaesthetist for advice regarding the investigations, review of investigations and pre-habilitation protocols. One physical visit is mandatory for assessment of fitness.

Preoperative optimization

- Telemedicine consultations are especially useful for preoperative optimization of the patients planned for a surgical procedure.
- A multimodal intervention, consisting of a standardized fitness program, nutrition supplementation, smoking cessation can be given through the telemedicine portal to optimize the condition of the patients.
- Online interaction with the physician can be facilitated to address any co-morbid conditions like diabetes mellitus, hypertension, etc.

Appointment for surgery and admission

- The patient may be given an appointment for the surgery using a telemedicine platform and information regarding admission procedure can also be provided through telemedicine platform.

Post-operative care

- Post-operative wound monitoring, care of drains and tubes and physiotherapy can be managed through a telemedicine portal and patients can be called for managing major wound complications and suture removal etc. The active and passive movements of physiotherapy can be demonstrated once in the ward and subsequent teleconsultations can be carried out.
- Video links depicting some minor procedures like - suctioning, tracheostomy tube care, colostomy bag change, feeding tube care and dietary advise etc. can be shared with the patient and their primary care providers for effective management at home.

Review of Histopathology reports for Adjuvant therapy planning & Referral

- A surgeon may discuss the postoperative histopathology report in a virtual tumor board to decide the adjuvant treatments.
- Adjuvant treatment if decided can be communicated to the patient and appointments can be fixed with radiation or medical oncology specialists through telemedicine.
- If the patient needs to be referred to higher centre, telemedicine can be used for referral. A complete clinical summary must also be sent along with the referral.

Genetic counselling for patients with hereditary or familial cancers

- Patients and relatives who have a strong family history of cancer who are at a higher risk of developing cancers can be counselled through telemedicine portal for education, pre-test counselling, advise genetic testing, post-test counselling and to discuss various interventions including pros and cons of risk-reducing surgery.

3.7.2 Clinical Scenarios Where Telemedicine should not be used

- Telemedicine consultations have no role in the management of patients with surgical emergencies and prompt hospital care for further management must be emphasized upon.
- Tele surgery from remote location is not under the purview of these guidelines.
- Though a patient can be informed about the nature of the surgery and possible benefits/outcomes, a formal informed *written* consent is mandatory before undertaking any surgical procedure for documentation purposes after the hospital admission.
- No surgical decision must be made based on the interaction with the patient on a telemedicine platform. An in-person visit by the patient for a diligent clinical examination is essential for any surgical decision.

3.8 Medical Oncology

Majority of cancer patients need medical oncology consultations for systemic therapy planning and treatment. Medical oncology deals with a wide spectrum of chemotherapy, hormonal and biologic therapy agents in adjuvant, neoadjuvant or

palliative settings. Most of the medical oncology interventions are prolonged in nature and assessment of patient fitness and tumour response are critical for prescribing medications in a cyclical manner.

3.8.1 Clinical Scenarios Where Telemedicine can be used

First Consultation

- The first visit of a cancer patient for triage or navigation can be done via telemedicine. The clinical problems, reports, expectations and treatment plans can be broadly discussed and the patient may be directed to register at the appropriate specialty clinic. This will cut down the waiting list, streamline patient management at reception.
- Once the patient is connected to the concerned physician, preliminary assessment, review of available reports and recommendation of further investigations can be done through telemedicine platform and appointment for physical assessment can be given through same platform.
- **Physical presence of the patient is a must for establishing the diagnosis, assessing the performance status and planning treatment. Any discussion on prognosis, chance of recovery, or treatment plans needs the physical presence of the patient.**
- When the patient has been physically examined, multidisciplinary tumour boards can be organised on telemedicine portals to plan the management.
- Telemedicine is not recommended for managing oncological medical emergencies and treating sick patients

Follow-up Consultation

1. Solid Tumours

For patients on Neoadjuvant / adjuvant treatment

- Chemotherapy counselling for anticipated benefits, toxicity, and general precautions can be reinforced through teleconsultation.
- Patients on chemotherapy who are tolerating previous cycles well without toxicity may be tele consulted for mid cycle assessment, thus sparing them of OPD visits. Video-consults may be done for toxicity assessments like mucositis.
- Telemedicine is also useful for patients who have recently started a treatment and are concerned about how well their tolerating the drug at

home. A teleconsultation can be used to clarify whether they need to come for more in - hospital support.

On palliative systemic therapy

- Most of these patients will need physical visits for continuation of treatment, as assessment of toxicity and a continuously evolving disease status and the performance status needs evaluation.
- Patients on hormonal therapies who have been stable without toxicities, may be followed using telemedicine and physical consultation alternatively.

2. Hematological malignancies

Patients on Intensive chemotherapy

These patients are not suitable for teleconsultation as they need intensive close observation for toxicities and supportive therapy.

Patients on less intensive therapies

- CML: Stable patients in molecular remissions, on Tyrosine Kinase Inhibitors (TKIs) (Imatinib, Dasatinib, Nilotinib), who need monitoring of Complete Blood Count (CBC), Realtime Quantitative Polymerase Chain Reaction (RT-PCR) reports can be effectively followed by teleconsultation. Tele and physical visits may be alternately done and judiciously combined.
- Stable patients on maintenance chemotherapy e.g. low-grade lymphomas, Acute lymphoblastic leukemia on maintenance protocols may be checked via telemedicine before subsequent cycles. Teleconsultation may alternate with OPD visits.
- Patients with hematological malignancies who are under active surveillance or observation like CLL, low-grade lymphomas can be followed up using telemedicine or teleconsultation may alternate with physical visits, thus sparing them from hospital visits.

What can be done

1. Assessment of symptoms and side-effects of medications
2. Advising new investigations & evaluation of investigation and interpretation of results
3. Prescription of supportive medications allowed in MCI guidelines of Telemedicine
4. Stoppage of medications in case of toxicity
5. Referral appointment or consultation with a specialist or a genetic counsellor

6. Education sessions about a health problem, diagnosis, managing medications and nutrition
7. Help making lifestyle changes like diet and exercise, or help quitting smoking

3.8.2 Clinical Scenarios Where Telemedicine should not be used

1. Prescription of anticancer drugs
2. Dose modification of anti-cancer drugs
3. Managing Oncological medical emergencies.

3.9 Radiation Oncology

A significant proportion of cancer patients receive radiation therapy during the course of illness alone or in combination with surgery and or systemic therapy. Radiation therapy involves tumor board planning, counselling, in - hospital treatment planning followed by delivering radiation therapy over few weeks. Physical presence is needed for radiation therapy. Telemedicine can be utilized for managing certain phases of radiation therapy.

3.9.1 Clinical scenarios where Telemedicine can be used

First Consultation

Patient can consult a radiation oncologist through teleconsultation for preliminary assessment and review of reports. Subsequent appointment for a clinical assessment and advising further investigations can be done through a telemedicine platform. Telemedicine can also be used for tumor board discussion and treatment planning.

Follow-up Consultation

Pre-treatment Counselling

When radiation therapy is planned for a patient telemedicine can be utilized for pre-treatment counselling to explain basics of radiation therapy, various types of radiation therapy, pros and cons of each modality, and cost factors. Anticipated benefits and probable acute and late complications can be discussed in detail through a teleconsultation.

Optimization of Patient

Telemedicine can be utilized for patient optimization prior to radiation therapy including nutritional support, medical consultations and dental review prior to head & neck radiation etc.

Radiation therapy Planning

Imaging, simulation, and pre-treatment planning can be fixed on telemedicine platform and process can be explained with clear instructions.

Anaesthesia assessment for patients planned for Brachytherapy or External Beam Radiation Therapy (EBRT) under anaesthesia

Patients planned for brachytherapy or radiotherapy under aesthesia can be assessed through telemedicine for pre-anaesthesia evaluation and review of investigations to minimize hospital visit. One hospital visit is mandatory for physical assessment for assessment of fitness for anaesthesia.

Post Treatment assessment

Telemedicine can play a major role for assessment and management of mild radiation induced toxicities like mucositis and dermatitis etc. The treating doctor can take decisions on when to call the patient for a hospital visit based on severity of symptoms. Prescription of supportive medications (as per MCI guidelines) for management of toxicities can be done through telemedicine portal.

3.9.2 Clinical Scenarios Where Telemedicine should not be used

1. Managing Oncological Emergencies
2. Managing moderate to severe radiation induced reactions
3. Prescription of anticancer drugs

3.10 Palliative Care

A significant proportion of advanced cancer patients and their families require palliative and end of life care expertise and interventions. Telemedicine services can improve access and can play a critical role in delivering palliative care services to terminal cancer patients especially residing in remote locations (20). Through teleconsultation and counselling, majority of patients with advanced and incurable cancers can be managed at home with the help of family members or local care givers. Telemedicine can significantly reduce the hospital patient burden and help families to care for advanced cancer patients at home.

3.10.1 Scope of Telemedicine in Palliative Care

1. Consultation, referral, second opinion and treatment planning in palliative care
2. Pain management though first-time physical presence is required to assess pain.
3. Counselling/Psychosocial Support
4. End of life care

3.10.2 Advantages of Telemedicine in Palliative Care

- Tele-palliative care can facilitate symptom assessment and management for pain, depression, anxiety and fatigue. It can enable better reporting of psychological symptoms, improve psychological distress and avoid catastrophizing pain responses.
- Telemedicine in a palliative care setting can be a great source of support to the families caring for patients with terminal illnesses. It can foster communication between health care providers, patients and families and facilitate advance care planning (21).
- Telemedicine can also facilitate end of life care and dying at home.
- It can enable multiple family members situated at different geographic locations to participate in a family meeting using a single platform.
- Video consults are better appreciated than audio consults as they improve perception of the genuineness of the therapeutic relationship. It can foster the trust between families and palliative care team (22).
- Optimum utilization of tele-palliative care facilities can reduce emergency room visits and reduced unnecessary hospital admissions, and can have an overall cost-saving benefit for the families.
- From a health care provider perspective, telemedicine enabled palliative care providers to work effectively despite reduced staffing, and facilitate multidisciplinary participation and cooperation among various professionals providing palliative care (22).

3.10.3 Clinical scenarios where Telemedicine should not be used

- Avoid tele-palliative consultations in oncological emergencies
- **Don't prescribe opioids and anti-cancer drugs**

- Don't advise interventional pain management protocols
- If there is lack of consensus among family members regarding end of life care insist for a hospital visit and clearly explain and obtain consent for the management plan

Annexures describing Algorithmic approach for telepalliative medicine are in page nos. 34 - 36.

3.11 Oncoradiology

Imaging plays an important role in the overall management of cancer patients. A wide variety of imaging modalities including ultrasound, CT scan, MRI, PET scan and other nuclear medicine imaging modalities are frequently used in oncology practice. There is a significant potential for utilizing teleradiology services for cancer care. Most of the current imaging technology works on digital platforms and robust teleradiology platforms including PACS are widely available.

3.11.1 Teleradiology

- Electronic transmission of radiologic images like CT, MRI, X-ray, Mammogram, PET CT etc. can play a major role across remote locations for the purpose of interpretation and/or consultation.

3.11.2 Teleradiology can play a major role in the following cancer care clinical scenarios

1. Cancer screening
2. Cancer diagnosis
3. Cancer staging
4. Treatment Planning
5. Surveillance & Follow-up
6. Second opinion
7. Referral

3.11.3 Basic prerequisites for Teleradiology consultation

- Patient demographic data and clinical details, provisional diagnosis and biopsy report if available, previous imaging details and type of anti-cancer therapy received should be provided.
- Contact information (mobile/email) of requesting oncologist and radiologist should be available.
- Access to Picture Archiving and Communication System (PACS), Digital Imaging and Communication in Medicine (DICOM images) at treating

hospital/imaging centre conducting the study by remote log-in access to be preferred.

- High quality images or soft copy of the imaging study can be transmitted for obtaining expert opinions.

3.11.4 Clinical scenarios where Telemedicine should not be used

- Avoid giving conclusive teleradiology opinions in the absence of necessary clinical inputs.
- Don't recommend interventional radiology procedures without assessing the patient's condition.
- When there is a discrepancy in opinions, insist for a physical visit for a review of all available images and advise repeat imaging if necessary.

3.12 Oncopathology

Oncopathology services are one of the critical components of modern cancer care. Histopathology confirmation is mandatory for diagnosing cancer and treatment decisions are mostly based on organ system involvement, stage and histopathology of tumor. Recently molecular biology and genetics also play a major role in cancer diagnosis and management decisions. Modern oncopathology setups are resource intensive and availability of expertise is limited. Telemedicine can play a vital role in improving access to advanced oncopathology services to patients from rural and remote parts of the country.

3.12.1 Telemedicine can be utilized for providing following Oncopathology services

- Providing Pathology services within the hospital
- Tumor Board Discussions (reports can be discussed through telemedicine portal).
- Second opinion
- Referral
- Providing advanced & specialty pathology expertise

3.12.2 In cancer care the following samples can be used for obtaining telepathology services

- Pre-operative biopsy/cytology sample
- Post-operative surgical specimens

- Pre- operative biopsy/ Post-operative specimen and/or slides/blocks of tissue biopsied or patients who are operated in other hospitals.

3.12.3 Prerequisites for telepathology services

Complete clinical details, reports of radiological investigations should be provided to the referring pathologist. The requisition forms should provide details of the specimen and should be sent along with the labelled specimen/slides/blocks. The digital version of form may also be sent via the hospital information system if available. In institutes without Health Information System (HIS) facility and Lab information system (LIS), the exchange of clinical details and pathology reports may be done using shared google sheets (equivalent of MS excel) or google docs (equivalent of MS word) which are free to use.

3.12.4 Technologies available for Telepathology

Various technologies can be utilized for telepathology services.

- **Static image-based systems**: Images are captured from a digital camera connected to a microscope. An image area can be selected and transmitted for telepathology opinion.
- **Virtual slide systems**: In this technology, pathology specimen slides are scanned /video graphed, and high-resolution digital images are created for transmission.
- **Real-time systems**: The operator remotely guides a robotically controlled motorized microscope. The consultant pathologist has complete control and can adjust the slide position, zoom, etc. so that the area of interest is brought under view and transmitted.
- **Whole slide imaging (WSI)**: Digitization and scanning of a glass slide to generate a large sized digital image that can be viewed in parts in a manner that simulates microscopy.

In case adequate static images of the slides or whole slide imaging are available with the referring laboratory or centre then the same may be acceptable for consultation with following caveats-

a) The images/scans must be taken from all areas of section and be representative of the lesion. All special stains and relevant

immunohistochemical stains if done at referral lab must also be photographed or scanned.

b) The static pictures of slides must be at a resolution of 200-300 DPI resolution with white balance adjustments.
c) The referring lab must take an undertaking that the images sent belong to the patient and the digital images or scanned files must be named and annotated.
d) The contact details of referring lab must be provided for clarification on grossing of specimen, slides, and blocks and for any further details required for evaluation of the case.

The diagnosis on static digital images would be provisional and may be conveyed to referring clinician for purpose of triaging and further plan of action. Final diagnosis would be only possible once actual slides and blocks are received. The same may be transmitted via HIS or digitally shared files over internet.

3.12.5 Clinical scenarios where Telemedicine should not be used

- Don't offer Conclusive telepathology opinions in the absence of necessary clinical inputs.
- Avoid giving conclusive telepathology opinions based on sub-optimal material submitted for review.
- When there is a discrepancy of opinions, insist for a comprehensive review of material and request for clarification regarding the possibility of mix-up, and advise re-examination or re-biopsy if issue is unresolved.

3.13 Telemedicine for follow-up, referral and second opinion of cancer patients

3.13.1 Post treatment follow-up & chronic care

- Follow-up visits are critical part of cancer management. Areas that need to be focussed during follow-up of a cancer patient include quality of life, treatment related side effects, and ruling out relapse of cancer or development of second malignancies.
- The telemedicine portal can be used for follow-up of those patients who live in remote areas. Registered practitioners in the vicinity of cancer survivors can perform the physical examination and communicate with the treating oncologist over the telemedicine portal.

- Patients can be educated regarding RED Flag signs that are hallmark of cancer recurrence or a second primary, and can be asked to report through telemedicine.
- In addition to routine physical examinations by primary care physicians, tumor markers and imaging studies can be recommended and reviewed through telemedicine portal.
- Telemedicine will improve the follow-up data as many patients are lost to follow-up due to gradual decrease in hospital visits over a period of time.
- Patients in complete remission after completion of curative treatment requiring only surveillance may be followed using telemedicine alternating with physical visits.
- In case of clinical suspicion, discrepancy in reports or if the patient is not satisfied, a physical consultation should be arranged.
- Telemedicine can be effectively used for survivorship services (e.g. psychological counselling, sexual and reproductive health concerns, life-style modifications) and patient-reported outcome surveys.
- Telemedicine may also be effectively used for educational and social rehabilitation and guidance on issues of employment / livelihood.

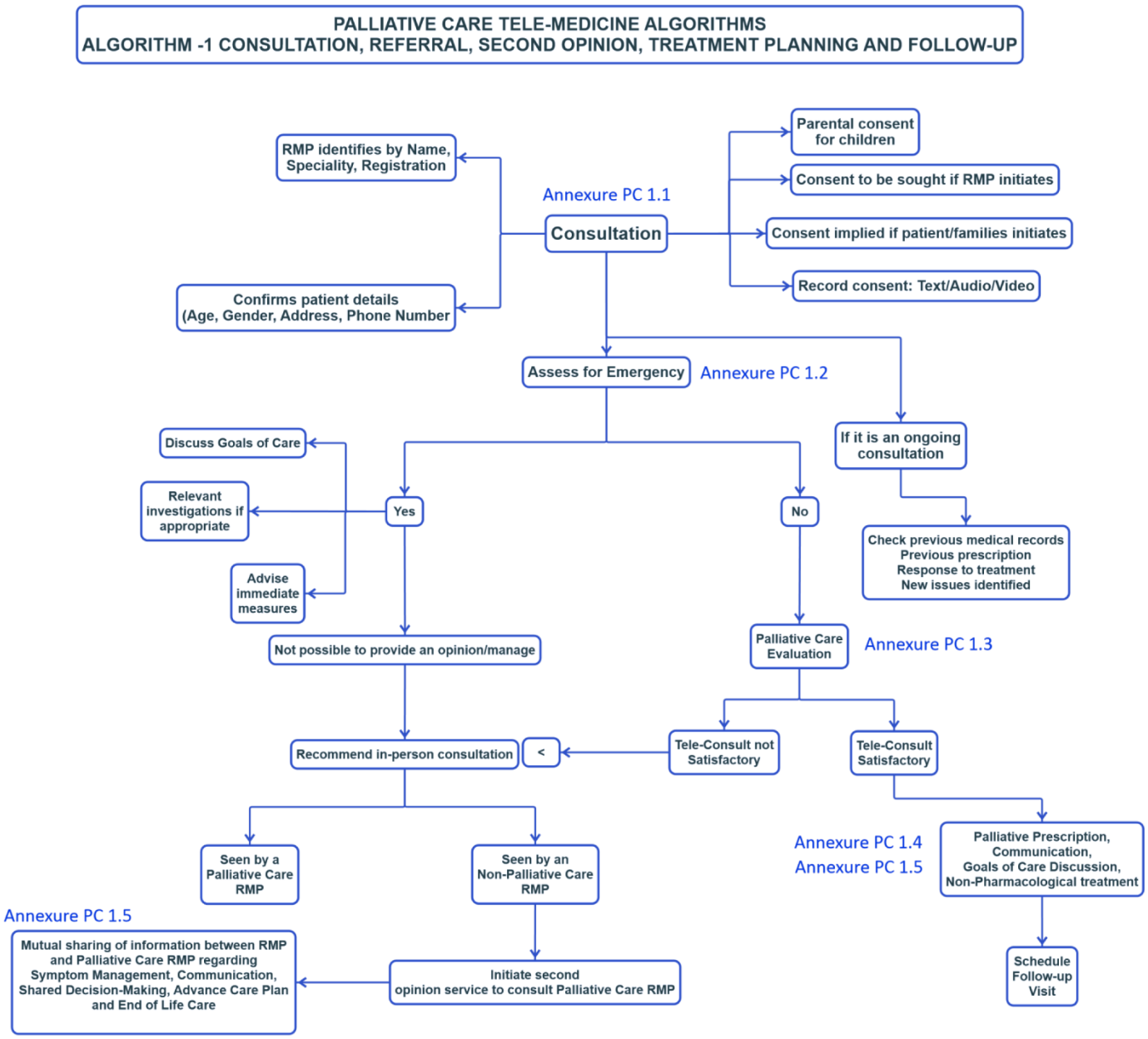
3.13.2 Referral

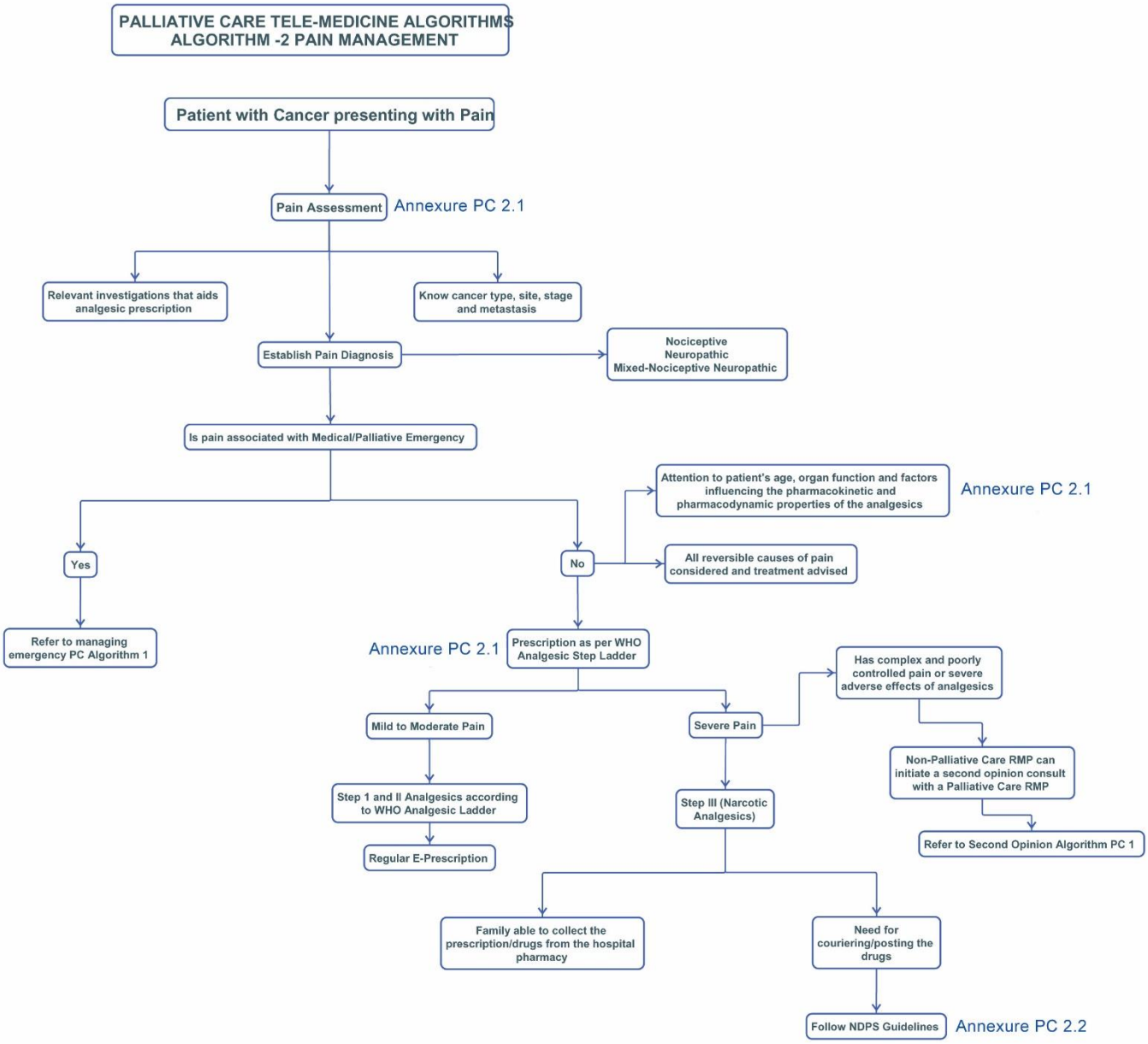
Telemedicine offers an excellent solution for appropriate and timely referral of cancer patients to tertiary care centres for comprehensive treatment and patients can be referred back to primary care physicians following completion of treatment. A standard format for referral including patient identification details, clinical summary and investigation reports should be used and reason for referral should be clearly mentioned.

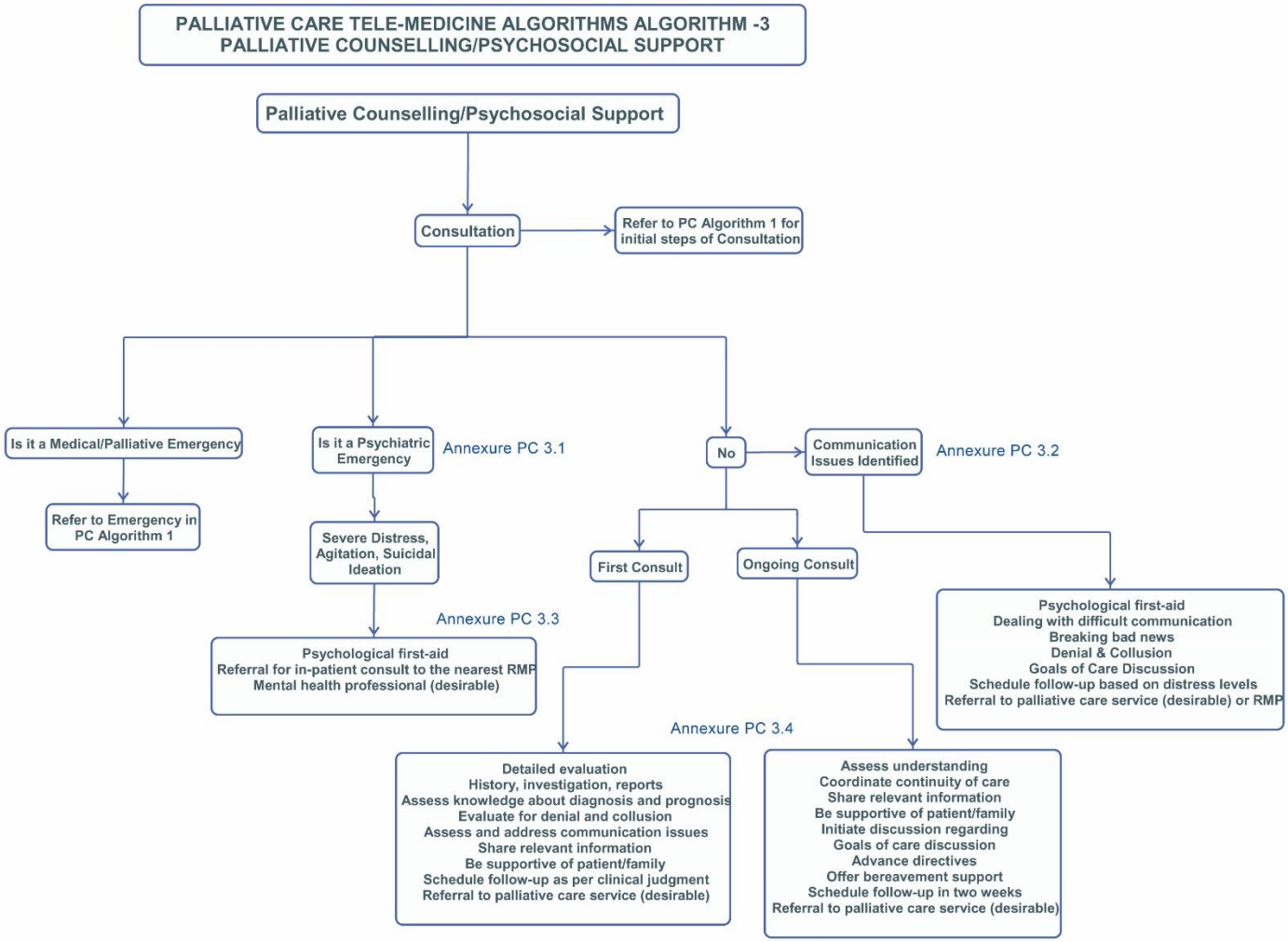
3.13.3 Second opinion

A second opinion from an expert clinician or a pathologist or radiologist may be needed in complex clinical situations, and while treating rare cancers. Telemedicine can play a major role while seeking a second opinion in such situations.

Annexures describing Algorithmic approach for telepalliative medicine.




PALLIATIVE CARE TELE-MEDICINE ALGORITHMS
ALGORITHM -2 PAIN MANAGEMENT
Patient with Cancer presenting with Pain
Pain Assessment
Annexure PC 2.1
Relevant investigations that aids analgesic prescription
Know cancer type, site, stage and metastasis
Establish Pain Diagnosis
Nociceptive
Neuropathic
Mixed-Nociceptive Neuropathic
Is pain associated with Medical/Palliative Emergency
Attention to patient's age, organ function and factors influencing the pharmacokinetic and pharmacodynamic properties of the analgesics
Annexure PC 2.1
Yes
No
All reversible causes of pain considered and treatment advised
Refer to managing emergency PC Algorithm 1
Annexure PC 2.1
Prescription as per WHO Analgesic Step Ladder
Has complex and poorly controlled pain or severe adverse effects of analgesics
Mild to Moderate Pain
Severe Pain
Non-Palliative Care RMP can initiate a second opinion consult with a Palliative Care RMP
Step 1 and II Analgesics according to WHO Analgesic Ladder
Step III (Narcotic Analgesics)
Refer to Second Opinion Algorithm PC 1
Regular E-Prescription
Family able to collect the prescription/drugs from the hospital pharmacy
Need for couriering/posting the drugs
Follow NDPS Guidelines
Annexure PC 2.2


PALLIATIVE CARE TELE-MEDICINE ALGORITHMS ALGORITHM -3
PALLIATIVE COUNSELLING/PSYCHOSOCIAL SUPPORT
Palliative Counselling/Psychosocial Support
Consultation
Refer to PC Algorithm 1 for initial steps of Consultation
Is it a Medical/Palliative Emergency
Refer to Emergency in PC Algorithm 1
Is it a Psychiatric Emergency
Annexure PC 3.1
Severe Distress, Agitation, Suicidal Ideation
Annexure PC 3.3
Psychological first-aid
Referral for in-patient consult to the nearest RMP
Mental health professional (desirable)
No
Communication Issues Identified
Annexure PC 3.2
First Consult
Ongoing Consult
Psychological first-aid
Dealing with difficult communication
Breaking bad news
Denial & Collusion
Goals of Care Discussion
Schedule follow-up based on distress levels
Referral to palliative care service (desirable) or RMP
Annexure PC 3.4
Detailed evaluation
History, investigation, reports
Assess knowledge about diagnosis and prognosis
Evaluate for denial and collusion
Assess and address communication issues
Share relevant information
Be supportive of patient/family
Schedule follow-up as per clinical judgment
Referral to palliative care service (desirable)
Assess understanding
Coordinate continuity of care
Share relevant information
Be supportive of patient/family
Initiate discussion regarding
Goals of care discussion
Advance directives
Offer bereavement support
Schedule follow-up in two weeks
Referral to palliative care service (desirable)

Further guides in the algorithms

Algorithm 1

PC 1.1 and PC 1.4 - Telemedicine Practice Guidelines. Available from: https://www.mohfw.gov.in/pdf/Telemedicine.pdf (Pages 12-19, 20-22)

PC 1.2 and PC 1.3 - Training manual for doctors and nurses under National Programme for Palliative Care-facilitator guide. Available from: https://dghs.gov.in/WriteReadData/userfiles/file/a/5127_1558685685054(1).pdf (Pages 81-90, 21-74)

PC 1.5 - Address Goals of Care- Smoothing discussions about prognosis and treatment. Available from: https://www.vitaltalk.org/topics/reset-goals-of-care/

Algorithm 2

PC 2.1 - WHO Guidelines for the Pharmacological and Radiotherapeutic Management of Cancer Pain in Adults and Adolescents. Available from: https://www.ncbi.nlm.nih.gov/books/NBK537492/

PC 2.2 - the Narcotic Drugs and Psychotropic Substances (Third Amendment) Rules, 2015. Available from: http://cbn.nic.in/html/NDPS3rdamend.pdf (Pages 26-27)

Algorithm 3

PC 3.1, PC 3.2 and PC 3.4 - Training manual for doctors and nurses under National Programme for Palliative Care-facilitator guide. Available from: https://dghs.gov.in/WriteReadData/userfiles/file/a/5127_1558685685054(1).pdf (Pages 67-74, 2-20, 67-74, 155-166)

PC 3.3 - Mental Health Challenges During COVID-19 Pandemic Guidance for Psychiatrists. Available from: https://indianpsychiatricsociety.org/wp-content/uploads/2020/05/IPS-NIMHANS-COVID-19-Final.pdf (Pages 25-37)