MINISTRY OF HEALTH AND FAMILY WELFARE

GOVT. OF INDIA

Guidelines on Managing Mental Illness In Hospital Settings during COVID 19

In collaboration with

NATIONAL INSTITUTE OF MENTAL HEALTH AND NEUROSCIENCES

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FOREWORD

The Covid-19 pandemic has brought forth multiple challenges in addition to the infection itself, and mental health issues have been in the forefront. Apart from the pandemic-induced mental health concerns, managing psychiatric disorders (both pre-existing and new onset not induced directly by the pandemic) is a huge concern. Like physical disorders, managing psychiatric disorders (both inside the mental health establishments) and in the community requires multiple adjustments and following the various Covid related protocols. Right from the moment patient enters the mental health establishment, till the time he/she exists, due processes should be followed. In addition to the general precautionary and safety guidelines, specific issues related to psychiatric disorders needs to be addressed. Many state run mental health establishments in our country see huge number of dailyfootfalls. Added to this, many of the patients may lack capacity and may become overly paranoid about the restrictions of movement and the necessity of having to wear masks. Moreover, many homeless persons with mental illnesses are increasingly brought to the mental health establishments during these times. Patients' clinical conditions (such as catatonia or delirium) may interfere with their co-operation for procedures such as swab-collection. Patients admitted to in-patient facilities also need to be protected from Covid infection. This issue becomes even more pertinent in the closed ward facilities, where patients may be particularly vulnerable. Mental health outpatient clinics also pose their own set of challenges.

These guidelines have been prepared keeping in mind all the above challenges. This draft has been prepared by experts from the National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru. The latest available literature as well as the Government guidelines on various aspects of Covid-19 have been referenced (though these are dynamic and change over time, depending on the emerging situation). The draft has also been reviewed by both internal and external peers and their comments have been incorporated. These guidelines are intended primarily for medical officers and officers handling the mental health establishments.

We earnestly hope that these guidelines help in the better management of patients with mental illness in hospital-based settings.

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Guidelines for Delivery of Mental Healthcare Services during the Covid-19 Pandemic

Background

The COVID-19 pandemic has made a profound and pervasive impact on mental health of people across the globe. The pandemic has put inordinate strain on health facilities, and posed unique challenges to mental health care delivery, both in the community and institutional/hospital settings. There are at least three groups affected by mental health concerns during this pandemic. Firstly, patients with confirmed COVID 19 infection may develop mental health problems. Research suggests that depression (present in about 30% of the diagnosed patients; Zhang et al., 2020a) and symptoms of post-traumatic stress disorders (almost everybody diagnosed with COVID 19: 96%; Bo et al., 2020) could be extremely high (Vindegard & Benros, 2020). Secondly, pre-existent patients (with psychiatric disorders)may experience a recurrence or worsening of their symptoms (Fernandez- Aranda et al., 2020 ; Zhou et al., 2020) or develop additional psychiatric symptoms (Fernandez-Aranda et al., 2020) during the pandemic. Thirdly, there are mental health concerns faced by the general public. A wide variety of psychiatric symptoms including anxiety (ranging from mild to severe), worries, non-specific psychological distress, depression, stress symptoms (including PTSD), insomnia, hallucinations, paranoid and suicidal ideations etc (Li et al., 2020; Tan et al., 2020; Gao et al., 2020; Qiu et al., 2020; Roy et al., 2020) have been noted during the pandemic. In addition, worries related to restriction of lifestyles, issues related to special populations including children and adolescents, job losses and uncertainty about future, increase in domestic violence and child abuse have also been reported. Therefore, there is a need for specific guidelines for medical officers and mental health professionals on how to prevent the infection and provide Covid-19 related care in hospital-based settings. These guidelines have been prepared to address these specific needs. It may be noted that these guidelines are based on current recommendations and protocols of ICMR and currently available information on COVID-19 illness. It is important to keep updating and revising the guidelines from time to time. The guidelines provided in this document need to be carried out as per provisions of the Mental Healthcare Act, 2017 and the Rules.

Key Challenges Faced by Mental Health Service Providers

- Difficulty in isolating/quarantining patients with active symptoms of mania and acute psychosis, as well as people with mental health emergencies.
- Patients with psychiatric disorders (by virtue of their symptoms) may not cooperate during swabbing and testing. The patient may have to be sedated, and some of the procedures and appropriate tests may get delayed.
- Staff has to be in close contact with some of the patients who are at risk of violence or suicidality and to keep a check on them frequently.
- Some patients may be uncooperative or at times hostile (for example, those with delusional disorders, psychotic disorders) to the treating team, creating additional challenges to the health providers. Provisions of the Mental Healthcare Act, 2017 have to be complied with—particularly those related to assessment of capacity, supported admission, etc. Also, the provisions of National Disaster Management Act, 2005 and Epidemic Diseases Act, 1897 may have to be invoked in certain instances.
- Homeless persons with mental illnesses are usually brought (including those with intellectual disabilities) to Mental Health Establishments (MHEs). Such patients often fail to provide proper history and no reliable informants would be available in most cases. Also the lack of ID Proof and valid phone number for the COVID testing (pre requisite as per the ICMR guidelines) are commonly seen in this population

It is therefore important to develop a strategic plan to provide safe and appropriate mental health care with all the necessary safety precautions to control the spread of COVID-19 infection.

Minimizing the risk of exposure and protecting both patients (who are inherently vulnerable by virtue of psychiatric disorders) and frontline healthcare workers are important.

Standard Operating Procedures (SOPs) chalked out by the establishments should align with the policies of the government.

A nodal officer should be nominated and assigned the task of reviewing these guidelines periodically, update and share them with mental health professionals working in the mental health establishment as well as other healthcare establishments who cater to those with mental health issues.

Also, a hotline can be established between an MHE and a nearby COVID designated hospital to facilitate easy transfer across facilities.

Another important aspect is the training on managerial aspects of COVID-19. This includes training of all cadres of healthcare workers in frequent hand washing, disposal of waste, sanitizing the establishment, importance of maintaining social and physical distancing, donning and doffing of Personal Protective Equipment (PPEs), etc. The guidelines for swab collection for COVID-19 testing are given in **Appendix I**.

Delivery of Mental Health Care in Community

- Mental Health Care in the community includes promotive and preventive measures that mitigate new onset mental disorders during COVID 19 pandemic, in addition to care for pre-existing cases.
- Use of IEC materials to spread accurate facts on COVID 19 including general health and mental health issues through digital, print and social media platforms.
- Liaison with the NGOs and volunteers working in the field of mental health for continuity in care by ensuring regular supply of medications at the patients' doorstep.
- Patients and caregivers need to be encouraged not to visit OPDs of MHEs unless any emergency arises. In case of difficulty in procuring medications locally, they can contact the local/state/national helpline number services for further assistance.
- Pandemic can be used as an opportunity to establish or strengthen community based mental health services.
- Services like Home visits for patients who are unable to visit the OPDs, but require clinical consultation need to be initiated. Such visits can be used for administering Long Acting Injectables (LAIs) to the persons with SMI.
- The following table depicts the general advice to be given to pre-existing patients and their caregivers in the community:

1	Patients should not stop any current psychotropic medications without consulting a

	doctor
2	In case of poor insight, mental disorders with intellectual disability, caregivers must ensure compliance with adequate supervision
3	If patients are not able to understand or follow instructions, caregivers should try and ensure safety measures like masks, hand sanitization and physical distancing
4	In case of any new onset psychiatric symptom, to consult hospital (preferably tele-consultation)
5	Encourage utilization of tele-consultations for routine follow-up and avoid visits to hospital, unless there is an acute emergency
6	The physician who is treating a person with mental illness for COVID 19, needs to be informed about the psychiatric treatment the person is receiving.

Protecting persons with mental illness in mental health establishments from COVID 19 infection

Reorganization of Infrastructure and Administration: General Considerations:

- All MHEs need to constitute a Hospital Infection Committee that ensures the implementation of the newer norms recommended by the MoHFW during the COVID 19 Pandemic at their establishments, so as to safely practice mental health services.
- It is important to ensure adequate human resources and other resources (including testing facilities and equipment like thermometers or pulse oximeters) for following the precautionary measures. A prudent roster/duty system needs to be developed for health care workers (including Group D staff) and adequate stock of masks, hand sanitizers, face shields, gloves, PPE kits, etc) need to be made available for use as appropriate.
- All personnel need to be trained on hand hygiene, physical distancing, donning and doffing of the complete PPE kit.
- Disinfection and waste management:
    - Disinfection of equipment and surfaces that patients come in contact with (include stethoscope, blood pressure cuffs, stretchers and examination

couch)need be disinfected after every use with 1% sodium hypochlorite solution or alcohol (70% alcohol based) solution.

- Other surfaces which are frequently touched such as doorknobs, waiting areas, chairs used by patients and table surfaces in the outpatient or clinic have to be disinfected frequently (recommended at least once in 4 hours))
- All the locations for patients care (inpatient, outpatient, emergency) have to be disinfected mandatorily at the end of the day.
- The bio-medical waste generated such as the PPE has to be disposed in yellow bags, the inside of which is sprayed with 1% sodium hypochlorite solution. The exterior of the bag also needs to be sprayed after tying. This must be disposed as per the hospital biomedical waste management protocols. Hand sanitization must be followed after disposal.

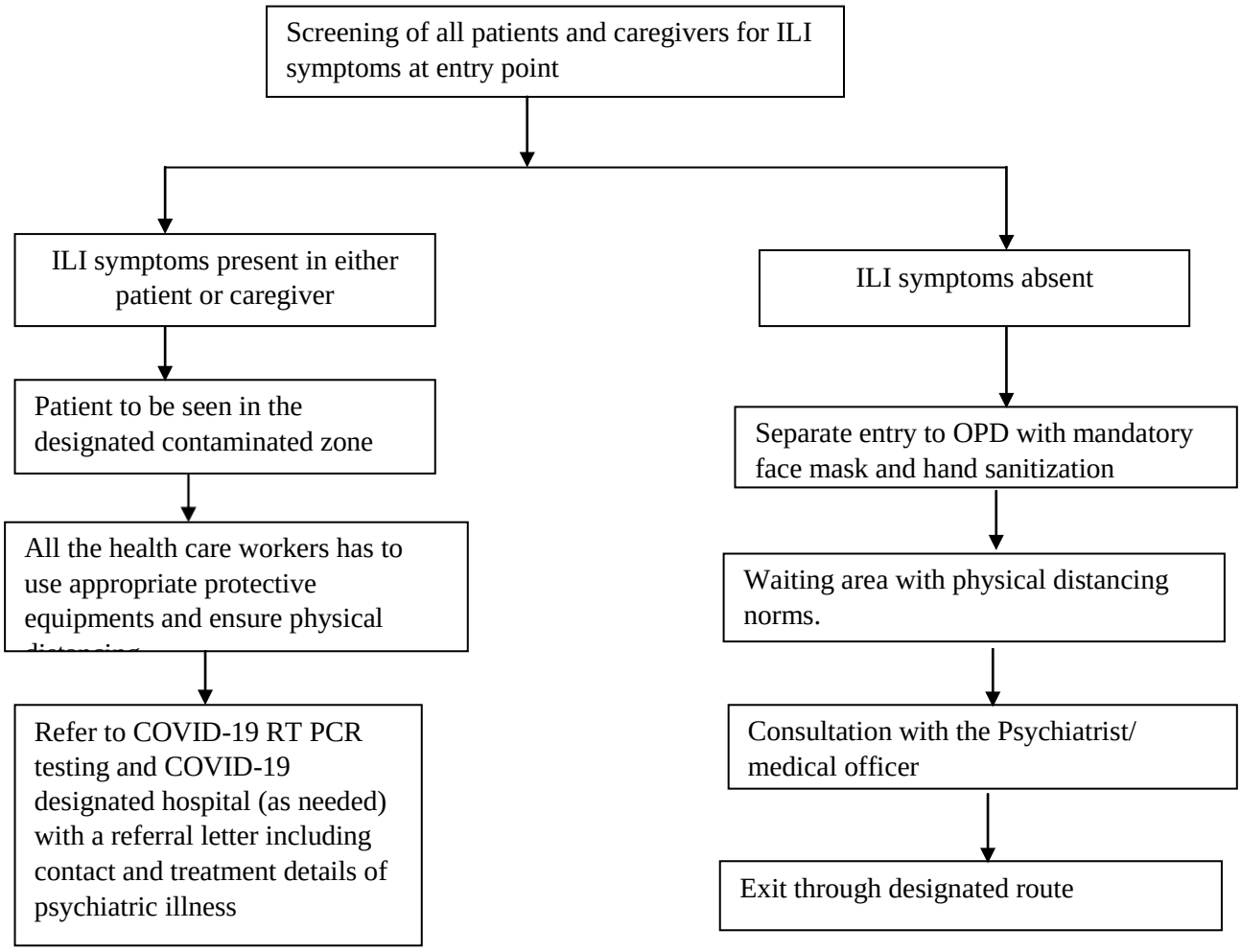
- IEC materials such as symptoms of COVID-19, hand hygiene techniques, precautions to be taken to prevent the spread of COVID-19 have to be on displayed at prominent areas in all the patient care locations (eg. in the waiting halls of OPD, etc.)

Outpatient Facility:

- Encourage only appointment-based OPD consultations to prevent crowding
- Make seating arrangements at the waiting hall ensuring physical distancing norms.
- Designate separate areas for patients screened positive and negative for ILI symptoms.
- Have dedicated entry and exit points separately for patients and health care workers.
- Ensure adequate ventilation is available in the building especially in the waiting hall and doctor's chamber or outpatient examination rooms.
- Use of air-conditioning must be strictly avoided.

- For patients with ILI symptoms, arrange a separate area for examination by medical staff using appropriate protective equipment. After consultation, the patient if Covid-positive should be referred to a COVID centre for further management.
- Referring patients to nearby DMHP hospital should be encouraged alongside tele-consultations follow ups for reducing the footfalls.
- In addition, provision for telemedicine/tele-psychiatry services shall be utilized for reducing the footfalls further

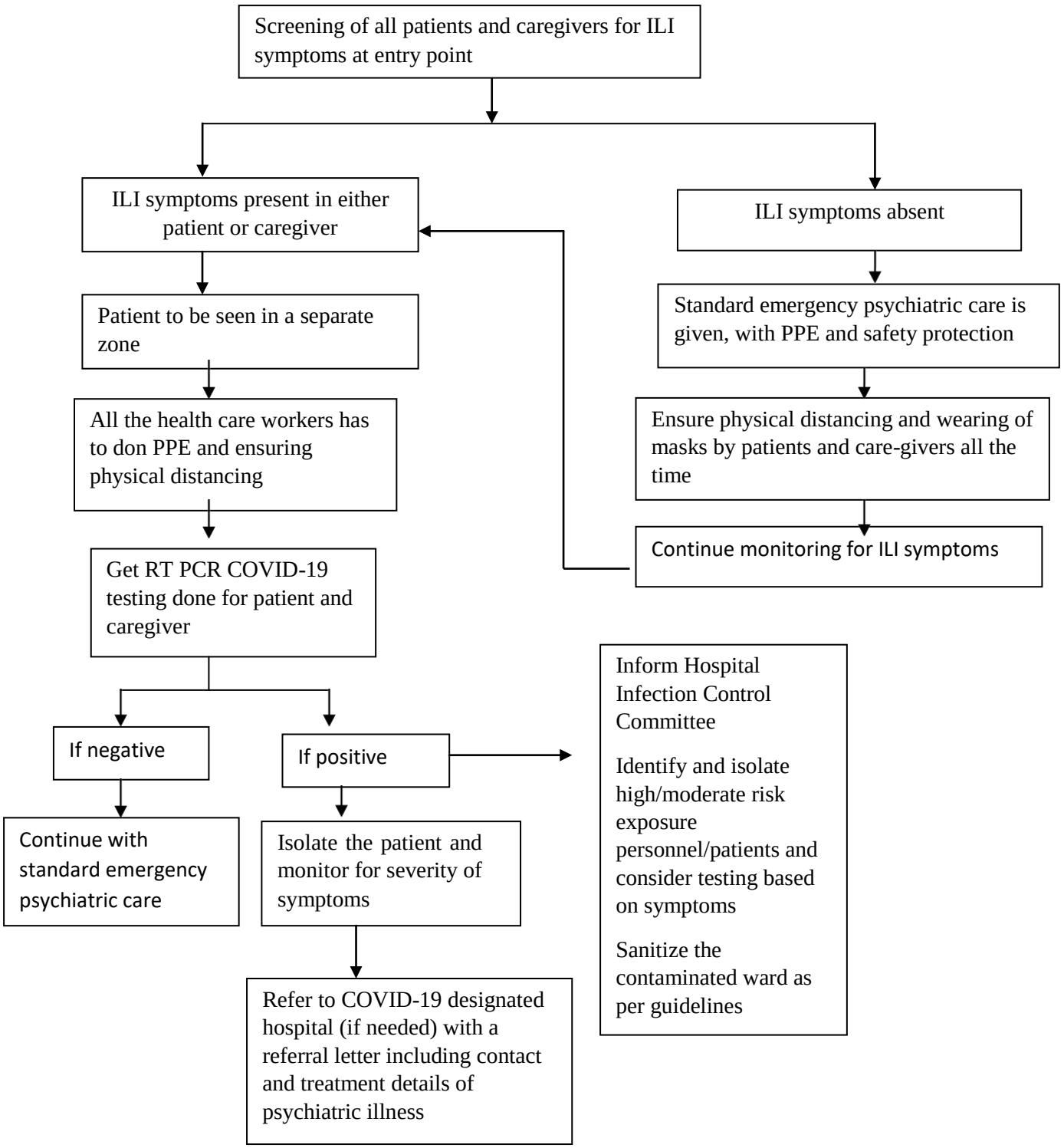
Flow Chart for Delivery of Care in the Outpatient Facility



Emergency Facility:

- Screening for ILI symptoms for both patient and the caregiver to be carried out by the Casualty Medical Officer/Duty Medical Officer/Officer In-charge/Duty Psychiatrist. Beds to be segregated within the ward for patients or caretakers who screen positive and negative respectively.
- An interim standby or holding ward for patients or their caregivers who have been swabbed and are awaiting the COVID test result may be established.
- Liaison with nearby COVID designated hospital to be established in order to avoid delay in referral after a patient has tested COVID positive.
- Provision of a dedicated area for donning and doffing of PPE near the entry and exit points, respectively. A separate area must be identified for swab collection within the ward as per ICMR protocol.
- All patients and caregivers screened positive for ILI symptoms to undergo Rapid Antigen test/ RT-PCR testing as per the hospital protocol. If COVID positive, then the patient can be shifted to the interim standby ward for stabilization/until referral to COVID designated hospitals
- A standby Ambulance/108 Ambulance services with safety precautions must be made available for shifting COVID positive patient to the COVID designated hospital.
- In the case of a patient/care giver or health professional testing Covid-positive, the Hospital Infection Committee must be contacted for contact tracing, risk assessment and advise on quarantine.
- Food, ideally as food packets to be provided for the patients and caregivers bedside in order to ensure restricted movements in and out of the ward.

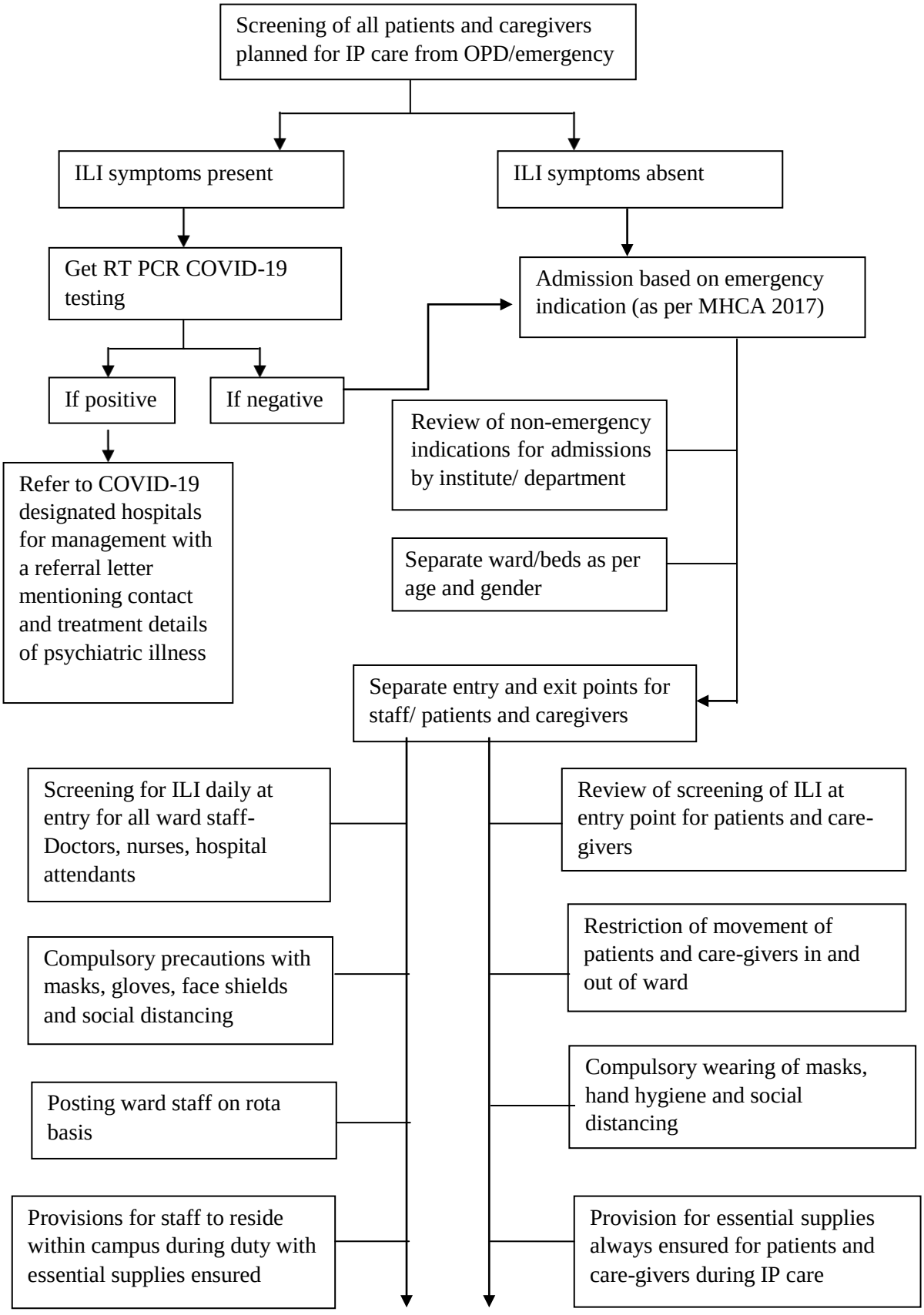
Flow Chart for Delivery of Care in Emergency Facility

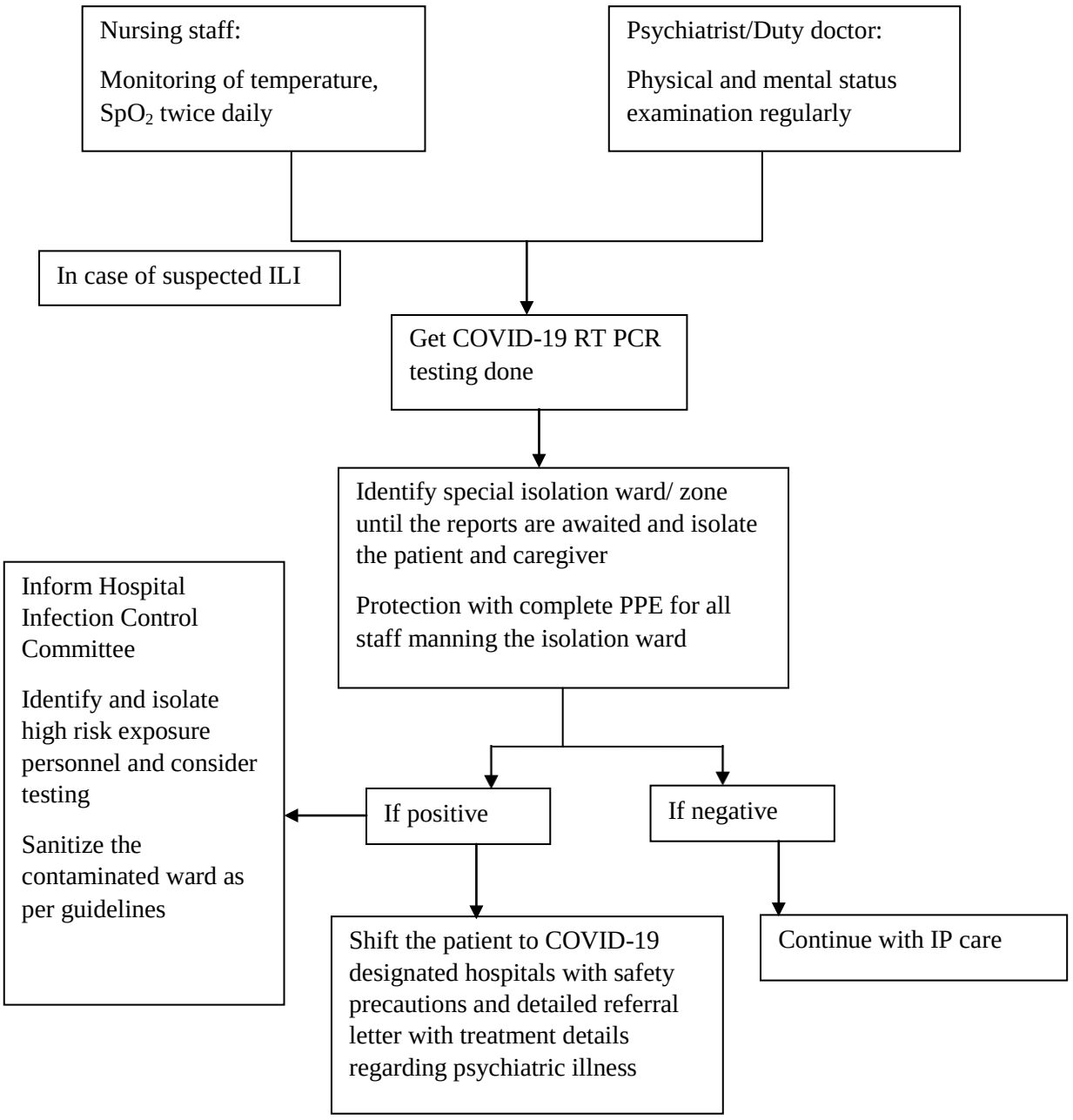


Inpatient Facility:

- Provision for dedicated area for donning and doffing of PPE and swab collection.
- Quarantine and isolation facilities for patients and staff to be made available separately in case of suspected COVID and COVID positive cases, respectively.
- Wards providing single rooms with all facilities should encourage patients to remain inside their rooms as much as possible. Though this is contrary to the normal running of ward, staff should find ways to monitor the patients inside the ward. Rules and restrictions can be revised appropriately, viz., eating while watching television.
- Wards providing single rooms without toilet or shower facilities should plan proactively to manage personal hygiene. This may include planned bathe and showers, usage of commodes and routine cleaning of equipment. All such plans need to be clearly communicated to the patients.
- Separate wards/beds to be assigned as per age and gender.
- Provision for dedicated area for donning and doffing of PPE to be designated near the entry and exit points, respectively. A separate area to be provided for swab collection within the ward as per ICMR protocol.
- All patients and caregivers screening positive for ILI symptoms during their inpatient care shall be swabbed for RT-PCR testing. If COVID positive, then the patient alone (excluding caregiver) to be shifted to the interim standby ward until referral to COVID designated hospitals
- Provision for standby Ambulance/108 Ambulance services with safety precautions to be made available for shifting COVID positive patient to the COVID designated hospital.
- Contact tracing and advise on quarantine to be ensured by the Hospital Infection Committee
- Food to be provided for the patients and caregivers bedside in order to ensure restricted movements in and out of the ward.

Flow Chart for Delivery of Care in Inpatient Department




Nursing staff:
Monitoring of temperature, SpO_2 twice daily
Psychiatrist/Duty doctor:
Physical and mental status examination regularly
In case of suspected ILI
Get COVID-19 RT PCR testing done
Identify special isolation ward/ zone until the reports are awaited and isolate the patient and caregiver
Protection with complete PPE for all staff manning the isolation ward
Inform Hospital Infection Control Committee
Identify and isolate high risk exposure personnel and consider testing
Sanitize the contaminated ward as per guidelines
If positive
If negative
Shift the patient to COVID-19 designated hospitals with safety precautions and detailed referral letter with treatment details regarding psychiatric illness
Continue with IP care

ECT services:

General Considerations:

ECT with bag and mask ventilation and use of suction leads to aerosol production. As COVID-19 is known to be present in aerosol, the procedure has to be done only as emergency treatment and with adequate safety precautions.

Currently there is not enough evidences on safety of intervention procedures such as ECT in COVID-19 positive patients. However, pulmonary diseases are known to affect the recovery post ECT, which has to be kept in mind while planning ECTs.

- Patients with significant respiratory symptoms may be deemed unfit by anaesthetist.
- For patients who have mild or no respiratory symptoms, ECT to be considered only as emergency treatment. ECT to be administered only by a qualified psychiatrist.
- Patient with COVID-19 positive status may not be administered ECT. However, a repeat RT PCR testing can be done after 14 days and if negative, can be considered for ECTs.
- In case of emergency, live saving procedure, it has to be decided by the ECT committee on an individual basis.

COVID-19 screening protocol (for ECT administration):

- Every patient posted for ECT to be screened for symptoms of COVID-19 such as fever, cough and ILI symptoms before each procedure.
- History of close contact with a confirmed COVID-19 person to be looked for before every session.
- RT PCR COVID-19 test using nasopharyngeal swab have to be done before initiating ECT for each patient, and subsequently monitored for symptoms before every session.
- In case of suspicion or high risk of COVID-19, ECT may have to be deferred.

Reorganization of Infrastructure:

- ECT administration room and patient recovery room have to be two separate rooms.
- In the waiting area and recovery room adequate social distancing has to be maintained.
- Hence the number of people who can be accommodated will have to be lesser than usual capacity of the unit.

- Cleaning, disinfecting and waste management to be done carefully as per the hospital infection control protocol.

Precautions for Health Care Workers:

- The number of staff in the ECT administration unit to be as minimum as possible. The ECT team may comprise of a nurse, psychiatrist and an anaesthetist.
- Rotation of staff in such a way that minimum number of staff has the risk of exposure.
- All the members of the team to wear PPE throughout.
- Screening for symptoms of COVID-19 such as fever, cough and ILI symptoms mandatory before entering the ECT administration area.
- Physical distancing, hand hygiene have to be performed by everyone at all times.

Administration of ECT:

- Every patient must be ventilated with a bag and mask disinfected before every use.
- Hyperventilation must be limited to prevent aerosolization.
- Disposable equipment such as breathing circuit, reservoir bag, patient mask, gas sampling tubing should be discarded after use.
- Once the mouth guard and the bag valve mask are placed, disposable waterproof plastic and a protective airway box will have to be placed over the patient's head and the bag valve mask, to reduce aerosol spreading during ventilation.
- The airway box must be disinfected after using it on every patient.
- Unless contraindicated, use of anti-cholinergics to reduce the secretion formation and aerosolization is recommended
- ECT with the highest likelihood of success- bifrontal or bitemporal ECT with brief pulse ECT may be preferred.
- To avoid possibility of a failed seizure, particularly during the first session, ECT psychiatrist may consider delivering ECT at 120mc for younger patients and 180-240 mc for those aged above 45 years.
- All exposed surfaces such as railing cots have to be disinfected after every use.
- The ECT device with electrodes can be cleaned using alcohol based (70% alcohol based) solutions.

Precautions for Health Care Workers and Other Staff:

General Considerations:

- All the staff (doctors, nurses and other staff) reporting to duty have to be screened for ILI symptoms at entry point of each facility.
- In case of any symptoms, the staff must inform the Head/In-charge of the concerned facility and refrain from work until certified fit by the authorized Medical Officer.
- Staff, patients and attendants must avoid gathering at common areas like canteen, dining hall, elevators and always ensure maintaining the precautionary measures in the premises.

During Clinical Care:

- Admission of patients to be reviewed by the In-charge Officer to avoid elective and non-essential admissions
- Mental health examination to continue as usual in addition to monitoring of ILI symptoms and vital signs twice daily. The vital signs should include temperature and $SpO_{2,.}$
- It is recommended to limit the interaction with the patient at a minimum and avoid interventions like face-to-face psychotherapy as much as possible. Any mental health professional needing to see a patient face-to-face should wear adequate protective equipment or schedule tele-psychotherapy sessions.

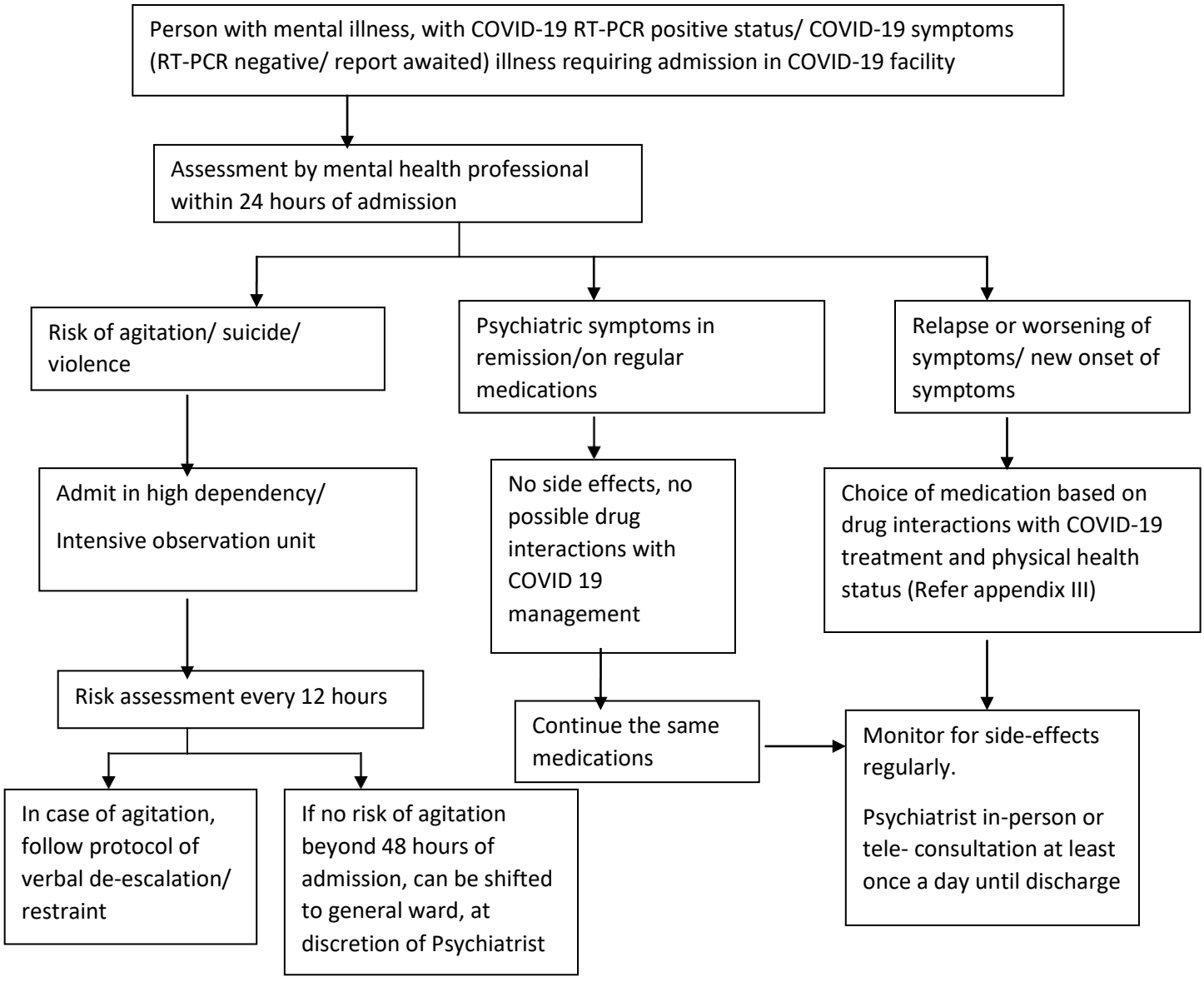
Precautions for Patients and Caregivers:

General Considerations:

- Screening of all patients and caregivers for ILI symptoms must be done at the entry points of the respective facilities.
- Compulsory wearing of masks and physical distancing by all patients and caregivers always in the hospital premises should be advised. Everyone attending the OPD must be made compulsory.
- Ensure adequate hand sanitization with alcohol based (70 % alcohol based) sanitizer during the entry, exit points and wherever necessary.
- Encourage the family members to utilize technology such as free use of video calls or mobile phones to stay in contact with patients rather than personal visit.

Clinical Management of Persons with Mental Illness or Mental Disability Who Test Positive for Covid-19

Flow Chart for Management of Person with Mental Illness at COVID-19 Facility:



General Guidelines

- The COVID-19 facility should have a facility for consultation with a Psychiatrist either in person or by tele-consultation, while admitting a person with mental illness.
- Wherever feasible, the primary treating Psychiatrist can be contacted to collect treatment details of the individual patients.
- Mental status examination within 24 hours of admission either in-person or by tele-consultation.
- Simple risk assessment can be done by the consulting psychiatrist to triage the patients.
- Details regarding pre-admission assessment are given in **Appendix II.**
- **At no point should any psychotropic medication be stopped abruptly without a psychiatrist's advice, unless in case of a life-threatening emergency.**
- The bed allocated for the patient should be preferably close to the nursing station. This will ensure that the person can be observed round the clock.
- Steps must be taken to ensure that the windows are well boarded and there is no access to instruments to harm self/others.
- All medications must be supervised and medical care (eg: wound care) reviewed.
- Information about PPE and social distancing can be provided using simple language and visual depictions or videos.

Communication with Caregivers:

- Contact with caregivers should be maintained via video-call facility at set times in the day.
- Care-givers must be provided daily updates regarding both physical and mental health condition of the patient
- In exceptional circumstances, if the caregiver needs to stay with the patient, appropriate counseling and advice regarding protection may be provided to the caregiver and appropriate permission obtained for the same

Non-pharmacological Management:

- If possible, some supervised engagement for patients within the quarantine facility maybe arranged. This may be some simple task or recreation such as games and group activities following the principles of physical distancing.

- The psychological support can be provided through tele-consultation mode by Psychiatrist or Clinical Psychologists as per availability and feasibility.

Pharmacological Management:

- Most patients will be on long term psychotropic medications which have to be continued while treating them for COVID-19.

- In case of liver or kidney damage caused by COVID-19 or drugs used for its management, the psychotropic medications need dose adjustments as per their pharmacokinetics.

- Some of the drugs used for treatment for COVID-19 can have neuropsychiatric side effects, which may worsen the pre-existing mental illness.

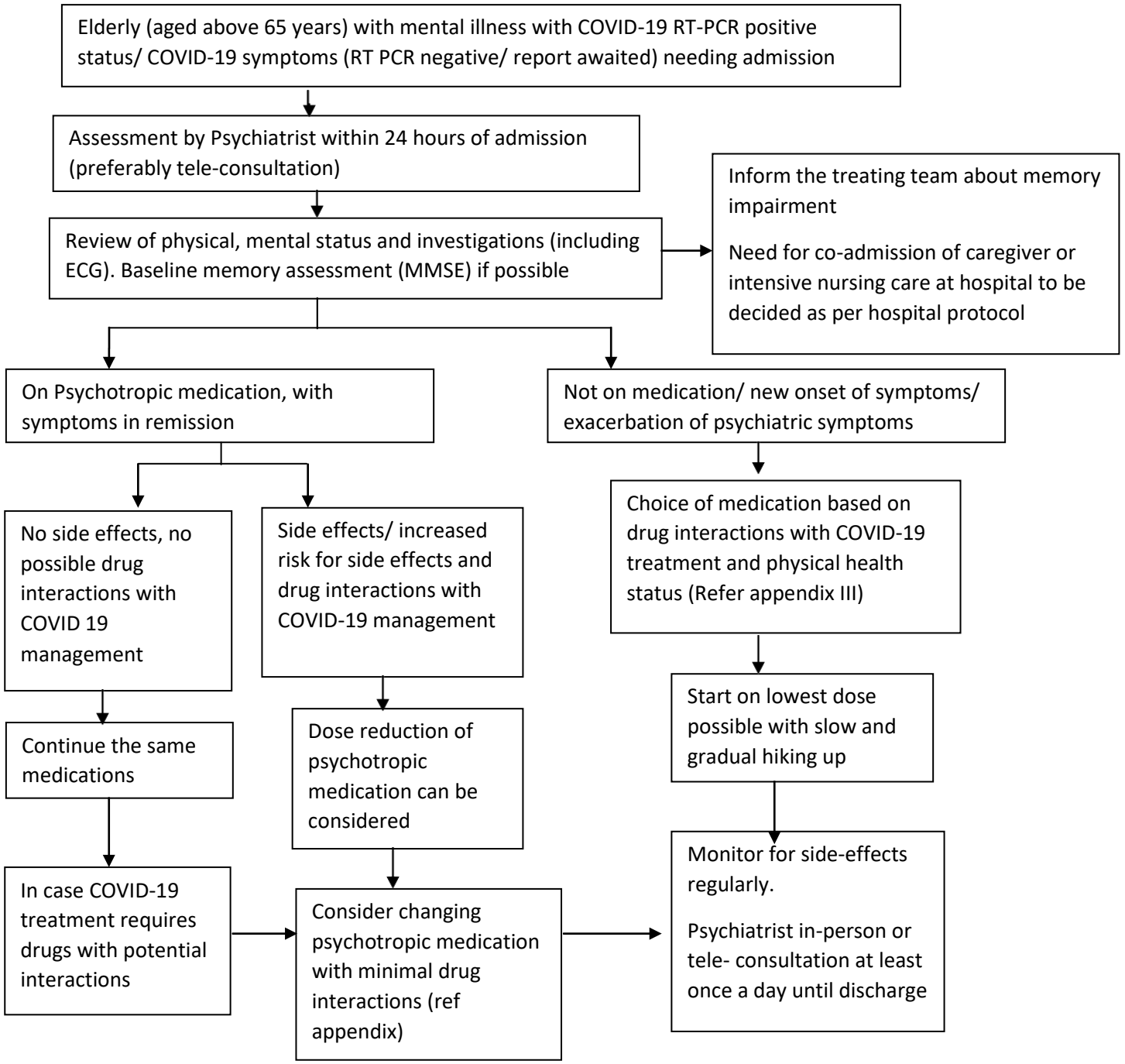
- While considering any specific treatments for COVID-19, the drug interactions with psychotropic medications and any pre-existing physical illnesses of the patient must be kept in mind.

- Available evidence suggests that there is no contraindication for starting/continuing psychotropic medications in a person who is COVID-19 positive. However, it is prudent to keep in mind, possible drug-drug interactions. A tentative list of such interactions and recommendations are given in **Appendix-III**. These may be broadly followed.

- A collaborative approach is strongly recommended for making specific decision/s on a case-to-case basis (both formulating and implementation). These can be made by a team involving a physician and a psychiatrist.

Management of COVID-19 in Special Population:

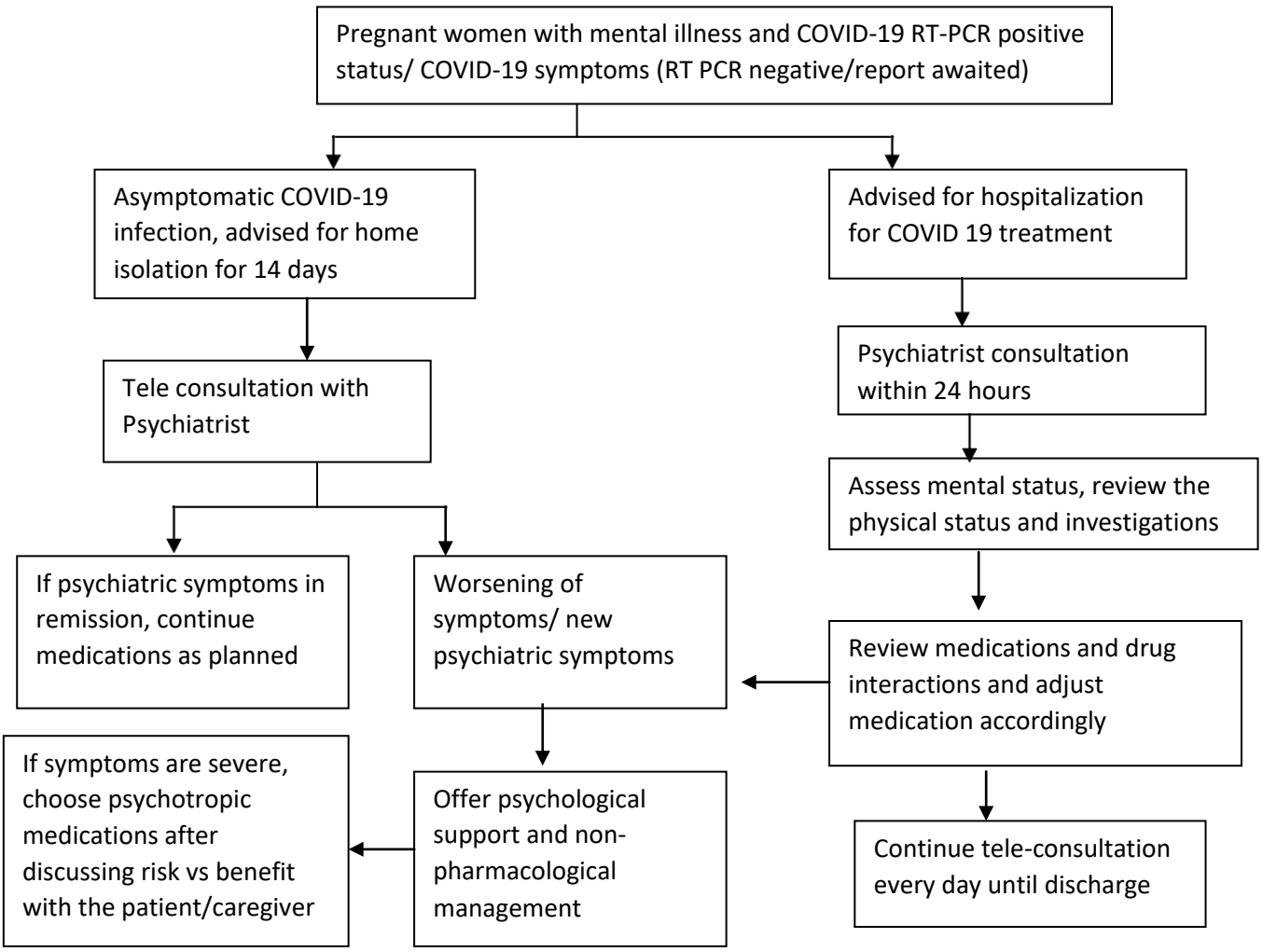
Elderly with Mental Illness:



Note: Risk of multi-organ failure and delirium is higher in elderly. In case of memory impairment frequent MMSE (Mini Mental State Examination is advised)

Peri-natal Women with Mental illness:

Antenatal women

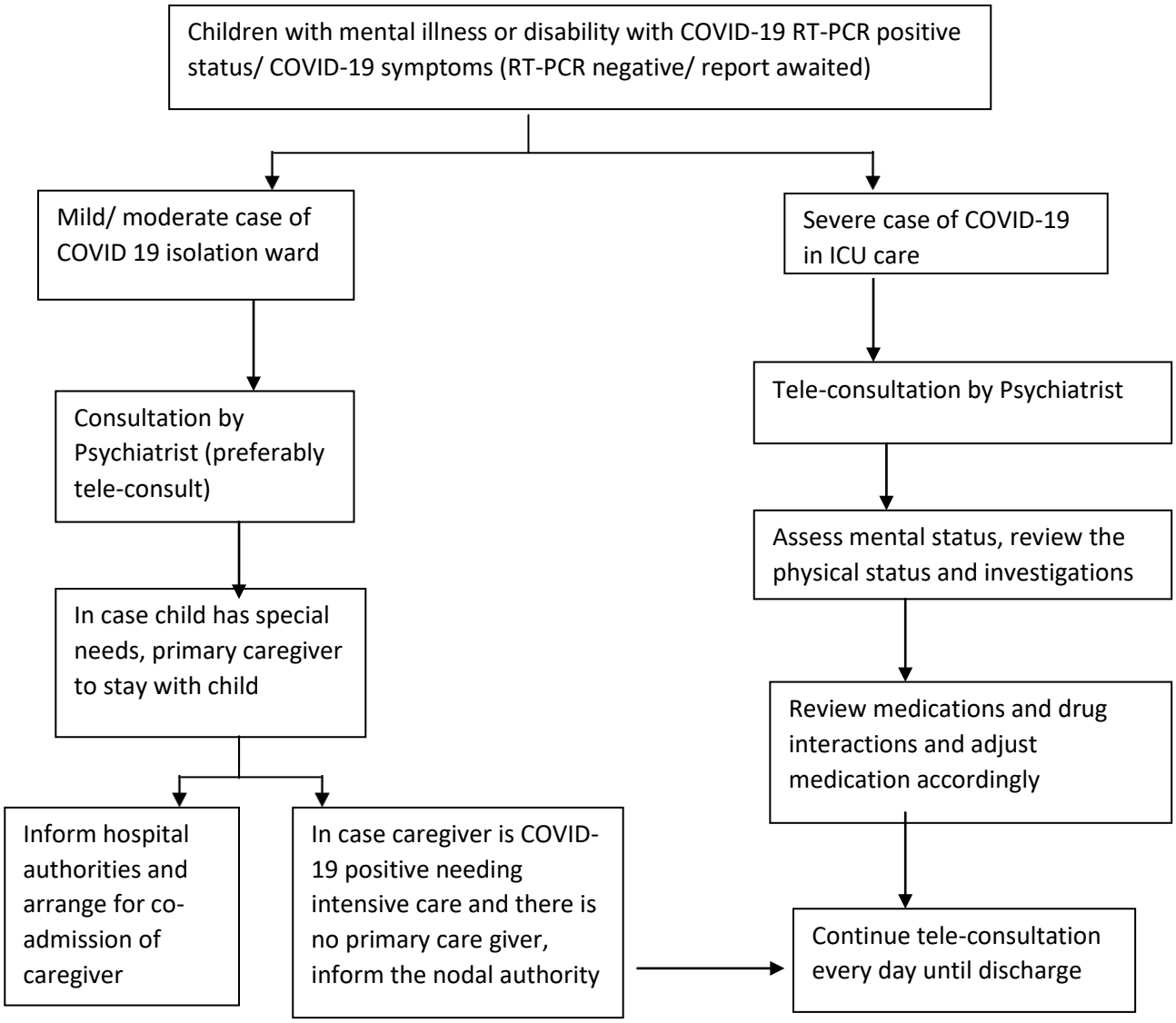


Post-partum period:

For breastfeeding mothers:

- Mothers who are COVID-19 positive are strongly encouraged to initiate or continue to breastfeed. The available evidence suggests that the benefits far outweigh the potential risks for transmission to babies.
- Instructions such as to express and discard the breast milk before feeding the infant in the morning and not to breast feed the infant in the night after ingestion of psychotropic medications have to be clearly explained to the nursing mothers.
- Hand hygiene and other necessary precautions to prevent transmission of COVID-19 to infants have to be followed as per the ICMR guidelines.
- In case of psychiatric symptoms, same algorithm as above can be followed.
- In case mother's mental status prevents her from taking care of the baby, family members have to be instructed and child's safety ensured. Mother's treatment for psychiatric illness can be decided by treating psychiatrist as OP/IP care based on severity.

Children and Adolescents with Mental Illness:



Admission with Caregiver:

- The decision for admission with a caregiver may be considered by the consultant managing the setting. Only one caregiver for the entire length of stay should be encouraged. Presence of caregiver might be inevitable in cases of neuro-developmental disorders such as autism and intellectual disability.

- If such an admission is initiated, the risks must be explained (including risk of COVID-19), a high-risk consent must be documented, and caregiver must be provided with personal protection equipment (PPEs) as mandated by the settings.

- Caregiver must be taught about the safety and hygiene practices including washing of clothes of COVID-19 positive person, cleaning of contaminated surfaces, etc.

- In these circumstances, maximum possible separation from other patients must be ensured.

- Even then, additional healthcare workers must be planned for, as the caregivers may not be able to look after their wards when they are ill.

Management of Substance Use Disorder (Alcohol)

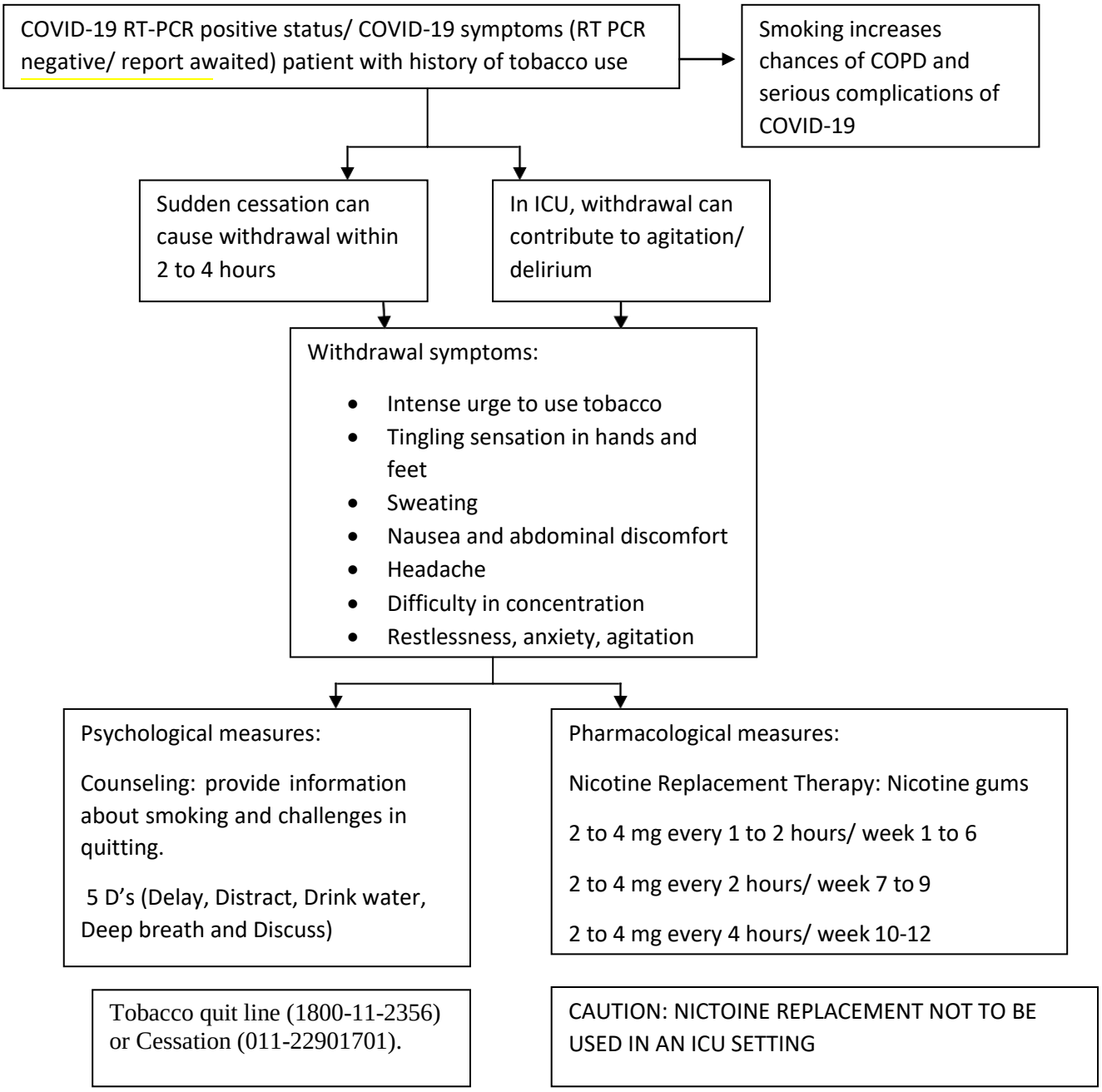
COVID-19 RT-PCR positive status/ COVID-19 symptoms (RT-PCR negative/report awaited) patient with history of alcohol use admitted

- Occasional use/ harmful use
  - Give oral vitamin supplements (multivitamins/ B-complex)
  - Brief intervention (FRAMES)
    - Feedback of personal risk
    - Responsibility
    - Advice
    - Menu of alternate choices
    - Express empathy
    - Self-efficacy
- Dependence pattern of use
  - Assessment by Psychiatrist
  - Uncomplicated alcohol withdrawal state
    - Signs and symptoms emerge within 6 to 12 hrs of last drink and reduce by 7 to 10 days
      - Autonomic hyperactivity (Increase PR, BP and sweating)
      - Tremors (fine or coarse)
      - Insomnia
      - Nausea and vomiting
      - Psychomotor agitation
      - Anxiety
    - Nutritious diet
    - Correct hydration and electrolyte imbalance
    - Thiamine (100mg) or multivitamin inj. IM for 7 days followed by oral supplementation
    - Proton pump inhibitor for 7 days
    - T. Diazepam 40 to 60 mg in divided doses to be tapered over 7 to 10 days (5 to 10 mg every 2 days)
    - Or
    - T. Lorazepam 8 to 12mg in divided doses to be tapered over 7 to 10 days (1 to 2 mg every 2 days)
  - Complicated alcohol withdrawal state
    - Withdrawal signs PLUS
      - Seizures (GTCS within 12-24 hours of stopping alcohol)
      - Delirium tremens (Confusion, visual and auditory hallucination within 24-72 hours of stopping alcohol)
    - Keep NPO if patient is sedated or in altered sensorium
    - Monitor vitals- BP PR Temperature frequently
    - Maintain airway, anti-aspiration measures, Secure IV access
    - High dose multivitamin supplementation (15 ampoules of B-complex in 500 ml of NS over 4 hours, once a day for 7 days) and Proton pump inhibitor
    - Acute control of Seizure/ delirium tremens:
    - Give IV diazepam 5 to 10 mg or IV lorazepam 2 to 4 mg initially and repeat if necessary, every 10-15 minutes
    - Refractory Delirium tremens needs high intensive care with cardio-respiratory monitoring

CAUTION:

DO NOT REPEAT DOSES OF DIAZEPAM OR LORAZEPAM IF PATIENT IS HEAVILY SEDATED/NOT AROUSABLE/COMATOSE

Substance use disorder (Tobacco):



Appendix I

Swab collection and testing for COVID-19

If swab has to be collected and sent to designated laboratory for testing, guidance on specimen collection, processing, transportation, including related bio-safety procedures, is available on https://mohfw.gov.in/media/disease-alerts.

General guidelines:

- The hospital has to be registered with ICMR for the purpose of sample collection.
- Health care professionals who will be doing the swab collection has to be identified and trained to do the procedure.
- The Personal Protective Equipment (PPE) has to be worn while collecting the swabs.
- In order to send the RT PCR sample to the laboratory, for each patient the ICMR Specimen Referral Form (SRF) has to be filled in completely and SRF ID generated through the web based ICMR application.
- Duly filled form with properly labeled sample has to be sent to the laboratory as per biosafety protocol.

For sending sample for RT PCR testing

Preferred sample: Throat or nasal swab in Viral Transport Medium (VTM) and transported in ice.

Technique for swab collection

Nasopharyngeal swab collection:

Tilt patient's head back 70 degrees. Insert flexible swab through the nares parallel to the palate (not upwards) until resistance is encountered or the distance is equivalent to that from the ear to the nostril of the patient. Gently, rub and roll the swab. Leave the swab in place for several seconds to absorb secretions before removing

Throat swab:

For throat swab, take a second dry polyester swab, insert into mouth, and swab the posterior pharynx and tonsillar areas (avoid the tongue). Place tip of swab into the same tube and cut off the applicator tip.

Specific challenges (and potential solutions) in a mental health establishment:

- Patient can be uncooperative for sample collection.
- Try to prime and prepare the patient well ahead of sample collection. Reassure them and explain in simple language the need for sample collection.
- Whenever nasopharyngeal swab collection is not possible, a combined nasal and throat swab can be sent as an alternate option.
- Many a times, an extra person might be needed while collecting swab, to hold the patient/ sample. The accompanying health care worker should also wear PPE as per recommendation.

Appendix II

Pre-admission assessment of a person with mental illness to be admitted at a COVID-19 facility

Psychiatric diagnosis: Details of the treating Psychiatrist

Seizure disorder: present/absent (contact details if present)

Substance use: present/absent, if present, details. Date of last use/drink:

Co-morbid physical illness:

Duration of illness/ Treatment:

Treatment details: severe/life threatening side effects in the past

- List of psychotropic medications with dosages
- Antiepileptic medications if any
- SOS/PRN medications if given/if any
- Other medications for co-morbid physical illness

When was the dosage of medications adjusted last:

Refusal of taking medications: present/absent

Last admission for psychiatric illness:

Has the patient been violent or threatened verbally recently (in last one month)

Has the patient attempted suicide or expressed suicidal ideations (in the last one month)

Any significant behavioural problem that needs special care

Is the patient independent for self- care needs: yes/ no

If no, needs assistance for: bathing/sanitation/dressing/eating/medications/others

Appendix III

System- wise manifestations of COVID-19 and potential complications with psychotropic medications

System	COVID-19 infection	Psychotropic medications	Recommendation
Cardiovascular system	a possible arrhythmogenic effect and heart failure	haloperidol, quetiapine, ziprasidone can prolong QT interval. synergistic effect with other medications that cause prolongation (azithromycin, hydroxychloroquine, lopinavir/ritonavir)	ECG with baseline corrected QT (QTc interval) for all patients on antipsychotic medications. Frequent monitoring in case of QTc> 500ms Safety of hydroxychloroquineis not well established in elderly, especially with concomitant psychotropic use. Blood investigations including electrolytes as hypokalemia and hypomagnesmia can worsen it. Risk- benefit decision to be done on a case-by-case basis regarding continuation versus switching to alternative medication.
Hematological system	Lymphopenia, increased prothrombin time, thrombocytopenia and disseminated intravascular coagulation	Carbamazepine and clozapine can cause leukopenia, neutropenia and agranulocytosis. SSRI increases bleeding risk	Complete hemogram to be done. Neutropenia can increase the risk of secondary bacterial infections and poorer prognosis. In such case, the offending drug must be stopped and alternate medication to be considered.
Renal system	Acute kidney injury has been observed in patients with COVID-19 particularly with pre-existing chronic kidney disease.	Psychotropic medications that are dependent on renal excretion includes lithium, topiramate, pregabalin and paliperidone that needs caution	Renal function test and creatinine clearance calculation to be done and dose adjustment accordingly. Lithium levels to be done, wherever feasible and dose adjusted accordingly
Respiratory system	The primary organ of damage is lungs and respiratory failure	Benzodiazepines reduce respiratory drive Second generation	Benzodiazepines in low dose may be needed for panic or anxiety. Some patients on long term

		antipsychotics, especially clozapine can cause pneumonia	benzodiazepines may need gradual tapering
Neurological system	Impaired consciousness, delirium (especially in elderly), seizures, memory impairment Azithromycin, Hydroxychloroqine, Corticosteroids can cause delirium	Anticholinergic agents such as Trihexiphenidyl, Tricyclic antidepressants and sedatives can worsen confusion Second Generation Antipsychotics can lower seizure threshold	Use of benzodiazepines, opioids and other anticholinergic agents must be minimized. Other contributing causes for delirium such as electrolyte imbalance, hypoxia has to be treated. Haloperidol PO 2.5mg- 5mg or Olanzapine PO 5-10 mg PRN can be used for treatment of delirium
Hepatic system	Acute liver injury. Use of Remdesivir can increase liver enzymes	Valproate, Carbamazepine,Second Generation Antipsychotics, TCAs, SNRI can have mild hepatotoxicity with modest increase in liver enzymes	Baseline Liver function tests to be done. Also, frequent monitoring High risk drugs such as valproate, carbamazepine, chlorpromazine to be preferably avoided.

Interactions between psychotropics and medications for management of COVID-19

	Azithromycin	**Hydroxychloroquine**	**Favirapir**	**Interferon**	**Lopinavir/ Ritonavir**	**Remdesvir**	**Corticosteroids**
Antipsychotic medications Haloperidol Quetiapine Ziprasidone Clozapine	Risk of QTc prolongation	Risk of QTc prolongation Risk of seizures	Possible QT prolongation	Risk of bone marrow suppression	CYP 450 inhibitor Can increase levels of antipsychotics Risk of neutropenia	Risk of elevation of ALT	No possible interaction reported
Antidepressant medications SSRI SNRI Bupropion		CYP 3A4 interaction with fluvoaxmine	Possible drug interaction	Lowers seizure threshold	Can increase levels of serotonergic agents- risk of serotonin syndrome	No information available about drug interaction	Weak CYP 3A4 inducer Risk of lowering seizure threshold
Mood stabilizers Carbamazepine Valproate	Risk of hepatotoxicity	CYP3A4 inducer		Risk of bone marrow suppression	CYP3A4 and CYP 2 D6 interactions increases levels	No information available about drug interaction	

Lithium					Caution in kidney disease		
Sedative/ Hypnotics Diazepam Clonazepam (longer acting)	Risk of hepatotoxicity		CYP metabolism can increase levels		CYP metabolism can increase drug levels and side effects		

Note: Among benzodiazepines it is safer to use short acting medications such as lorazepam in terms of respiratory depression and possible drug interactions with antiviral medications.

Vitamin C has no reported interactions with psychotropic medications. Co administration of barbiturates can reduce the levels of vitamin C.

Convalescent plasma therapy has no specific interactions with psychotropic medications.

Appendix IV

Mental Health of health care providers (Care of Carers)

The COVID-19 Pandemic has caused major change in our working format as health care providers. Varying duty hours, need to wear PPEs, fear of contracting the infection and fear about safety of family members and other such changes have the potential to be mentally stressful and exhausting for all the frontline warriors.

In order to have efficient functioning of the health system, to provide optimum care for patients it is important that the mental health issues of the workers are duly addressed at the earliest. This will also mitigate the serious mental health consequences of the stresses/ burnt-out individuals. Hence, every establishment must proactively take steps to address the concerns of all the health care professionals and workers in their establishment.

A general outline for providing mental health support:

- All the COVID-19 treatment facilities should have a designated mental health support network for its personnel
- The frontline workers have to be made aware of the availability and accessibility of such system
- The information regarding other supports such as help lines: IMA helpline - 999116375, 999116376, NIMHANS helpline-080-46110007 and particular state helplines have to be made available.
- The administration should promote awareness about mental health and stress during COVID-19, through various IEC activities.
- Setting up of grievance redressal system will be of great use for all the health care workers to raise any issue pertaining to their current work and prompt resolution and solutions can be offered.
- Have regular team meetings even if it is brief. This will enhance the bond between the workers in the system.
- Ensure all the Health Care Workers are aware of the latest testing, quarantine and isolation policies and the support provided by the individual establishments (if any)
- Ensure the process of testing, quarantine and re-joining work is streamlined and communicated to everyone working in the establishment.
- A rotational basis in the work from highly stressful to low stressful duties can be considered.
- Ensure the team working at each department/service is a mix of juniors and seniors who can be of support to one another. Encourage ―buddy system‖ with buddies being aware of need for confidentiality and available resources to help the person in distress.
- Refer the person who appears very distressed to the nearest available mental health professional
- Encourage all the workers to follow a healthy lifestyle such as having a daily routine, pursuing their hobbies and stress management and relaxation techniques such as yoga and breathing exercises
- Caring of Health Care Warriors –Mental Health support during COVID-19 : https://www.mohfw.gov.in/pdf/HCWMentalHealthSupportGuidanceJuly20201.pdf can be accessed for further details for managing the mental health issues in the health care workers.

Appendix V

Telepsychiatry: Challenges and possible solutions during COVID-19

During the COVID-19 pandemic, patients are discouraged from travelling and visiting a hospital unless it is emergency or for the purpose of treatment for COVID-19 illness. In this background, the Ministry of Health and Family Welfare along with NITI Aayog released the ―telemedicine guidelines‖ in the country and have provided statutory status for the practice of telemedicine. This had led to the development **of "Telepsychiatry Operational Guidelines 2020"** that can be referred to while implementing the TelePsychiatric services in the respective establishments.

Some of the challenges in delivering mental health services during a pandemic including:

- Difficulty for the patients in reaching the hospital for consultations during lockdown/ curfew
- Fear of contracting the infection (by both the patient and the health care provider)
- Treatment non-adherence is related to higher risk of relapse of most of the psychiatric illnesses
- Home visits and other community-based rehabilitation services are difficult to be continued or carried out during the pandemic situation

In this context, delivery of services in the form of tele-psychiatric services will ensure continuity of care in the community for persons with mental illness. Modes of Tele-psychiatry video consultations that can be considered during the COVID-19 pandemic are:

- **Direct to patient**: Video consultations may be used for triaging, screening, and providing first consultation services. After-care services, to follow-up the patients for whom direct first consultation has been provided earlier. It is possible to include brief interventions such as counseling and reassurance and brief psychotherapies through this mode of services.
- **Collaborative Video Consultations** (CVC): in the form of video consultations and intermediary medical or paramedical staff will be included at the patient's end, who will be consulted first by the patient, who in turn will consult the psychiatrist through video consultations. Collaborative consultations with other physicians, specialists can be made possible through this form of service.
- **Home consultations**: Home visits by a locally available nurse/ health care workers/ social workers augmented with video consultations with the psychiatrist, especially in cases of emergencies. The person visiting the patient has to take all necessary precautionary and safety measures such as wearing protective equipments during such visits.

For guidelines on setting up of video consultations services and for various services that can be provided, it is recommended to look into the following guidelines:

Telemedicine Practice Guidelines: Enabling Registered Medical Practitioners to Provide Healthcare Using Telemedicine. 25th March 2020. Available at https://www.mohfw.gov.in/pdf/Telemedicine.pdf.

Bada Math S, Manjunath N, Kumar, CN & Basavarajappa C & Gangadhar BN. (2020). Telepsychiatry Operational Guidelines 2020 Available at https://www.researchgate.net/publication/341650070_Telepsychiatry_Operational_Guidelines_2020

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