

MEMORANDUM OF UNDERSTANDING

Entered into by and between

Indian Association of Respiratory Care



Indian Society of Critical Care Medicine



MEMORANDUM OF UNDERSTANDING

Entered into by and between

Indian Association of Respiratory Care

(Herein referred to as "IARC")

Herein represented by Dr. Jerry V. Paul and Mr. Jithin K Sreedharan in their capacity as President and General Secretary of the Indian Association of Respiratory Care

duly authorized there on the other part

And

Indian Society of Critical Care Medicine

(Herein referred to as "ISCCM")

Herein represented by Dr. Rajesh Chandra Mishra, Dr Rajesh Kumar Pande, and Dr Shyamsunder Tipparaju

in his/her capacity as **President, General Secretary** and **Secretary-Nursing** of the **Indian Society of Critical Care Medicine**

duly authorized thereto on the one part

and whereas	both IARC and ISCCM (hereafter referred to as parties), herein referred to as the		
	parties, aiming at strengthening their relations have agreed to sign this memorandum		
	of understanding to promote mutual cooperation for expanding the scope of practic		
	of respiratory therapy (RT), training and continuing education and other forms of		
	professional enhancement between IARC and ISCCM so far as their memorandum of		
	understanding does not prejudice either parties obligations, individual business		
	interests and national regulations.		
and whereas	the parties are desirous of entering into an agreement of mutual cooperation		
and whereas	the parties desire that the terms of their agreement be reduced to writing.		



Objectives of the Agreement:

The general objective of this Memorandum of Understanding (MoU) is to stimulate and facilitate the development of collaborative and mutually beneficial fellowship & certificate program/s which serve to enhance the intellectual life and cultural development on both societies, and to contribute for increased cooperation. Thus, IARC and ISCCM have agreed that in support of their mutual interests in the field of clinical practice, education and research.

The two professional organizations will;

- 1. Cooperate in the exchange of information relating to their activities in teaching and research in fields of mutual interests
- 2. Endeavor to encourage students and staff to spend periods in the host intensive care units, hospitals or organizations.
- 3. Promote and conduct joint researches, short courses, as mutually agreed in writing between the parties prior to commencement

Purpose and Scope:

- 1. To design and establish a structured **Fellowship Program** for Respiratory Therapists to enhance their scope of clinical practice in ICU.
- 2. To design and establish a structured **Certificate Program** for Other Health Care Providers to learn basic skills in respiratory technology.

Mutual Clauses and Commitments:

Neither IARC nor ISCCM will be responsible for the costs of room, board, travel, or other personal expenses (including books and study resources). The parties acknowledge that they will require the student participants to pay these costs.

IARC/ISCCM shall not be held liable for any damage that is caused, whether directly or indirectly, by the fellows/students/trainees. They shall not hold IARC/ISCCM liable for any damage that is caused, whether directly or indirectly, by the fellows/students/trainees. IARC/ISCCM will indemnify themselves for any loss suffered by fellows/students/trainees that is caused.

The parties agree to indemnify and hold one another harmless from any claims by participants, their parents, survivors, or agents, arising from any negligent acts or omission on the part of either societies or any of their employees, fellows/students/trainees.

The relationship between IARC and ISCCM under this agreement shall be that of independent contractors, and a party shall not be deemed, nor hold itself out as being, a partner or agent of the other party. Therefore both parties agree not to conduct the Fellowship or Certificate program independently or use the name FARC-ACC without mutual consent.

Neither IARC nor ISCCM shall be liable for acts of the other, nor shall they be liable for the acts of students participating in the fellowship/certificate/training programs.



Validity of MoU

- 1. The duration of this first MOU to be valid for a period of two years, from November 2022
- 2. The MoU shall be extended then, upon the mutual agreement between both the societies, i.e. IARC and ISCCM

Financial Obligations:

Item	Cost
Course Registration Fee (One Time)	INR 10000/-
Stipend for students	As per the Hospital Policy

- 1. The revenue generated from the student enrolment fee shall be used towards conduct of course and examinations.
- 2. The total revenue generated from the fees shall be utilized for conduct of the course and the final balance sheet will be prepared at end of 1st year after the conduct of final examinations for the 1st batch.
- 3. The net amount (gain or loss) after settling all expenses shall be shared on a 50:50 model between the both the societies, i.e. IARC and ISCCM
- 4. The proposed enrolment fee per student for conduct of both the courses and examinations shall be INR.10,000/- (Ten thousand INR only)

Examination Policy:

The examinations shall be conducted as per norms laid down by ISCCM, similar to the courses conducted by ISCCM.

Terms of understanding:

This agreement will take effect from the date of its signing and shall be valid for a period of **Three years**, unless sooner terminated, revoked or modified by the mutual written agreement between Parties, and may be extended by mutual written agreement.

The aim of the Memorandum of Understanding shall be to achieve a broad balance in the respective contributions and benefits of the collaboration, and this shall be subject to yearly periodic review by both societies. In view of this this MoU shall be reviewed at least every quarter to ensure that it is fulfilling its purpose and to make any necessary revisions.

Either organization may terminate this MoU upon thirty (30) days written notice without penalties or liabilities.

Authorization: The signing of this MOU is not a formal undertaking. It implies that the signatories will strive to reach, to the best of their ability, the objectives stated in the MOU.

On behalf of the organization I represent, I wish to sign this MOU and contribute to its further development.



For Indian Association of Respiratory Care,

Dr. Jerry V. Paul

Designation: President

Date: 24th November 2022

Mr. Jithin K. Sreedharan

Designation: General Secretary

Date: 24th November 2022

For Indian Society of Critical Care Medicine,

Dr. Rajesh Chandra Mishra

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Designation: President

Date: 22nd November 2022

Dr Rajesh Kumar Pande

Designation: General Secretary

Date: 22nd November 2022

Dr Shyamsunder Tipparaju

Designation: Secretary-Nursing

Date: 22nd November 2022



Fellowship in Advanced Respiratory Care-Adult Critical Care (FARC- ACC)



Fellowship in Advanced Respiratory Care- Adult Critical Care (FARC- ACC)

(A Collaborative Fellowship by IARC and ISCCM)

Introduction and Scope of Practice:

Respiratory Therapists are allied health care professionals responsible for therapeutic and diagnostic aspects of patient care with diverse cardiopulmonary and related disorders. The scope of practice includes patients of all age groups and various areas of practice that include, but not limited to different in-hospital and out-of-hospital settings. (American Association of Respiratory Care; Position Statement; Scope of Practice-November 2018)

The jobs and responsibilities of a Respiratory Therapist include, but are not limited to:

- 1. Performance and collection of diagnostic data
 - a. Pulmonary function testing
 - b. Interventional diagnostics
 - c. Sleep studies
 - d. Noninvasive and invasive diagnostic procedures
 - e. Blood gas and other pertinent laboratory analysis
- 2. Patient assessment
 - a. Physical examination
 - b. Diagnostic data collection and interpretation
- 3. Application of respiratory care in intensive care settings
 - a. Medical gas therapy
 - b. Humidity and Aerosol Therapy
 - c. Artificial airway insertion, management, and care
 - d. Airway clearance
 - e. Invasive and non-invasive mechanical ventilation
 - f. Vascular catheter insertion, management, and care
 - g. Extracorporeal Life Support (ECLS)
- 4. Assessment of various therapeutic interventions
- 5. Disease management of acute and sub-acute presentations
- 6. Collaborative support of hemodynamics
- 7. Discharge planning and follow up management
- 8. Provision of emergency, acute, critical and post-acute care, including
 - a. Patient and environmental assessment.
 - b. Therapeutic interventions.
 - c. Land and air transport of critically ill ventilated patients.



To become a qualified Respiratory Therapist, a candidate has to undergo rigorous training during his/her Bachelor's degree in respiratory therapy. Following the Bachelor's degree, he/she is eligible to do the Post-graduation (M.Sc.), specializing either in Adult Respiratory Care or in Neonatal and Pediatric Respiratory Care. In India, there are only a few Universities that offer Post Graduation in Respiratory Therapy.

Amongst all the aforementioned areas of scope of practice, Intensive Care Units (ICUs) of various hospitals across the country are in need of ICU trained Respiratory Therapists. Considering to enhance the scope of Respiratory Therapists in Critical Care settings, Indian Association of Respiratory Care (IARC) has joined hands with Indian Society of Critical Care Medicine (ISCCM), and developed a Unique Fellowship, intended for graduate Respiratory Therapists to equip them with sufficient academic and clinical knowledge to practice in Critical care.

The Fellowship in Advanced Respiratory Care- Adult Critical Care (FARC-ACC) is a one-year (1 year) Fellowship designed to advance the knowledge and skills of a Respiratory therapist, who are working in the advanced clinical areas of Adult Critical Care. The Fellowship is a joint venture of IARC and ISCCM and follows the entry, coursework and exit requirements as set forth by both the societies.

Aim:

To design a structured Fellowship program for facilitating the specialization of Respiratory therapists to enhance their scope of practice in ICU.

Need of the Program:

There is a huge gap in the care of ICU patients associated with the advancement in disease specific mechanical ventilation strategies and ancillary therapies. Not many in the regular staff including medical registrars are competent to handle and troubleshoot issues arising out of this. Respiratory Therapists are allied health care professionals specialized in cardiopulmonary care and they can bridge the gap in the clinical and technical areas of ICU.

Goal:

To create a pool of formally trained Respiratory Therapists, who are specialized in Critical care, to effectively manage mechanical ventilation, advanced respiratory care and ancillary therapies. This will enhance the practice of safe ventilation and facilitate improvement in quality markers like ventilator associated events.

Duration of the Program:

One year



Mode of Study:

Residential, Full time

Entry Requirements:

- ✓ Minimum Criteria is a Graduation in Respiratory Therapy, [i.e. B.Sc. Respiratory Therapy/ B.Sc. Respiratory Care Technology/ B.Sc. (Medical Technology) Respiratory Therapy] from any of the UGC approved Universities in India.
- ✓ Graduate Respiratory Therapists from Foreign Universities, upon the decision from the Board of Fellowship Study.
- ✓ Registered Life Membership in IARC
- ✓ Associate Life Membership in ISCCM
- ✓ Fresh and Experienced Graduate Respiratory Therapists who fulfill the above criteria are eligible to apply.

Fellowship Centre:

All Critical Care Medicine Departments accredited or approved by ISCCM and IARC, as training centers, with ISCCM/ IARC accredited Faculties. It is mandatory that the training center shall be an approved/ accredited center by either one of the two societies.

Entry Criteria:

Upon the interview conducted by the Hospital HR personnel and Head of the Department of ICU, opted by the candidate, where he/ she wants to pursue the Fellowship.

Fellowship Fee:

INR 10000/- (Rupees Ten Thousand only)

Fellowship Stipend:

As per the hospital policy [Not less than INR 25000/- (Rupees Twenty-Five thousand only)]

Log Book:

All the Fellows are expected to have a log book, in which the cases seen and procedures attended/performed shall be noted (Minimum of 5 cases and 5 Procedures per week), and to get signed by the designated faculty assigned by the Head of the Department. Faculty should be the in-charge of monitoring and reviewing this logbook and provide continuous feedback to the trainee.

Research, Journal Clubs and Publication:



- All the Fellows are expected to complete a mandatory research module during the initial three months of Fellowship (Either Online/ Onsite, Certificate to be submitted) and;
 - 1. Publish a case study.
 - 2. Publication with the Fellow as the 1st Author, should be either in the Indian Journal of Respiratory Care (IJRC) or in the Indian Journal of Critical Care Medicine (IJCCM) OR in any indexed journal.
- Failure to obtain these mandatory certification and publication of article will be considered to as incompletion of Fellowship coursework; The Fellowship certificate shall be issued only upon the completion of all required coursework.
- All Fellows are expected to actively participate in the ICU journal club with Case Presentations, Article Critique and Literature Reviews- All these need to be entered in the Logbook, countersigned by the Head of the Department/ Assigned Faculty.

Additional Requirements (Mandatory and Optional):

Attendance of ISCCM National Conference,	Mandatory
during the Fellowship period	
Attendance and Paper Presentation in IARC National Conference,	Mandatory
during the Fellowship period	
Attendance of one ECMO conference and Certification	Optional
Participation in one of the Advanced Workshop conducted by	Optional
IARC and ISCCM	
Completion of One Online Course conducted by IARC and ISCCM	Optional

Attendance Requirements and Leave Policy:

48 hours per week x 48 weeks in one calendar year; or, as per the Hospital Policy; or, as suggested by the Head of the Department of ICU. Leaves as per the Hospital Policy or as per HOD's decision.

Fellowship Coursework:

- ✓ Attendance requirement, as per the policy of department/ hospital
- ✓ Completion of Logbook, signed by the Head of the Department/ Assigned Faculty
- ✓ Case Study to be published
- ✓ Certificate of Attendance- IARC and ISCCM National Conferences
- ✓ One advanced Workshop each by IARC and ISCCM
- ✓ Certification of completion of one online course, each by IARC and ISCCM
- ✓ Completion of competency checklist, countersigned by the Head of the Department/ Assigned Faculty



Exit Exam:

Upon the successful completion of Fellowship Program, the candidate will have an exit exam, comprising of Theory and Bedside Practical evaluation. The Examination Centre will be announced due course.

- Theory: Objective MCQ
- Practical: Viva, OSCE and Bedside Examination- by External Examiners, as delegated by IARC and ISCCM

Accreditation of Fellowship:

- Indian Association of Respiratory Care
- Indian Society of Critical Care Medicine

Fellowship Board:

The following members of both the societies will act as the Board Members of FARC-ACC

The board will also act as the grievance cell.

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Fellowship Program Director- ISCCM		Dr. Shyam Sunder T.		
Fellowship Program Director- IARC		Dr. Manjush Karthika		
Fellowship Coordinator- IARC			Mr. M. Kishore Kumar	
Hea	d of the Department of ICU opted by the	cand	idate	
FA	RC-ACC Board Members- ISCCM		FARC-ACC Board Members- IARC	
1.		1. Dr. Sudhesh Rao- (Mangalore)- Advisor		
2.		2.	2. Ms. Madhura Gauri Shevade (Pune)	

3.

Ms. Anmol Thorbole (Bengaluru)

Teaching Methodology:

3.

- ✓ Bedside Lectures
- ✓ Classroom Lectures
- ✓ Online Lectures- Zoom
- ✓ Webinars

Award of Fellowship:

Upon the successful completion of Fellowship coursework and Final Exit exam, the candidate will be announced to have cleared the Fellowship in Advanced Respiratory Care- Adult Critical Care (FARC-ACC).

The Fellowship will be conferred to the candidate in the **National Conference of ISCCM**, in the presence of Board of Fellowship Program and representation from both the societies.



Mandatory Disclosures:

- The Fellows are not permitted to undergo/ study any Full-time University-based Academic Programs (Masters, PG Diploma etc.) while pursuing the Fellowship Program.
- The Fellowship in Advanced Respiratory Care- Adult Critical Care (FARC-ACC) is a Clinical Fellowship Program and is not; a replacement for/ equivalent to Master of Science in Respiratory Therapy Programs, offered by UGC approved Indian Universities/ Foreign Universities.
- The Fellowship is not awarded by any University.
- The Fellowship only aims to enhance the Academic and Clinical skills of Graduate Respiratory Therapists, to deliver high quality patient care in the ICUs.

Use of Credential:

- Only those candidates who have passed the Fellowship exit examinations are authorized to use the credential acronym (FARC-ACC)
- The FARC-ACC credential is intended to be used exclusively by the respiratory therapists as a designation to reflect his/her professional's knowledge and experience. An individual who possesses a current FARC-ACC certification may use the credential.
- The FARC-ACC credential may be used in a context and with media consistent with demonstrating professional credentialing, including but not limited to: office signage, resumes, websites, business cards, presentations, introductions, and electronic signatures.
- The proper use of credential is as follows:

 - ♣ Mr. Khan BSRT, MSRT, FARC-ACC
 - **♣** Dr. Thomas BSRT, MSRT, PhD, FARC-ACC
- Some of the uses of **FARC-ACC** credential are **not permitted**; For example, to endorse any product, service or company; or as a company, product or brand name. The certification credential, whether in name or logo form, is not to be altered or modified in any way; this includes, but is not limited to, any change in font or color, any distortion, any animation, any translation, or any combination with any other logo or graphic material.



Fellowship Curriculum

Module	1
Title	Introduction to Critical Care and ICU Assessment
Duration	Three months

Basic Life Support and Advanced Cardiovascular Life Support Certification + Research Module

- The candidates are expected to obtain BLS and ACLS provider certification from American Heart Association, within a month of commencement of Fellowship Program.
- Those candidates, who already have the BLS and ACLS cards, are expected to have its validity till the completion of Fellowship.
- The candidates are expected to complete a short course on Research Methodology (Online/ On-site), which will prepare them for short thesis and case study publication.

A review on Cardiopulmonary Diseases and Other common ICU Presentations

This module focuses on various cardiopulmonary diseases that are common to the critical care areas and are candidates are expected to understand the detailed pathophysiology and ICU management of disorders and diseases that include, but not limited to ARDS, COVID-ARDS, COPD, Asthma and other obstructive airway diseases, Poly-traumas, Pulmonary hypertension, Pneumothorax, Sepsis, Shock, Pulmonary embolism, Burns, MI, Heart Failure, Pulmonary edema, Neuromuscular, Renal and Liver diseases, Acute Pancreatitis, Tetanus, Poisonings and GI Bleed.

Patient Assessment and Monitoring in ICU

This module details the various components of cardiopulmonary, neurologic, renal, gastrointestinal, metabolic, musculoskeletal and other systemic assessments as well as to reinforce the early recognition of clinical deterioration of critically ill patients. This module also includes various monitoring equipment in ICU, including multipara monitors, End-tidal CO2, Pulse-oximetry, transducers, ECG etc. This module also covers detailed diagnostic and therapeutic approaches with Blood Gas analysis including technical aspects of ABG and VBG.

Respiratory Mechanics, Cardiovascular Assessment and Hemodynamics

This module overviews the vital components of detailed assessment of respiratory system and advanced cardiovascular assessment. In addition, the module also covers various components of basic to advanced hemodynamic monitoring like Cardiac output monitoring, Thermodilution methods, including normal and abnormal values, and its clinical implications in critically ill patient.



Module	2
Title	Respiratory Diagnostics and Therapeutics
Duration	Three months

Aerosol Medicine and Pharmacology

This module will detail the common drugs (pulmonary and non-pulmonary) used in the treatment of critically ill patients. Furthermore, the importance of the effects/side effects, the role of the respiratory therapists in ICU pharmacology like sedatives, muscle relaxants, airway and cardiovascular pharmacology and the basic antimicrobial medications are focused here. This module will also focus on the importance of all aerosolized pharmacologic agents (bronchodilators and non-bronchodilators) via aerosol or instillation. Optimization of aerosol delivery during mechanical ventilation will also be discussed in this module. The candidates are expected to understand various aerosol delivery devices and their technology.

Airway Clearance Techniques and Airway Management

This module will explain the importance of airway clearance and various techniques as well as the indications and contraindications of various airway clearance techniques like Chest Physiotherapy and Mechanical devices to aid secretion clearance. The module also focuses to enhance skill competencies required to use basic to advanced airway adjuncts and to perform effective Bag Mask Ventilation. The candidates are expected to learn in detail about all areas of Basic to Advance to Difficult Airway Management including video laryngoscopy.

Medical Gas Therapy and Humidification

This module will explain the science and application of medical gases like Oxygen, Heliox, and Inhaled Nitric Oxide and its delivery devices and specification of various gas sources like tanks, cylinders and hospital gas storage and delivery system. The candidates are expected to be expertized in the indications, contraindications, dose calculation and complications of these medical gases. The candidates are also expected to learn various types of humidification used in respiratory critical care.

Diagnostics: Imaging and Laboratory

This module will focus on the utility of various diagnostic imaging tests, including: radiographs, computerized tomography, magnetic resonance imaging, ICU ultrasound, and nuclear scans. The lab module will detail normal and abnormal values in relation to blood chemistries, sputum and blood cultures, cardiac markers, fluid analysis, and blood gases.



Module	3
Title	Advanced Mechanical Ventilation and ICU Procedures
Duration	Three months

Non-Invasive Ventilation

This module provides the detailing of various modes, indications, contraindications, hazards, side effects, and beneficial effects of non-invasive ventilation. This module will detail the updates in NIV and High Flow Nasal Cannula (HFNC).

Invasive Mechanical Ventilation

This module provides a detailed review of the basics to the advances of various modes and settings of invasive mechanical ventilation. This also includes the comprehensive objectives of appropriate initial mechanical ventilation settings, titration of settings, ventilator graphics interpretation, disease specific ventilation and weaning techniques. Advanced study objectives also includes permissive hypercapnia, ventilator induced lung injuries, diaphragmatic dysfunction and advanced modes and technologies such as PRVC, IRV, APRV, automated weaning modes, Electrical Impedance Tomography and HFOV.

Adjuncts in Oxygenation and Ventilation

This session emphasized the importance of alternative methods to improve oxygenation including ECLS Prone ventilation, Inhaled NO, Heliox, independent lung ventilation and all other adjuncts in disease specific ventilation.

ICU Procedures, Patient Transport and Equipment Troubleshooting

- This module focuses on a variety of procedures performed in the critical care areas and the role of respiratory therapist in assisting and performing them. Some of these procedures include but not limited to: endotracheal intubation/extubation, ET tube adjustments, assisting in bedside percutaneous tracheostomy, arterial line insertion and monitoring, assisting in CVL insertion and monitoring, mini bronchial alveolar lavage and assisting in intercostal drainage insertion and monitoring.
- Another objective of this module is the preparation and escort for Inter and Intra-hospital Transport of Critically ill ventilated patients
- The candidates are expected to understand the troubleshooting of all respiratory related equipment including, but not limited to such as mechanical ventilators, aerosol generators and blood gas machines.



Module	4
Title	Multidisciplinary Critical Care and Other Core Areas
Duration	Three months

Multidisciplinary Critical Care

This module focusses on the role and scope of practice of Respiratory Therapist in diverse areas like Neurological and Neurosurgical Critical care, Obstetric critical care, Cardio-thoracic critical care, Coronary critical care, Trauma and Emergency care. The candidates are expected to learn the importance of Sepsis management pathways, fluid resuscitation and management in this module.

Clinical Microbiology, Infectious diseases and Infection Control Practices:

This course is designed to provide an extensive overview of the microbial structure, functioning, and diversity of microorganisms, growth and pathogenesis and immunology are presented with important bacterial, viral, parasitic and mycotic infections discussed from the standpoint of etiology, epidemiology, and pathogenesis and laboratory diagnosis. This module will also review the infections that are commonly seen in ICU patients in the intensive care unit and a special focus on various transmission routes. The candidates are expected to understand other aspects of infection control processes like sterilization and disinfection in the ICU and prophylactic measures for infectious sources, emphasizing more about ventilator associated events (VAE), CLABSI, CAUTI etc.

Nutritional Assessment and ICU Rehabilitation

This module focusses on the nutritional requirement of the critically ill patients, especially who are mechanically ventilated. The candidate is expected to understand the importance of indirect calorimetry and energy expenditure, and its importance in the outcome of ICU patient population. The Fellows are expected to expertize the ICU rehabilitation;

Health Management, Disaster Management, Ethics, Quality and Safety

This module details the ethical concepts and conflicts, commonly seen in critical care areas, including patient autonomy, informed consent, end of the life care, withdrawal of life support, and organ donation. This module will also cover the importance of multidisciplinary team performance and important components of healthcare quality and patient safety and the importance of effective disaster management plan in ICU. This module will also cover the domains like Leadership, Effective communication, Constructive Criticism and Hospital Information System/ Electronic Medical Record Systems



Competency Checklist (Continuous Assessment throughout the Fellowship Period)

Name of the Student:	
Name of the Student.	

Procedure	Date	Date
Basic Airway Management		
Bag Valve Mask ventilation		
Nasopharyngeal and Oropharyngeal Airways		
Advanced Airway Management		
Endotracheal Intubation		
Laryngeal Mask Insertion		
Other Supra-glottic Airways/ Laryngeal Tube Insertion		
Adjuncts for Intubation like Bougie, Stylet, Light-wand, Airway Exchanger		
Assistance in Surgical Airway- Tracheostomy, Cricothyrotomy		
Difficult Airway Management		
Bronchoscopy guided Intubation		
Video-laryngoscopy		
Care of Patients with Artificial Airway		
ET Tube care		
Tracheostomy care		
Oxygen therapy and Other Medical Gas Therapy		
Devices		
Cylinders		
Interfaces		
Oxygen and Other Medical Gas Supply and their Control in the ICU and	Hospital	
Aerosol Therapy		
Medications		
Types of Devices		
Compressors		
Interfaces		
Setting up, Initiation, Titration and Liberation of Invasive and Non-invasive Mechanical Ventilation		
Cardio Pulmonary Resuscitation- BLS and ACLS		
Vascular Access		



Arterial Blood Gas Analysis		
Peripheral Arterial Line Insertion		
Assisting in Central Arterial Cannulation		
Assisting in Central Venous Line Insertion		
Inter and Intra-hospital transport of critically ill ventilated patients-		
Checklists to Final documentation		
Chest Imaging		
Chest X-ray		
CT scan of Chest		
Airway, Diaphragmatic and Lung Ultrasound		
- To scan and interpret independently		
Assisting in vascular ultrasound		
Bronchial Hygiene and Airway Clearance Techniques		
Technical and Clinical aspects of Tracheal Suctioning		
Chest Physiotherapy		
PEP therapy		
Autogenic Drainage		
Rehabilitation in ICU		
Assisting in ventilated patient mobilization		
Breathing exercises		
Active Cycle of Breathing Techniques		
Troubleshooting and Calibration of ICU equipment		
Ventilators and Circuits		
Nebulizers and Compressors		
Vascular transducers		
ETCO2		
Pulse Oximetry		
Gas storage- Cylinders, Tanks		
Flow regulators		
Suction Equipment		
This checklist needs to be printed out on a weekly basis, and to be sign	ed by the	Faculty
Name and Signature of Assigned Faculty:		
Date of Completion:		
Remarks:		

Reference Resources:



Books
1. Critical Care Update 2019- S Todi (ISCCM)
2. ICU Protocols- R Chawla (ISCCM)
3. Textbook of Critical Care- JL Vincent
4. Egan's Fundamentals of Respiratory Care- RM Kacmarek
5. Mechanical Ventilation: Physiological and Clinical Applications- SP Pilbeam
6. Mechanical Ventilation: Clinical Application- V Deshpande
7. Clinical Application of Mechanical Ventilation- D Chang
8. Rau's Respiratory Care Pharmacology- DS Gardenhire
9. Mosby's Respiratory Care Equipment- JM Cairo
Journals
Indian Journal of Critical Care Medicine (ISCCM)
2. Indian Journal of Respiratory Care (IARC)
3. Respiratory Care Journal (AARC)
4. Critical Care Medicine (SCCM)
5. Intensive Care Medicine Journal (ESICM)
6. Canadian Journal of Respiratory Therapy (CSRT)

Contact Details:	
ISCCM Office	IARC Office
	Indian Association of Respiratory Care
	(IARC)
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	8th Floor, Door No: 37//2701-H5
	IMA House, JN Stadium Road
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