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ICU Nurse Staffing (INS) Model
COVID-19
Surge Capacity Building

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Executive Summary

What is the current need?

The emergence of human-health related outbreak of COVID-19 pandemic has become extremely severe and deadly. Critically ill patients with COVID-19 need treatments of high complexity. Thus, it is expected that there will be imbalance between the supply and demand for human resources especially critical care nurses.

Why this document important?

This document provides a staffing model for the critical care units' surge capacity which will provide a way for our health care system to contain the dramatic increase in the rate of coronavirus infections. Currently, the critical care units are overwhelmed and simultaneously challenged on multiple fronts. These include huge under-staffing and limited numbers of well-qualified critical care nurses, infection control and protection challenges, and minimum utilization of other nursing specialties working in less acuity level units.

How will Surge Staffing Model will help?

The staffing model represented in this document will provide strategies to support surge capacity plans and provide a sustainable workforce with a focus on patient safety, infection control and quality of care. Furthermore, it will provide guidance to the hospitals to keep delivering health care with required nursing staff to handle a significant increase on critically ill

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Title:	ICU Surge Capacity Building; A Nurse Staffing Model
Applied to:	This White Paper is directed to all nurse leaders and direct care givers dealing with COVID-19 cases at ICU hospital settings.
Replaces (if appropriate):	N/A

Recommended References:

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Terms & Definitions

Surge capacity:	The “ability to manage a sudden, unexpected increase in patient volume that would otherwise severely challenge or exceed the current capacity of the healthcare system” (Hick et al. 2004, p. 254)
Surge:	An increase in the number of patients presenting to the HOSPITAL due to a disaster that may overwhelm the ability of the HOSPITAL to provide treatment to all patients presenting.
Surge Capacity Plan:	The procedures that both the HOSPITAL and MEDICAL PROVIDERs will implement to manage a surge of patients.
Precepting:	Providing support and guidance enabling new registrants to make the transition from student to accountable practitioner.
Coaching:	A process that aims to improve performance and focuses on the ‘here and now’ rather than on the distant past or future
Mentoring:	A process where an ICU nurse establishes a structured interaction with a support-staff nurse to promote and achieve a career development and professional support.
Support-staff Nurse:	The support-staff nurse is a registered nurse who holds a bachelor’s degree of nursing and has a clinical experience of 3 years or 2 years minimum has a supporting role in critical care units during the COVIC-19 pandemic.
ICU Charge/Senior Nurse:	Charge nurse is an RN who is essentially 'in charge' of Intensive Care Unit during the shift. This nurse performs many of the tasks that general nurses do, but also have some supervisory duties.

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Table of Content

1. **Targeted Population**	All nurse leaders and nurses who care for critical confirmed/suspected adult and/or pediatric patients of COVID-19
2. **Targeted End Users**	All nurse leaders and nurses who care for critical confirmed/suspected adult and/or pediatric patients of COVID-19
3. **Methodology**	A literature search was performed using EBSCO host. This database was chosen because it provides authoritative medical information on medicine, nursing and the health care systems. The search *terms* used were: nursing, protocol, COVID-19, infection control, droplet precaution and pandemic. However, this guidance had been established with limited references due to insufficient published papers.
4. **Updating**	This MODEL will be updated with the emergence of higher quality evidence or change in the general clinical situation or as more information becomes available.
5. **Declaration of Conflict of Interest**	None
6. **Source of Funding**	None

1. Introduction

At the end of 2019, a novel coronavirus was identified as a respiratory disease caused by the corona virus in Wuhan, a province of China. It has spread from China to many other countries around the globe, including Saudi Arabia resulting in a global pandemic. Late February 2020, the World Health Organization designated the disease as the cause for acute respiratory distress and high mortality rate.

The current coronavirus pandemic is an incredibly challenging time and evolving situation that is impacting our health care system on many aspects especially critical care settings around the world. Thus, the raising number of critically ill patients is expected to surge in most of the countries which can lead to severe shortages of intensive care units nurses and requires careful advanced planning (Jit et al. 2020). During the current worldwide nursing shortages, it is crucial for any nursing administration to manage the available nursing workforce to ensure that patients and nurses needs are met (Vineet, 2020).

In Saudi Ministry of Health, there are 107,092 registered nurses working in primary, secondary, and tertiary health care settings whereas only 20,891 (19%) registered nurses are working in critical care units (MOH statistical yearbook, 2019). Furthermore, critical care nurses might face overwhelming workload and simultaneously challenged on multiple aspects. These challenges include huge under-staffing with surge capacity plan and limited numbers of well-qualified critical care nurses, protection of cross infection risks, job stress, and work-related burnout (Mo et al., 2020; Ran et al., 2020; Wu & McGoogan, 2020). Improving the ability of hospitals through supporting national surge capacity plans is crucial to sustain the safe provision of critical care (NCHF, 2020).

Creating an appropriate nurse staffing model will help intensive care units in their preparedness and readiness to accommodate the escalating number of critically ill coronavirus patients (Shah, Awasthi, Modi, Rashmi, Saxena, 2020). However, the nursing staff model is not achievable without significant prior planning or preparedness activities. Thus, the current White Paper provides recommended and suggested guidelines to be considered when planning to manage any plan to surge the Intensive Care Units (ICUs) in regard to nursing capacity during COVID-19 pandemic to ensure safe practice and sustainable critical nursing care services.

This White Paper "sheds light" on a team-based nurse-staffing model at critical care settings which is expected to be considered when planning to manage the surge capacity during the current pandemic. Furthermore, several hospital departments and units showed less nursing workload during the pandemic such as surgical department, orthopedic, ophthalmology, ENT, cardiology, urology, etc., therefore, the proposed staffing model will provide an optimum utilization of Non-ICU nurses who work in less acuity level units. This will provide a sustainable workforce with a special focus on infection control precautions and patient safety measures.

2. Literature review and Significance

As a relatively new field of study, there are limited number of published papers and reports on nurse staffing methods during a pandemic. In the case of a major pandemic, overlapping demands for funding, long-term effects and future infection of workers lead to highly restricted opportunities for transporting services or moving patients. Some simulations of extreme pandemics project that existing and increasing health care capability will be surpassed (Hick et al., 2014). Outbreaks will contribute to a substantial rise in the demand for ICU beds, although at the same time that the usable beds. The 2013 epidemic of Severe Acute Respiratory Syndrome (SARS) in Toronto resulted in a 10-day shutdown of 38% of ICU tertiary care facilities, primarily due to medical shortages related to disease or quarantine. Therefore, hospitals must prepare also and have proposals to improve the efficiency of the ICU room, which could require a general transformation (Arabi et al., 2020).

Specific and achievable targets for increasing patient care services (Arabi et al., 2020) should be used to plan surge capacity and capability. Sudden-onset accidents are defined by the need to triage (primary and secondary triage), accept and recover a large number of patients within a limited amount of time (hours) in the emergency department (ED). Patients admitted to the ICU are fewer than those handled in the ED but occupy 10 to 100 times longer ICU beds (days to weeks) than the time they spent in the ED (Booth and Stewart 2005). Wherever practicable, goals for surge capacity and availability should be based on expected patient loads amid a slow-onset, imminent catastrophe, or pandemic (Hick et al.2014).

Critical care services can cover a variety of disaster effects and offer traditional, emergency and disaster treatment. While the hospital transitions into readiness and disaster services, the government alliance and jurisdictional authorities become collaborators in optimizing capacity and resources and maintaining national continuity in treatment. Reducing the burden on healthcare and urgent care facilities is a vital consideration (Koenig & Schultz 2010; Lee et al. 2017). The recent American College of Clinical Pharmacy (ACCP) statement on disaster surge capacity recommended increasing ICU capacity by up to 200 percent above baseline capacity (Einav et al., 2014). Literature and previous experiences indicated that if the ability of the physical bed is not matched by an increase in staffing, a very significant decrease in survival may occur, which would at least partially negate any beneficial impact of growing the beds (Koenig& Schultz 2010).

Due to the heterogeneity of the rate of nursing workers in different countries, the relationship between nurse workload/staff ratios and patient outcomes might seem under. However, the number of studies that have shown that decreased nurse/patient or nurse/bed ratios negatively affect clinical outcomes is extensive (West et al. 2014). This is expressed in the heterogeneity of the rates of nursing workers in different countries. In the United Kingdom, at least one nurse / patient ratio is prescribed for two patients (Bray et al., 2010). In the United States, the ratio varies from 1.29 to 3.8 (Lee et al., 2017). Remarkably, research has shown that exposure of critically ill patients to high workload/staff ratios is associated with a significant reduction in the chances of survival (Kelly et al.2014).

Human-health emergence linked to the COVID-19 pandemic outbreak has been highly serious and deadly (Bilal,2020). Sensitive patients with COVID-19 require high-intensity care (Yuan Yu,2020). Therefore, it is expected that there will be an imbalance between supply and demand for human resources, especially essential nurses. A staffing model can help balance the workload with the workforce and the growing demand for critical care to our healthcare system.

In comparison, nearly 48 percent of reported COVID 19 patients encountered psychological discomfort during early treatment, much of which was attributed to their emotional reaction to their discomfort (Chew et al.2020). Ensuring sufficient and properly qualified staff in hospitals, health systems and services is therefore an integral component of patient care and management during the COVID-19 pandemic. (Buss & Thompson 2015; NC-AHEC, 2020). Nevertheless, the importance of precisely communicating coping techniques to healthcare workers to help alleviate any of the "Anxiety and Tension" they may feel when working through the COVID-19 pandemic (CDC, 2020; WHO, 2020).

Particularly, in order to promote workplace readiness to satisfy the increasing surge demands for distinct health care demographics, the literature review is supplemented by a variety of other guidance manuals that complement the approach for optimizing skills use with adequate preparation, cross-training and retraining tools. These approaches will also allow nurses to assist critical care nurses in applying evidence-based practice and skills to COVID-19 patients in nursing practice (Christian 2005).

During times of understaffing or a small number of well-qualified staff, as can be the case during biological upsurge, it is important that nursing leaders and nursing staff work together to provide healthy, professional treatment to all patients in a manner compliant with nursing laws and health regulations (Christian 2005). Maintaining sufficient staffing requirements during the pandemic is also necessary to maintain a safe work environment and quality patient care (WHO 2020).

3. Purposes of the Model

Currently, according to the Ministry of Health nursing demographics, 18 percent of nurses are skilled to work with critically ill patients and they are located primarily in large and teaching hospitals. This leads to huge under-staffing and limited numbers of well-qualified critical care nurses. On the other hand, critical care units are expected to be overwhelmed and simultaneously challenged on multiple fronts during COVID-19 pandemic.

Despite the severe shortage of ICU nurses, the opportunity to optimize the nursing workforce from other hospital departments and units particularly staff nurses in procedural areas with reduced workload during the current pandemic such as post- anesthesia care unit, cardiac catheterization lab, electrophysiology lab, and operating room. Therefore, the main purposes of this White Paper are:

a) To provide recommendations and suggestions to ensure sustainable critical care during the COVID-19 pandemic.

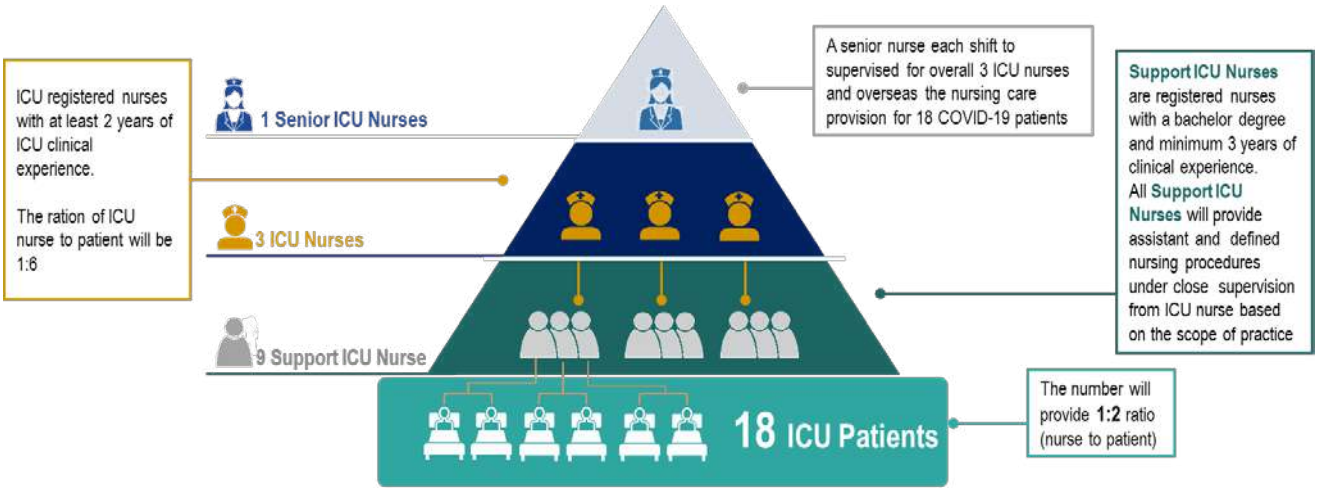
b) To minimize the pressure on ICU nurses and to reduce the implications that result in workplace stress, burnout, and cross-infection rates among nurses.
c) To utilize the nursing workforce that can assist ICU nurses to expand critical care surge capacity and extension of clinical services capability during national disasters and global pandemics.
d) Introduce the new staffing model (INS) for ICU nurses and support-staff nurse during pandemic.
e) Provides continuous suggestions for expanding and extension of critical care capacities.

4. The ICU Nurse Staffing Model

Globally, there are several models previously and currently being used to support staffing demands over pandemic (Koenig & Schultz 2010). Based on the literature review, international applications, and the national surge response planning, the proposed INS model expected to address effectively nursing shortage and contextual relevance in critical care. The INS model which has been modified from the Ontario Health Plan for Critical Care during Pandemic will provide a framework to assist critical care nursing managers in competing for unit capacity while delivering required nursing services in the pandemic (Christian, 2005).

Through applying the team-based INS model, ICU managers will be able to provide the nursing care for 18 ICU patients being treated for Covid-19 infection with 1 senior/charge nurse will lead the nursing care plan through 12 nurses. Whereas one ICU nurse will be assisted with three support staff nurses (Figure 1).

Figure 1. Intensive Care Unit Nurse Staffing (INS) Model during Pandemic (modified from the Ontario Health Plan for Critical Care).



The staffing ratio in this model is 1:2 (nurse to patients) while the nursing workload for (6) ICU patients will be distributed between (3) support-staff nurse and (1) ICU nurse and therefore the accountability of the (6) patients will remain on (1) ICU nurse (1:6 ratio). Furthermore, each group of (3) ICU nurses, who provide nursing care for (18) patients with assistant of (9) support-staff nurses, will led by one senior nurse or charge nurse. Additionally, the support-staff nurse should be carefully selected and must be well trained and has acknowledged the next role, responsibilities, and scope of work. All support-staff nurses should provide assistant and defined nursing procedures under close supervision from the ICU nurse based on the scope of practice.

5. Implementation of the Model

The main element for a successful implementation of the INS model are the support-staff nurses with a clear-defined selection criteria and smooth well-structured transition program. The support-staff are recommended to go through the following phases (Figure 2):

Figure 2. The 40-Days Clinical Transition Program of the Support-staff Nurse.

5.1 Selection Criteria Phase

The support-staff nurse should fall under specific criteria to smooth the clinical transition period therefore, its highly recommend to use the following inclusion criteria to recruit the capable staff nurse who can treat patients with acute situation and perform the needed role and responsibility during the temporary deployment in the ICUs. These criteria are potentially including:

a) The support-staff nurse should be a registered nurse and holds a bachelor's degree of nursing,
b) The support-staff nurse has a clinical experience of 3 years or 2 years minimum.
c) Has passed the Triple-C course (COVID-19 Critical-care Crash Course for Nurses) (Box. 3).
d) Certified as an ACLS provider.
e) Nursing staff who worked before in critical care settings or has a formal critical care training might be a good candidate to be a support-staff nurse in the ICU.

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Box 1.1 COVID-19 Critical-care Crash Course for Nurses (Triple-C course)

The purpose of this blended learning course is to enable Support-staff Nurse to assist critical care nurses to apply evidence-based knowledge and skills to nursing practice for patient with COVID-19 Respiratory-related Symptoms. By the end of the course, the trainees will be fully up to speed on the duties that nurses must perform to ensure that their Covid-19 patients are well cared for.

Description

The Covid-19 Critical care Crash (Triple-C) course is a blended learning program that provides the knowledge and skills for nurses to care for the patients with Covid-19 respiratory symptoms. The course will guide the frontline trainees through the Open-WHO platform, MoH webinars, and practical training to get the required knowledge about respiratory illnesses, standard precautions, how to examine common factors that cause each organ to become diseased, and the nursing roles during critical manifestations. Through the end of the course, the nurse will be fully aware and oriented with the roles that nurses must perform to appropriate care need for the COVID-19 patients.

Target Audience
Non-Critical Care Staff in Hospital

Delivery
Blended (Online courses + Practical training)

Duration
3-5 Days Online + one Day Practical

Level
Intermediate

Language
English

Date
Self-paced

Assessment
Online & Competency-based Assessment

Certification
Certificate of completion

Course Content
This program is a blended educational methodology including online learning (open WHO platform and MOH webinars), and practical training to provide support-staff nurses with the necessary knowledge, skills, and clinical competences.

E-learning
Completing recognized online courses that meet the WHO, CDC, and MOH standards in line with intended theoretical learning objectives for basic nursing critical care and COVID-19 care. The online course including four chapters and (24) online modules.

Practical Training
The practical training part, either in actual clinical field or in simulation labs, will be implemented to develop nursing competency to deal critical COVID-19 cases. This part consists of two chapters with four modules, clinical exam, and Competency-based Assessment.

5.2 Clinical Transition Program Phase

The clinical transition program is a structured orientation and learning period designed to gradually prepare support-staff nurse within 40 days progression of responsibility and evolving changes in new work environment. The clinical transition program consists of three steps: precepting, coaching, and mentorship (Figure 2). Each step, both ICU nurse and support nurse must fulfill the following role and functions:

Precepting	5 Days

- Preceptorship phase at critical care setting within the INS model is vital phase that provides a significant teaching and learning experiences for the support-staff nurses who are new to an intensive care unit.
- The preceptor (ICU nurse) is the person at the practicum site who agrees to mentor the (Support-staff Nurse) and administrate the everyday activities.
- The preceptor (ICU nurse) ought to have experience in allotted project areas, expertise and standing inside the organization, and also the ability and desire to supervise and mentor (Support-staff Nurse).
- Nurses who can build the best preceptors have the subsequent qualities: commitment and want to be a preceptor. Clinical competence. Continuous skilled development. Caring attributes and with minimum range of 2 years of experience.

ICU nurse Role	Support-staff Nurse Role
▫ Introduce support-staff nurse to the clinical working environment ▫ Provide constructive feedback ▫ share clinical knowledge with support-staff nurse ▫ Accessible and approachable all the time ▫ Helps Support ICU Nurse cope with the stresses	▫ Use PPE when caring for COVID-19 patients ▫ protect confidential information about patients ▫ Respect Mentor ▫ provide feedback ▫ Discuss clinical decisions

2. Coaching	21 Days

- This process aims to improve the performance of the support-staff nurse where the ICU nurse focuses on the 'here and now' rather than on the distant past or future.
- Coaching is a teaching, learning, training, and development process in which the support-staff nurse gets support while learning to attain professional result or goal.

- The ICU nurse purposefully provides results-oriented and structured coaching sessions with patient interaction for the purpose of promoting achievement of patient's safety goals.
- In partnership with the support-staff nurse, the ICU nurse trains with example in a thought-provoking and creative process that inspires the support-staff nurse to the highest personal and skilled professional.
- The ICU nurse should use good judgment and perform professional commitment at work, not essentially to be the most expert nurse on the patient's topic matter.
- The ICU nurse should demonstrate teaching skills and inspirational motivation to achieve selected traits and professional characteristics.
- Occasionally, a causal relationship between the ICU nurse and support-staff nurse should exist to build trustful relationship and facilitates perceiving the ICU nurse' punctuality and professionalism.

ICU nurse Role	Support-staff Nurse Role
▫ Delegate nursing care appropriate to the knowledge/skill level of the Support-staff Nurse	▫ Apply all delegated nursing procedures under direct supervision.

3. Mentoring	14 Days

- A mentor (ICU nurse) is a trusted guide, advisor, and subject material skilled who shares their expertise whereas conveyance the "mentee" (Support-staff Nurse) up the ranks.
- A mentor (ICU nurse) helps a (Support-staff Nurse) evaluate her own experiences and grapple with the emotional aspect of teaching
- Mentoring can facilitate them maintain a healthy judgement, whereas continued to be adjunct and dealing toward established goals.
- The mentor (ICU nurse) will hold regular conferences with the (Support ICU Nurse) following the teaching sessions, providing each feedback and support.

ICU nurse Role	Support-staff Nurse Role
▫ Assists, guide, direct and supervise Support ICU Nurse activities	▫ Assessing ICU nurses in all nursing care provided

5.3 Defining Duties Phase

The duty of support-staff nurse will remain as assisting functions, this determines and identifies the responsibility of the ICU nurse to continuo the delivery of care with complete accountability to make sure that the patients and support-staff nurses are safe and work efficiently within the legal requirements and rules of the ICU Department. This is a continuous role of the ICU-Nurse, which the responsibilities and the accountability are remained on the ICU nurse.

- Support-staff Nurse **Should**:
  - Assist the ICU Nurse to provide respiratory care to patient.
  - Assist the ICU Nurse to assess patient's history and nursing care plan.
  - Assist the ICU nurse to perform emergency procedures on patients who have suffered from heart attacks, shock or from drowning.
  - Support the ICU nurse to administer right medications, and how to manage airways complications.
  - Assist the ICU nurse to be a competent nurse in administering oxygen therapy.
  - Support the ICU nurse on how to collaborate with other healthcare practitioners including physicians and respiratory therapists.

- Support-staff Nurse **Should Not**:
  - Administer inotropic medication without direct supervision of ICU nurse.
  - Operate or setting up ventilator machine without direct supervision of ICU nurse.
  - Any invasive procedure without direct supervision of ICU nurse.
  - Handling the life support equipment without direct supervision of ICU nurse.
  - Administer medications to the patients as per the doctor's instructions without direct supervision of ICU nurse.

- Support-staff Nurse can do **Under Supervision**:
  - The support-staff nurse can perform diagnostic testing under supervision of the ICU nurse.
  - The support-staff nurse can do assessment on patient's history on symptoms and previous diagnoses with direct supervision of the ICU nurse.
  - The support-staff nurse can educate patients and families under direct supervision during the discharge planning procedure such as teaching a new diet regimen, utilizing a regular exercise, or smoking cessation.

Key messages

Peer Support
Working in a surge or mass patient incident can affected frontline healthcare providers and develop physical, psychological, and emotional injuries (Williamson et al., 2020) It also places both practical and emotional burdens on nurses' families (Richard & Milos, 2020). The hospital will need to be able to provide additional services such as on-site rest and meal accommodations, counseling and other services that nurses and their families need.

6. Roles and Responsibilities

To a successful implication of the INS model, we strongly advice to adhere to the following recommended roles and responsibilities for the main three elements of the INS model; the support-staff nurse, ICU nurse, and the senior nurse as the following:

6.1 Support-staff Nurse

a) Always adhere to infection control's protocols and guidelines before, during and after caring for COVID-19 patients.
b) Comply to comprehensive nursing assessment including patient history, general appearance, physical examination, and vital signs.
c) Record patient medical history, symptoms, and observations.
d) Present emotional support to patients and their families.
e) Collaborate with ICU nurse to plan for patient care.
f) Advocate for health and wellbeing of patient.
g) Assess ICU nurses in all nursing care provided when needed.
h) Apply delegated nursing procedures within the scope of support-staff nurse practice under direct supervision of ICU nurse.
i) Follow the ICU nurse lawful instructions.

6.2 ICU Nurse

a) Introduce support-staff nurse to the clinical working environment.
b) Provide constructive feedback to support-staff nurse.
c) Share clinical knowledge with support-staff nurse.
d) Must be Accessible and approachable to support-staff nurse all the time
e) Help support-staff nurse cope with the stresses
f) Assists, guide, direct and supervise support-staff nurse activities
g) Delegate the appropriate nursing care within the scope of Support ICU Nurse practice

6.3 Senior Nurse

a) Consider implementing registries with concise shift periods or restrict exposure to hazardous area for part of the shifts.
b) Cooperate inept staff with expert staff and for ICU-trained registered nurses to be accessible to oversee support staff nurses.
c) Schedule sufficient days between shifts.
d) It is proposed to have between teams brief conversational reports before and after each shift.

e) Staff support Nurses need more support to reduce their fatigue and cope with the mental health pressures of being on the frontline of caring of COVID-19 patients.

Key messages to all critical care and Support-staff Nurse

- Follow Saudi Ministry of Health's or SCDC approved precautions hand guidelines during and after caring of patients with suspected or confirmed COVID-19.
- Properly remove and disposal of contaminated PPE.
- Report to management if you are experiencing or other nurses any signs or symptoms such as, fever, cough, sore throat and headaches.

7. Patient Safety

The ICUs are particularly prone to medical errors as patients are very ill requiring continuous monitoring. Safe staffing models are vital to ensure the safety of care provided by healthcare professionals as well as to guarantee the safety of the healthcare professionals themselves (SPSC, 2019).

The patient safety program that drives improvement for ICU patients can be achieved by the following four domains:

1. Ensuring compliance with patient safety regulations.
2. Responding to adverse events by performing root cause analyses and implementing targeted corrective measures.
3. Applying evidence-based risk reduction strategies that are not required by regulations, but are considered best practices
4. Implementing strategies to meet and exceed patient safety metrics that are publicly reported or tied to pay-for-performance programs.

Furthermore, to prevent patient errors, the Joint Commission requires the use of at least two patient identifiers when administering medications and blood products, when collecting laboratory specimens and taking imaging tests, and when providing any type of treatment. However, most adverse events are never reported and therefore cannot be addressed.

When a serious adverse event happens to a critical care patient, a systematic investigation of the event, called a root cause analysis, should be completed by an interdisciplinary team that has expertise in the areas involved in the event. According to the Just Culture concept, the major focus of an adverse event investigation should be on potential system failures that led to the error as opposed to simply attributing blame to the providers involved in the error.

Therefore, team training could be a good approach for preventing errors in high-risk industries like the military and therefore the airline industry and is now being applied to the medical industry. Simulation training with the application of scenarios enables new strategy for improving patient safety. The current

recommended staffing model in the critical care settings can provide safe nursing practice with should innovate new approaches for preventing errors, and study these approaches using rigorous research methodology.

Key messages to critical care nursing managers

The health institution should develop and provide Job Description Action Sheets to all critical care and Support-staff nurses, detailing the duties/responsibilities that a position is to carry out in each of the treatment areas. In addition, these job description action sheets detail a nursing member's supervisor and nursing supervised. Job description action sheets are intended to provide information to personnel who often may be functioning in critical care area, which is different from their usual job assignment.

8. Ethical, Legal, and Professional Considerations

In addition to the roles and responsibilities that have been mentioned previously in the current document, every nurse should follow the practice code of ethics for healthcare professionals that has been published by for the Saudi Commission for Health Specialties (SCHS, 2014). The following are the ethical, legal, and nursing professional accountability for the ICU nurse and support-staff nurse during the implementation of the ISN model:

1. Ethical Practice	**Delivers nursing care within the Saudi socio-cultural context and ethical framework.**
	1.1 ICU nurse and support-staff nurses both should practice according to the nursing professional code of ethics. 1.2 Nurses in critical care setting must engage in ethical decision-making with specific consideration and respect to their nursing professional responsibilities and where ethical issues impact in healthcare institution. 1.3 The ICU nurses and support-staff nurses must act as an advocate to protect the patient's rights particularly most patients in critical care settings are unconscious, have limited mobility, and unable to communicate and make decision. 1.4 Nurses in critical care units should maintain confidentiality and security to verbal and electronic patient information. 1.5 ICU Nurses should demonstrate respects and insure patient's dignity and privacy right. 1.6 Respect patients' cultural and religious beliefs, ethnicity, racial identities, gender, and other relevant considerations. 1.7 Ensure and maintain ethical practice with full collaboration with other healthcare practitioners.

2. Legal Practice	Practices with a complete adherence to nursing practice regulations and policy guidelines
	2.1 The ICU nurse and Support-staff nurse should maintain valid registration and licensure to practice nursing in Saudi Arabia 2.2 The ICU nurse and support-staff nurse both should practice in accordance with the nursing practice guide. 2.3 The ICU nurse and Support-staff nurse must practice in accordance with relevant acts and regulations that govern nursing practice. 2.4 The ICU nurses must act upon the laws and regulations relating to the professional role and professional code of conduct of the SCFHS.
3. Professional Accountability	Accepts and demonstrates with accountability for own professional judgment and every decision-making process related to patient outcomes.
	3.1 Accept accountability for own actions, outcomes of care and continued competence in accordance with the institutional Scope of Practice. 3.2 ICU nurses should recognize the boundaries of the Support-staff nurse Scope of Practice and the limitations of competences if applied. 3.3 ICU nurse and Support-staff nurse respects the accountability and responsibilities of other healthcare workers. 3.4 Support-staff nurse should seek guidance when encountering situations beyond the limits of his/her own competence. 3.5 ICU nurse and Support-staff nurse assumes accountability for delegation. 3.6 Support-staff nurse should assume the accountability for improving the quality of healthcare provided. 3.7 Optimize patient access to the full range of care required for effective healthcare.

9. Conclusion

The current INS model tries to tackle the current hectic time of the COVID-19 pandemic and to balance the current nursing workload between the nurses with the healthcare institutions. This White Paper provides a clear and ready-to-use tool to give the opportunity for nursing managers and leaders to minimize the workload and stress of ICU nurses and optimize other staff nurses who work in non-critical care units. The recommended staffing model is expected to promote safe staffing, decrease the risk of adverse events, and improve patient outcomes.

10. APPENDECIS

10.1 Appendix A: Nursing Assignment Sheet Template

Day……

Date……

Shift……

Senior/Charge ICU Nurse Name…….. Job #:……..	1.ICU Nurse Name:…….. Job #:……..	1. Support ICU Nurse 1 Name…….	1. Patient Name:
			2. Patient Name:
		2. Support ICU Nurse 2 Name…….	3. Patient Name:
			4. Patient Name:
		3. Support ICU Nurse 3 Name…….	5. Patient Name:
			6. Patient Name:
	2.ICU Nurse Name:…….. Job #:……..	4. Support ICU Nurse 1 Name…….	7. Patient Name:
			8. Patient Name:
		5. Support ICU Nurse 2 Name…….	9. Patient Name:
			10. Patient Name:
		6. Support ICU Nurse 3 Name…….	11. Patient Name:
			12. Patient Name:
	3.ICU Nurse Name:…….. Job #:……..	7. Support ICU Nurse 1 Name…….	13. Patient Name:
			14. Patient Name:
		8. Support ICU Nurse 2 Name…….	15. Patient Name:
			16. Patient Name:
		9. Support ICU Nurse 3 Name…….	17. Patient Name:
			18. Patient Name:

Staff Member	Roles
Charge Nurse	
ICU Nurse	
Support ICU Nurse	

Other assignments

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