



Patient Centered Transitional Care for Patients Transferred from Intensive Care Unit (ICU) to Step-down Care Unit: A Mixed Method Study

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Outline

- Introduction
- Literature review
- Study aim
- Theoretical framework
- Method
- Results (analysis in progress)

Introduction

- Critical ill patients
 - experience multiple transition
 - survived with complex health problem
- healthcare providers (HCPs) face great challenges to provide continuity of care
 - shortage of ICU beds
 - immature ICU discharge
 - silo clinical practices
 - under equipped general ward care
- To ensure the continuity of care
 - understand ICU patients' transitional needs
 - identify gaps exist in the current transitional care
 - explore ways to improve patients' transition

Define Terms

- Transition
 - is not only a process but also refers to the outcome of the complex person interaction with environment

(Chick, 1986)

- Transitional care
 - is defined as critical component of healthcare system to ensure patients' care coordination and continuity

(Chaboyer et al., 2005; Coleman & Boulton, 2003)

- ICU transitional care
 - refers to care provided before, during and after transferring patients from ICU to other care units
 - is to ensure continuity of care

(Chaboyer et al., 2005)

Literatures Review - Patients

- Critical ill patients' perception on transition
 - reorientation and readapting to the new environment
 - dependent due to certain irreversible pathophysiology, physical deficit and psycho-social difficulties
 - sense of abandon, vulnerable, anxiety and depression, helpless, unimportant, high care demand from wards nurse
 - Lack of care continuity

(Chaboyer et al. 2002; Russel, 1999; Mckinney & Deeny, 2002; Ramsay et al., 2014; Kralik et al., 2006)

- Therefore, understand the patients' transitional needs will equip HCPs to assist their transition

(Chaboyer et al., 2005; Kralik et al., 2006)

Literatures Review-Factors

- Factors affecting patients' transition

- Patients' factors

- physical instability, functional decline, not ready for self-care, poor coping skills
 - unrealistic expectation, unavailability of social support, and inadequacy of education and information

(Weiss et al., 2007)

- HCPs' factors

- lack of ICU discharge planning, last minutes decision due to bed shortage
 - lack of team collaboration for discharge plan
 - lack of common goals for patient's transfer
 - lack of efficiency and effectiveness of handover information and accountability /responsibility
 - lack of following up care and insufficiently equipped step-down wards
 - lack of wards manpower

(Field,2008; Chaboyer et al 2003, Haggstorm et al., 2009, 2012; Wu & Coyer, 2007; Abraham et al., 2012; Arora et al., 2009; Chaboyer et al 2003)

- Hence, build supporting structure and system between intra-professionals, inter-professionals and inter-departments will ensure patients' continuity of care

(Lin et al., 2012)

Literature Review- Interventions

- Interventions to improve

- Information booklets to prepare patients and relatives prior to transfer
- ICU liaison nurse to ensure continuity of care
- Critical care outreach services (CCOS) and extend ICU services

(Chaboyer et al., 2005; Wendy Chaboyer, Thalib, Alcorn, & Foster, 2007; Endacott & Chaboyer, 2006; Endacott et al., 2009; Green & Edmonds, 2004; Harrison, Gao, Welch, & Rowan, 2010)

- However, the limitations

- Lack of common goals, objectives, and activities
- lack of theoretical fundamental support
- lack of exploring transitional needs related to their clinical context
- lack of multi-disciplinary collaboration

(Kibler & Lee, 2011; Burke et al., 2009)

- Therefore, effective intervention need to explore

- patients' needs
- healthcare providers' needs and restrictions
- clinical context
- theoretical support

(Bruner et al., 2011, Dacies, 2005)

This Study

- Aims:
 - To explore, develop and evaluate the Patient Centered Transitional Care to support patient who transferred from ICU to step-down care unit
- Objectives are:
 - explore what is patient centered ICU transitional care
 - develop a Patient Centered Transitional Care (PCTC) pathway
 - pilot test the effectiveness of the PCTC pathway

Study Design

- A exploratory sequential (Qual-Quan) mixed method design

Phase 1 : Qualitative study

Explore the entire patient's and HCP's perceptions on the transitional care needs and strategies

- Qualitative data collection
- Qualitative data analysis
- Qualitative results



Develop PCTC pathway

- Theoretical framework underpin
- Results from Qualitative study
- Supported by literatures
- Validate and ensure practicality by clinical stakeholders

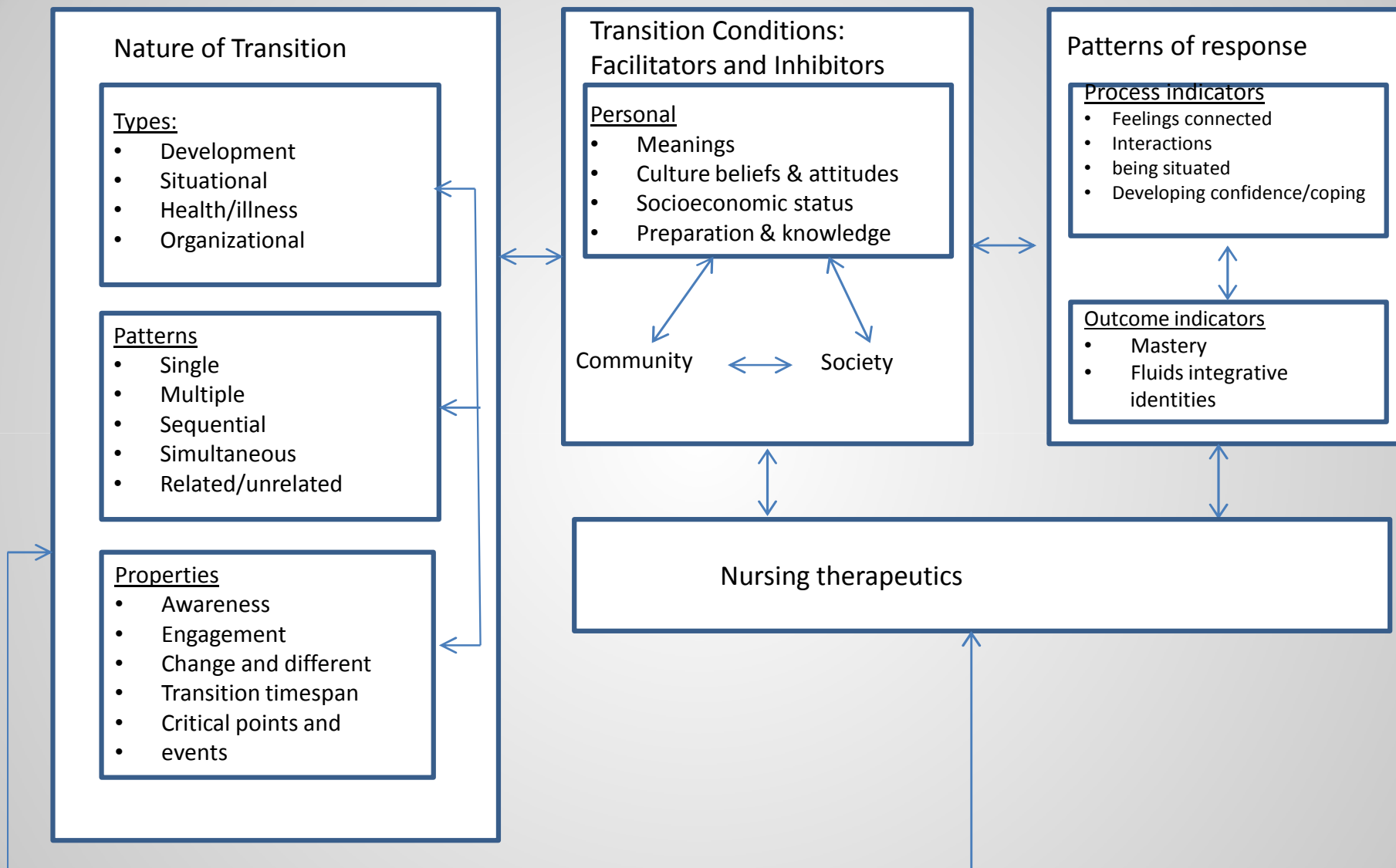


Phase 2: Quantitative study

Exam the effectiveness of the PCTC pathway

- Quantitative data collection
- Quantitative data analysis
- Quantitative results

Theoretical Framework

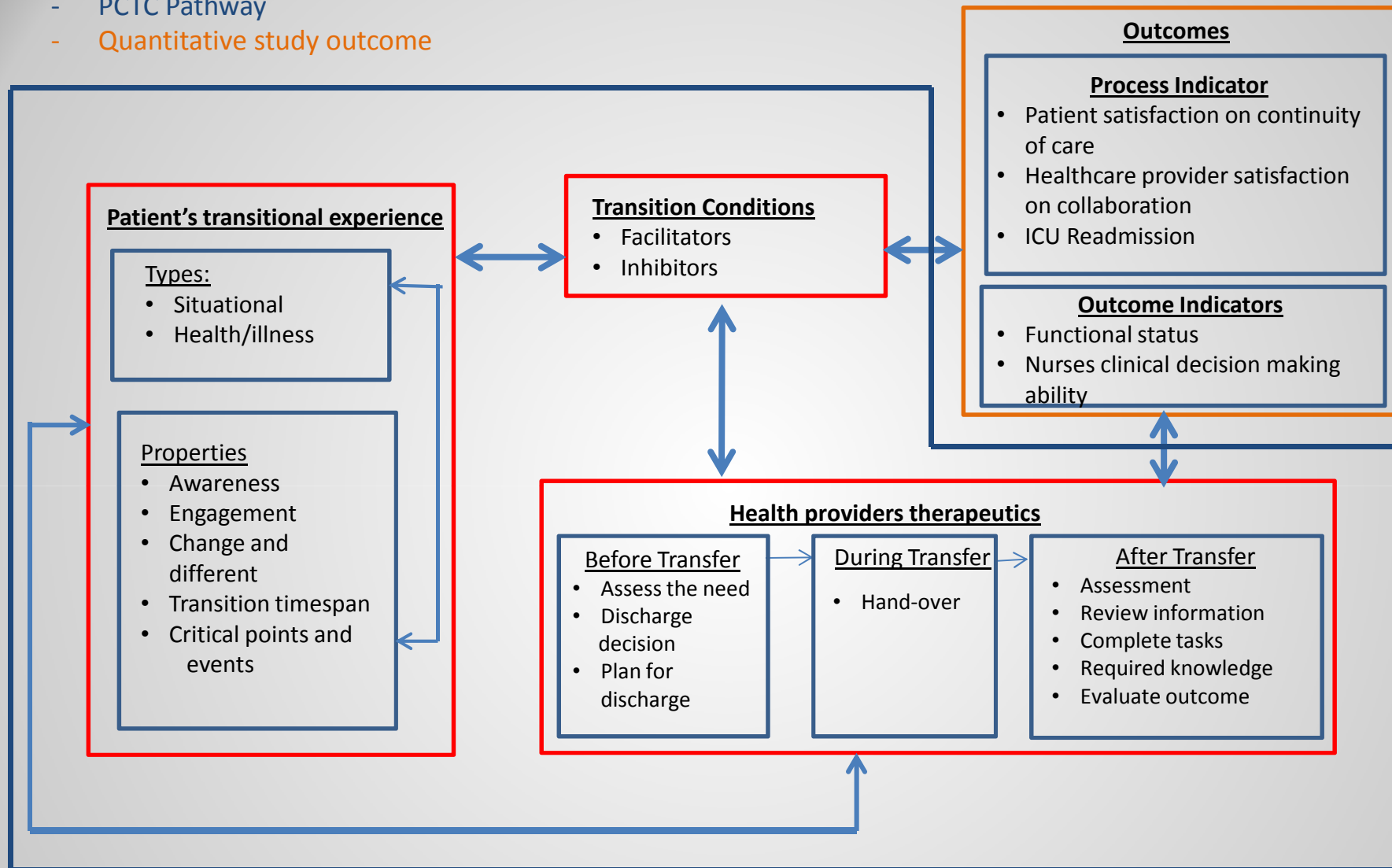


Mid-range Transitional Theory
(Meleis et al. 2000)

Theoretical Framework

- The transitional theory will help to
 - develop interview guideline for qualitative study
 - underpin the PCTC pathway development
 - identify the outcome measures for quantitative study

- Qualitative Exploration
- PCTC Pathway
- Quantitative study outcome



Modified ICU Transitional Care Model

Qualitative study

Explore and Develop the Patient Centered
Transitional Care (PCTC) Pathway for Patients
Transferred from Intensive Care Unit (ICU) to Step-
down Care Unit

Study Aim

- To explore the patients' transition experiences and the healthcare providers' perspectives towards patients' transition experiences and transitional care provided
- To develop a Patient Centered Transitional Care (PCTC) pathway for patients who are transferred from ICU to step-down care units

Research Questions

1. What are the patients' transition experiences and needs when transferred from ICU to step-down care unit?
2. What are the factors affecting their transitional experiences?
3. What are the healthcare providers' perspectives towards patients' transition experience and needs?
4. What are the barriers that affect the transitional care provided?
5. What are the strategies that will help patients' transition care?

Study Method

- Study design
 - Descriptive qualitative research design
- Study setting
 - A restructured public hospital in Singapore, has total 33 wards, 4 ICUs and 1500 beds
 - 2 ICUs (NICU, SICU), Surgical HD and 10 wards will be the study sites

Study Sample

- Purposive sampling method
 - Helps to maximize the variation of samples
 - Patients
 - Based on length of stays
 - Age
 - Surgical and medical cases
 - Destination location
 - Healthcare providers
 - Multi-professional groups
 - Seniorities
 - Locations

Sample Size

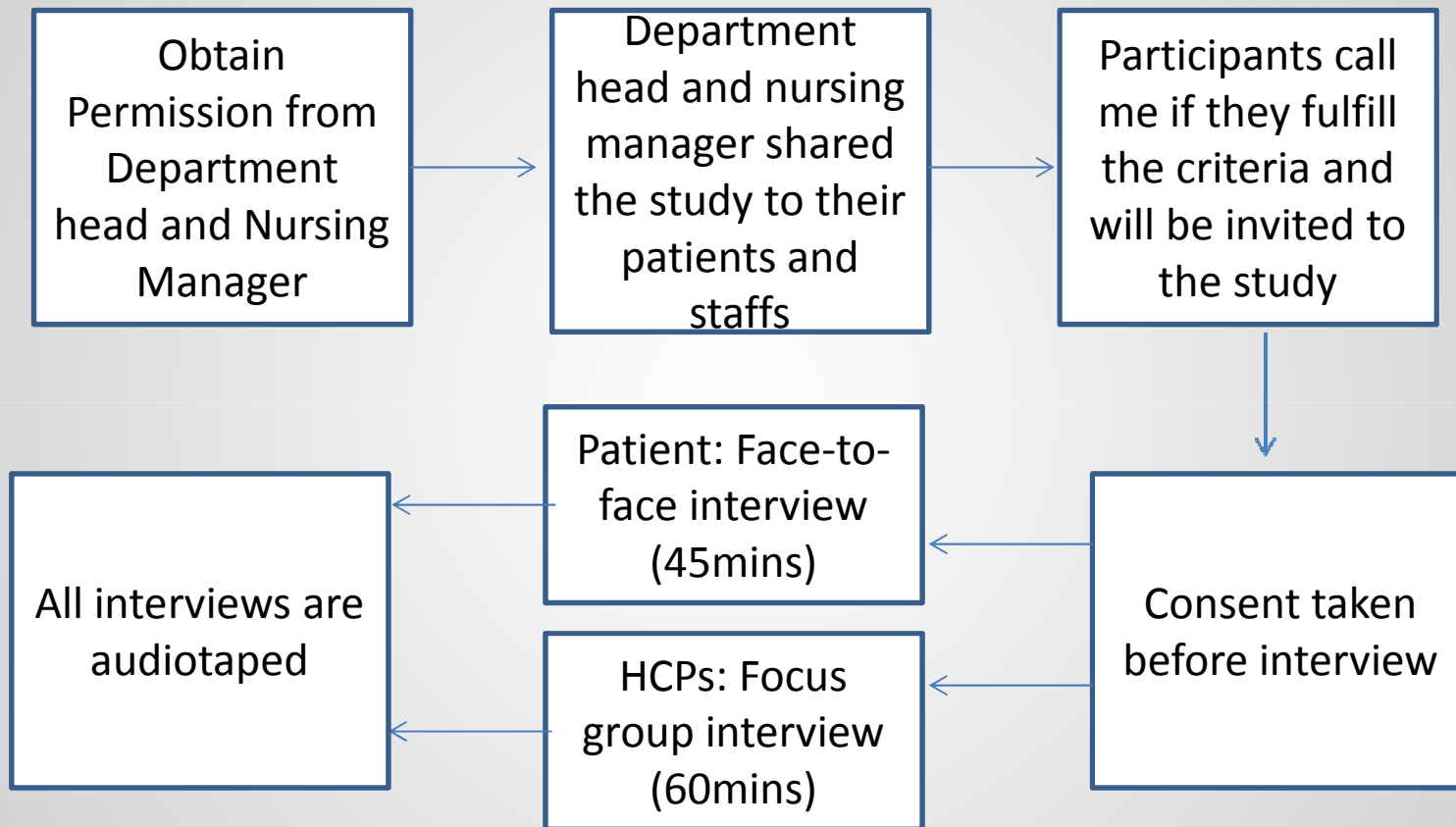
- No. of participants are based on evidence of data saturation
- 20 patients were proposed, 3 patients have been interviewed
- 30 healthcare providers were interviewed
 - Nurses, Doctors, Allied health providers (includes: PT, OT, ST, Dieticians and Medical Social Workers)

Inclusion Criteria	Exclusion criteria
<p>patients</p> <ul style="list-style-type: none"> • >21 years old • Stay in NICU/ SICU for >48 hours • Able to communicate in English • Neurological GCS 15 • Transferred from NICU/SICU to step-down care units (Surgical HD or general wards) • Stays in step-down care units >24hours and < 72hours 	<p>patients</p> <ul style="list-style-type: none"> • Terminal ill and DNR patients • Transferred to step-down care units from other hospitals' ICUs • Have ICU transitional experience in the past 2 months
<p>healthcare providers</p> <ul style="list-style-type: none"> • Have experience in transferring patient out from NICU/SICU and receiving patient from NICU/SICU • Work experience at the relative settings for >6 months 	<p>healthcare providers</p> <ul style="list-style-type: none"> • Healthcare providers who are interns or fellows from other institutions

Ethical Consideration

- This study has been approved by Domain Specific Review Board (DSRB)
- Study participation is voluntary

Recruitment process



Data Collection Tools

- Semi structured interview guide
- Pilot test
 - to ensure understandability and changes were done after
- Face to face interview guide
 - *What your experiences are during the transfer from ICU to step down care wards?*
 - *What can be improved for this transfer process?*
 - *What will be the idea care before, during and after transfer?*

Data collection

– Focus group interview guide

- *What are the patients' transfer needs when they transferred from ICU to step-down care wards?*
- *What are the current structure or process to transfer patient from ICU to step-down wards?*
- *What are the barriers and strategies to ensure the continuity of care?*

– Probing technique was used for interviews

– Observation diaries were recorded

Data Analysis

- Interviews were transcribed immediately
 - to ensure consistency
- Checked with audiotape again after transcription
 - to ensure accuracy
- Nvivo10 were used
 - analysis in progress
- Themes derived from qualitative study
 - used to develop PCTC protocol

Study Rigor

- Credibility
 - Developed interview guide based on transitional theory and literatures
 - Pilot tests were done to ensure understandabilities
- Dependability
 - Purposive sampling to ensure representative
 - Interview is conducted by researcher herself
 - Immediate transcription to ensure accuracy
 - code by using an inter-rater agreement between the researcher and experienced supervisors
- Confirmability
 - All data will safe kept for audit purpose
- Transferability
 - Purposive sampling method helps to ensure well represent the study context

Develop PCTC Pathway

- Drafted transitional care protocol has been developed
 - Transitional theory and available literatures
- The study findings will help to
 - identify the common goals among patients and healthcare providers to direct the transitional care
 - integrate patient centeredness into the transition process
 - include and expand some of the drafted interventions
 - interlink the three phases
 - ascertain the appropriate implementation method
- Clinical stakeholders were and will be consulted on the feasibility and usability

Pre-transfer-discharge phase: Coordination of care and decision making for ICU transfer

<i>Domains</i>	<i>Activities and action plan</i>	<i>who</i>
developing multidiscipline discharge planning	<ul style="list-style-type: none"> • Multi-disciplinary team create discharge planning <ul style="list-style-type: none"> ○ medication reconcile ○ functional ability ○ nutritional needs ○ psychosocial needs ○ advanced care planning (Palliative care) ○ Level of follow up care required • Setting Multidisciplinary goals of care for patient under transition • Coordination care among team members 	<ul style="list-style-type: none"> • Multi-disciplinary <ul style="list-style-type: none"> - Physician, - ICU Nurses, - pharmacist, - ST, PT, OT as per patients' need
providing patient education to ensure transition aware, engage, prepare for the changes and differences	<ul style="list-style-type: none"> • Educate on <ul style="list-style-type: none"> ○ recovery process ○ new wards' environment ○ resource person outside ○ plan of care 	ICU Nurses

During transfer- handover phase: Information transfer and assess the care providers' needs for the complex care

communicating information by using structure format	<ul style="list-style-type: none"> • Communicating information <ul style="list-style-type: none"> ○ Situation: Patient identity , primary diagnosis, patients' vital data and precautions and status, patient's need (physical, function, psychological) ○ Background: Past medical history, past related investigations ○ Assessment: Problem list, pharmacy issues ○ Recommendation: Plan of care and activities, Pardon me for not clear (equipment , invasive lines and special devices, properties) 	<ul style="list-style-type: none"> • ICU and GW nurses
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Post-transfer phase – admission phase: follow up care activities

providing continuum support	<ul style="list-style-type: none"> • providing continuum support for patient as well as for healthcare providers in general wards <ul style="list-style-type: none"> ○ Support step-down wards to reprioritize the nursing care ○ Act as resource person to support step-down nurses to assess and monitor patients' clinical condition ○ Educate step-down nurses to skilled up to care for critical ill patients' need 	<ul style="list-style-type: none"> • Liaison nurse/Advanced practice nurse/Clinical Nurse specialist
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PCTC pathway

- Aims to
 - improve patients' continuity of care
 - improve the collaboration between the intra-professional, inter-professional, and inter-departmental
 - improve patients' cognitive and functional status
 - improve nurses' clinical decision making ability

