



TTPSS

TAG TEAM PATIENT
SAFETY SIMULATION



FACILITATOR GUIDE

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Foreword

The popularity and appeal of simulation is now so widespread within university and clinical training facilities that it has become a ubiquitous teaching method. There are multiple benefits to this pedagogical approach cited in the literature, including:

- Provision of opportunities for active engagement in authentic and evolving learning experiences (Dwyer, Reid-Searl, McAllister, Guerin, & Friel, 2015; Levett-Jones et al., 2015);
- Exposure to unpredictable situations that help to develop learners' technical and non-technical skills, and opportunities to make mistakes and learn from them without risk to patients (Cant & Cooper, 2010); and
- Facilitation of meaningful learning experiences enhanced by immediate feedback and reflection on practice (Dreifuerst, 2009; Levett-Jones et al., 2015).

There are also a number of barriers to the effective use of simulation in education programs. Simulation can be resource intensive and there is sometimes a perceived need for high technology, purpose-built simulation facilities and specialised staff (King, Moseley, Hindenlang, & Kuritz, 2008; Leigh & Hurst, 2008). Additionally, in Australian nursing programs, large student numbers and resource limitations can lead to simulations being conducted as group activities where authentic roles and observational simulation are frequently employed. Evidence suggests that when this happens, learners who take on the observer role can lose interest and disengage from the learning experience (O'Regan, Molloy, Waterson, & Nestel 2016). In addition, observers typically learn less and are less satisfied with the learning experience (Harder, 2009; Kettlewell, Southcott, Stevens, & McCrone, 2012).

Tag Team Patient Safety Simulation (TTPSS) was developed to overcome the challenges associated with providing meaningful and engaging patient safety simulations to large groups of learners. In TTPSS, each participant and observer has a specific, active and integral role, while purpose-built facilities and expensive equipment are not required. This approach enables flexibility, in terms of location and group size, while at the same time creating an immersive experience for learners. Although TTPSS has been designed for undergraduate nursing students, it can be easily adapted for use by other health disciplines.

This *Facilitator Guide* has been designed to support the implementation of TTPSS. It outlines the purpose and key pedagogical features of this innovative approach and describes the process and participant roles.

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Glossary of Terms

Act	Each simulation package contains two scenarios, each comprising two parts, referred to as Act 1 and Act 2.
Actor	A performer in the play.
Antagonist Card	Cards designed to provoke challenging and confronting situations that learners may experience in clinical practice and that can affect patient safety. The Antagonist Cards may be given to cast members by the Director during the TTPSS to increase the complexity of each scenario and to enhance learners' resilience and critical thinking. Learners are not informed about the content of the Antagonist Cards before beginning the scenario.
Audience	Learners who are allocated the role of theatre critics during the TTPSS and provide feedback during the Intermission and Debrief.
Cast	Learners who are allocated the role of actors in the TTPSS.
Cue Cards	Cue Cards provide focus for the Intermission and Debrief. Cue Cards are provided to members of the audience at the beginning of the TTPSS. Audience members use their Cue Card to focus on key points during the TTPSS and to provide feedback during Intermission and Debrief.
Debrief	The final stage of the TTPSS when feedback is provided by the audience members and the Director to the cast. The Debrief is designed to enable learners to construct knowledge through the sharing of perspectives, knowledge and experiences.
Director	The educator who facilitates the TTPSS.
Handover	The transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis. Each TTPSS scenario commences with a handover.
Intermission	A short break in the TTPSS occurring between Acts when feedback on performance is provided by the audience and the Director to the cast members.

ISBAR	Identify, Situation, Background, Assessment and Recommendation is a mnemonic created to improve safety in the transfer of critical information.
NSQHS Standards	National Safety and Quality Health Service Standards developed by the Australian Commission on Safety and Quality in Health Care to support clinical governance and risk mitigation in acute care.
Participant Information Handout	Information provided to learners before each simulation. It includes preparatory readings and details about the simulation.
Prologue	Introduction to the TTPSS.
Protagonist	The protagonist is the central character in the play. In TTPSS, this is generally the patient.
PSCF	Patient Safety Competency Framework – a set of nine competency statements with linked knowledge and skill sets developed to facilitate the teaching and assessment of patient safety to nursing students.
Socratic questioning	A teaching and learning method that uses open-ended, thought-provoking questions to analyse concepts, uncover assumptions and distinguish between what is known and what is not known.
Tagging	Tagging occurs when cast members exchange roles during the TTPSS. It is initiated by either the Director or cast members.
The Play	The simulation scenario which is comprised of two Acts.
The Stage	This is the setting where the play occurs. The stage can be in any setting considered appropriate to meet the intended learning outcomes.
TTPSS	Tag Team Patient Safety Simulation.
'What if' questions	'What if' questions can be employed by the Director towards the end of the Debrief to facilitate transfer of learning from the simulation to the learners' future practice.

What is Tag Team Patient Safety Simulation?

The concept of Tag Team Simulation was first developed in 2014 to address the challenges associated with providing large numbers of learners with engaging simulation experiences; namely, ensuring active participation of all individuals (Levett-Jones et al., 2015). An acronym illustrating the key elements of Tag Team Simulation is presented in Figure 1.

<p>T = Theatrical, embracing the dramatic contribution of acting to education</p> <p>A = Applied and directly relevant to clinical practice</p> <p>G = Guided by a 'Director' and 'narrator' who facilitate the learning experience</p> <p>T = Tactical and strategically designed to achieve pre-defined learning outcomes</p> <p>E = Engaging through immersion of participants and observers in authentic learning experiences</p> <p>A = Active involvement in dynamic and unfolding simulation experiences</p> <p>M = Meaningful, memorable and designed to empower learners to become agents of change</p>

Figure 1: Tag Team Simulation (Levett-Jones et al., 2015)

Tag Team Simulation is a creative approach that is:

- designed to foster engagement and promote active inclusion of all learners involved
- immersive, with learners (cast and audience members) taking shared responsibility for the actions and outcomes of the simulation
- informed by the tenets of Forum Theatre, a process that allows members of the audience to pause and discuss the performance and suggest different actions for the actors to take
- Flexible and without the need for specialised simulation equipment or purpose-built facilities (Levett-Jones et al., 2015).

In 2016, Tag Team Simulation was extended to focus specifically on patient safety and is now termed Tag Team Patient Safety Simulation (TTPSS). TTPSS is informed by the National Safety and Quality Health Service (NSQHS) *Standards* (Australian Commission on Safety and Quality in Health Care 2012) and the *Patient Safety Competency Framework* (PSCF) (Levett-Jones et al., 2017). It includes a set of simulations that address key areas known to contribute to adverse patient outcomes. TTPSS focuses on the development of technical and non-technical skills that graduates require to be work-ready upon graduation, for example, the ability to work effectively as a member of an inter-professional team, communication skills, resilience and clinical reasoning skills. An additional aspect of TTPSS is helping graduates to manage difficult and sometimes confronting situations that may affect patient safety.

Why is Tag Team Patient Safety Simulation needed?

Clinical errors are the third highest cause of death in developed countries and it is estimated that 10–16% of people will experience a serious adverse event during their healthcare experience. Importantly, reports indicate that 80% of these errors are preventable (Makary & Daniel, 2016). Among other factors (see Figure 2 below), these alarming statistics were a significant driver underpinning the development of TTPSS. In addition, pre-registration health professional students can find themselves in challenging situations which may impact on patient safety. The TTPSS approach incorporates Antagonist Cards to initiate everyday challenging situations with the intent of empowering students and new graduates to manage similar situations and to reduce or prevent patient harm.

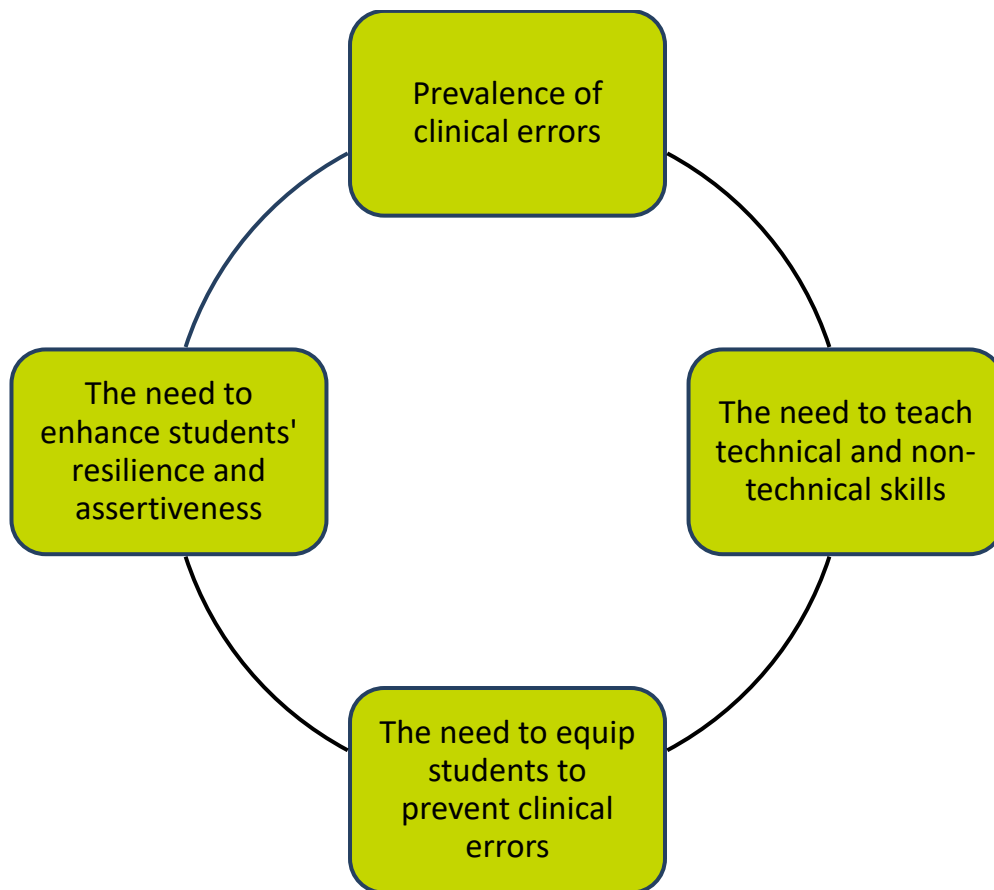


Figure 2: Drivers behind Tag Team Patient Safety Simulation

The Theoretical Foundations of TTPSS

TTPSS is informed by the tenets of Forum Theatre (Boal, 2002), experience-based learning (Boud, 2010), and the sociocultural perspective of legitimate peripheral participation (Lave & Wenger, 1991).

Forum Theatre

Forum Theatre was developed by Augusto Boal in the 1960s as a strategy for transformative learning with the intent for social change. It is a process that allows members of the audience to interact with the actors by pausing and discussing the performance and suggesting different actions for the actors to take (Boal, 2002). The actors then move in this new direction, improvising and carrying out the suggested changes. In this way Forum Theatre facilitates the co-construction of the play and through this participative approach, the audience as well as the actors are empowered to imagine changes, direct the changes, and reflect collectively on the changes made, so as to become agents of social change (Boal, 2002). Boal viewed members of the audience not as passive observers, but as engaged observer-participants who are enabled to take part in the action in a meaningful way (McClimens & Scott, 2007). These concepts and approaches are fundamental to TTPSS, with learners empowered to consider different actions and outcomes when addressing patient safety issues.



In TTPSS, audience members are not passive observers but engaged observer-participants

Experience-Based Learning

David Boud (2010) proposed a model of experience-based learning that is prefaced on two assumptions:

- learning builds on an individual's prior experiences; these experiences influence perceptions of what is or is not considered important and determine how the learner will respond, interact and react in the present
- vicarious learning occurs when learners are actively engaged in both their own experience and the experience of others.

TTPSS draws on these assumptions by acknowledging and building on the prior experiences of learners and by recognising the importance of the vicarious learning that occurs through learner participation and interaction.

Boud (2010) asserts that learning involves noticing, intervening and reflection-in-action. Noticing is the awareness of what is happening within and around oneself. It is important for making sense of a situation and provides the stimulus for deeper learning through reflection. Intervening is any action of the learner that affects the learning process and outcomes. Reflection-in-action is essential to interpret what was noticed during the simulation and the ways in which the learner's interventions influenced the outcomes.

Learning from experience happens after the event through re-evaluation of the thoughts and emotions that were evoked during the experience. In TTPSS, re-evaluation takes the form of Intermission and Debrief. There are four components of re-evaluation:

- *Association* — the process of relating new information to information that is already known
- *Integration* — seeking relationships between new and old information
- *Validation* — determining how learners perceive the authenticity of the ideas and feelings that have resulted from the experience
- *Appropriation* — making knowledge a part of one's normal way of operating.



Although much of this learning is invisible, TTPSS aims to make these processes explicit through the active negotiation that occurs during Intermission and Debrief. This process of negotiation promotes critical reflection and awareness of alternative views and interpretations (Boud, 2010).

The Director facilitating the discussion at Intermission

Legitimate Peripheral Participation

Lave and Wenger's (1991) perspective of situated learning, termed legitimate peripheral participation, emphasises that learning is an outcome of engagement in social relationships. The focus is on the relationships between the activity, members of a community and the ways in which each learner participates. Legitimacy defines a characteristic of belonging, an essential condition for learning; and peripheral participation represents a learner's location in the social world. Moving from peripheral to fuller participation represents changing locations and perspectives in terms of a learning trajectory, the development of identity, and the formation of membership (Lave & Wenger, 1991). TTPSS facilitates social relationship formation and provides a participative experience in which each learner has a legitimate role in the simulation.

Quality Indicators for Simulation Design

The development of TTPSS was guided by evidence-based quality indicators for the design and implementation of simulation experiences (Arthur, Levett-Jones & Kable, 2010). The five quality indicators include:

Pedagogical principles

- Simulation experiences are aligned with curriculum goals and learning outcomes
- Learning outcomes guide all aspects of simulation design, including modality, group size, equipment, and staffing

Fidelity

- A range of methodologies based on learning outcomes, resource availability and cost effectiveness are used to ensure authenticity of the simulation experience
- Environmental fidelity is maintained
- Patient information in the form of hard copy or electronic charts is provided

Student preparation and orientation

- A structured orientation/briefing is provided where expectations are clarified and students are familiarised with their roles, the environment and all equipment

Staff preparation and training

- All staff are provided with appropriate training
- Educators understand the possibilities and potential of simulation
- Staff understand subject learning outcomes and curriculum philosophy, the clinical situation being portrayed and the simulation modality requirements

Debriefing

- A structured debrief is provided immediately following the simulation
- Skilled facilitators undertake debrief
- Debrief includes facilitation of reflection on practice and self-evaluation
- Opportunities (when applicable to learning outcomes) to discuss non-technical skills such as clinical reasoning, communication and teamwork are provided in debrief.

Patient Safety

The National Safety and Quality Health Service (NSQHS)

The knowledge and skills nursing students develop during their undergraduate studies have a direct impact on patient safety (Bristol Royal Infirmary Inquiry, 2001). Patient safety is defined as ‘the prevention of errors and adverse effects to patients associated with healthcare’ (World Health Organization, 2017).

To improve the quality of patient care and promote patient safety the Australian Commission on Safety and Quality in Health Care (2016) developed the National Safety and Quality Health Service (NSQHS) Standards. The Standards prioritise key areas of safety and quality where it is known that patients experience higher levels of harm, and where there is good evidence that improved care could result in better patient outcomes. The NSQHS Standards address the following areas:



Clinical Governance for Health Service Organisations focuses on the clinical governance and safety and quality systems that are required to maintain and improve the reliability, safety and quality of health care, and improve health outcomes for patients



Partnering with Consumers focuses on the systems and strategies to create a consumer-centred health system by including patients in shared decision-making, to ensure that patients are partners in their care, and that consumers are involved in the development and design of quality health care



Preventing and Controlling Healthcare-associated Infection focuses on the systems and strategies to prevent infection, to manage infections effectively when they occur, and to limit the development of antimicrobial resistance through prudent use of antimicrobials, as part of effective antimicrobial stewardship



Medication Safety focuses on the systems and strategies to ensure that clinicians safely prescribe, dispense and administer appropriate medicines to informed patients, and monitor use of the medicines



Comprehensive Care focuses on the integrated screening, assessment and risk identification processes for developing an individualised care plan, to prevent and minimise the risks of harm in identified areas



Communicating for Safety focuses on the systems and strategies for effective communication between patients, carers and families, multidisciplinary teams and clinicians, and across the health service organisation



Blood Management focuses on the systems and strategies for the safe, appropriate, efficient and effective care of patients’ own blood, as well as other supplies of blood and blood products



Recognising and Responding to Acute Deterioration focuses on the systems and processes to respond effectively to patients when their physical, mental or cognitive condition deteriorates

The Patient Safety Competency Framework for Nursing Students

The TTPSS is informed by the NSQHS Standards. However, although these Standards are often used to inform nursing curricula, their key purpose is not educational but to support clinical governance and risk mitigation in acute care. In addition, while *Standard 6* of the Nursing and Midwifery Board of Australia Registered Nurse standards for practice refers to the importance of ‘providing safe, appropriate and responsive quality nursing practice’, the level of detail required for curriculum development or student assessment is limited. For these reasons a Delphi project was conducted to develop a Patient Safety Competency Framework (PSCF) for nursing students that could be used to inform the four simulations in the TTPSS package.

Competency frameworks constitute a blueprint for optimal performance in a given area of practice (Thistlethwaite et al., 2014); and competency statements refer to the specific outcomes of learning. The knowledge and skill statements included in the PSCF were structured with reference to Miller’s (1991) pyramid of competence. The PSCF knowledge statements are conceptualised as the foundation for competence. The nine overarching competency statements that were derived from the Delphi study by consensus include:

1. Person-centred care – The nursing student demonstrates the ability to plan and provide care that is respectful of the person’s individual needs, values and life experience.
2. Therapeutic communication – The nursing student demonstrates the ability to use verbal and non-verbal communication to convey respect and empathy, and to encourage the person to express their feelings and needs, while at the same time maintaining appropriate professional boundaries.
3. Cultural competence – The nursing student demonstrates respect for each person’s cultural values, beliefs, life experiences and health practices.
4. Teamwork and collaborative practice – The nursing student demonstrates the ability to collaborate and communicate effectively with members of the healthcare team in ways that facilitate mutual respect and shared decision-making.
5. Clinical reasoning – The nursing student demonstrates the ability to assess accurately, interpret and respond to individual patient data in a systematic and timely way.
6. Evidenced-based practice – The nursing student demonstrates the ability to provide care that takes into account best available evidence, clinical expertise and the person’s individual needs, values and preferences.
7. Preventing, minimising and responding to adverse events – The nursing student demonstrates the ability to anticipate and respond to human and systems factors that may jeopardise patient safety; and takes appropriate actions to prevent reoccurrence of errors and near misses.
8. Infection prevention and control – The nursing student demonstrates the ability to reduce the risk of patients acquiring healthcare-associated infections and manage infections effectively if they occur.
9. Medication safety – The nursing student demonstrates the ability to administer and monitor the therapeutic use of medications and respond appropriately to medication errors and adverse drug reactions.

The PSCF knowledge and skill sets have been used to inform the TTPSS learning outcomes, Cue Cards, Antagonist Cards and Knowledge Application Tests.

Tag Team Patient Safety Simulation Rules, Roles and Responsibilities

Rules for Simulation

Tag Team Patient Safety Simulation provides an opportunity for collaborative and meaningful learning. This requires all learners to:

- Demonstrate professional behaviours (including restricting the use of mobile devices)
- Imagine that the simulation is real
- Participate enthusiastically
- Provide meaningful, honest and constructive feedback to their peers
- Learn from what went well during the simulation and from the mistakes
- Maintain respect and confidentiality during and after the simulation (this includes not taking and sharing photos and videos).



TTPSS provides opportunities for learners to collaborate meaningfully

Tagging

Tagging occurs when cast members exchange roles as each scenario is played out. It is designed to increase participation of cast members and to facilitate inclusion of alternative perspectives and approaches throughout the simulation experience. Tagging can be initiated by either the Director or cast members and is not a reflection on performance but rather a strategy that allows different approaches in a situation.

Cast members who are 'on stage' (actors) may tag out if they feel unsure of the correct course of action. Cast members who are 'off-stage' may in tag if they wish to contribute to the unfolding scenario. Tagging does not include audience members.



During tagging cast members exchange roles to increase learner participation and facilitate alternative perspectives

Tagging can be initiated by the word 'TAG' and there may be a touch of hands (similar to basketball) when tagging in and out. Tagging indicates an exchange of roles and responsibility between one cast member and the next. When tagged, the new cast member takes over where the previous cast member left off. The concept behind tagging in and out is that one role is played by many learners, lending different voices, thoughts and actions to the role.

TTPSS roles

The Protagonist

The Protagonist is generally the patient and the leading character around whom the action revolves. It may be played by a trained actor, student, simulated patient, Mask-Ed character, manikin or educator. The Protagonist has a life story and medical history that provokes an emotional resonance in the learners and stimulates dialogue and debate.



The Protagonist is the leading character and the one around whom the action revolves

The Director

The Director is an educator who conveys the patient's story to the cast and audience. The role of the Director is essentially one of narrator and facilitator who guides the learners, intervenes at key moments throughout the scenarios, and conducts the Debrief. The Director's expertise in the discipline area and understanding of the learning outcomes enables them to capture teachable moments or move the simulation in a new direction to facilitate learning.

The Audience

The audience are the learners who are allocated the role of theatre critics and who actively observe the scenario being played out. Audience members provide critique during the Intermission and Debrief.

The Cast

Cast members are the learners who are allocated roles in each scenario, with some participating and others waiting to be 'tagged in'.



Cast members actively working together during the unfolding scenario

The TTPSS Toolkit

TTPSS is intended to be flexible, transportable and adaptable for a range of environments. The context for the simulation may be varied depending on room availability and group size and the simulation modality can be altered according to the learning outcomes and availability of equipment.

The TTPSS Toolkit includes:

- TTPSS Facilitator guide
- Four Simulation guides (each comprising two scenarios, one that is foundational and one more complex)
- Cue and Antagonist Cards
- Scenario Quick Guide
- Participant Information Handout template
- Cast members' identification tags
- Scenario resources
- Evaluation instruments.

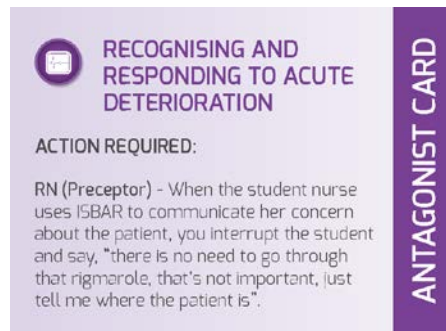
The Toolkit is also available on the TTPSS website.

TTPSS Cards

There are two types of cards that are used in TTPSS, Cue Cards and Antagonist Cards (see examples below). They are colour coded to correspond with the NSQHS Standards, and depending on the scenario chosen, instigate varying levels of complexity. Cue Cards are given to the audience members by the Director before the commencement of the play and provide key focus points for learners to consider during the scenario. Cue Cards also guide audience members' feedback during the Intermission and Debrief.



Example Cue Card



Example Antagonist Card

Antagonist Cards may be given to cast members by the Director during the TTPSS to increase the complexity of the scenario and enhance learners' resilience and critical thinking skills. The Antagonist Cards direct the actor to behave in a certain way or take a specific action during the play that presents a challenge to patient safety. Antagonist Cards can change the direction of the play and require cast members to respond to the new and unfolding situation. Depending on how the play unfolds, the Director may choose to employ one, many, or no Antagonist Cards. Cast members are not aware of the content of the Antagonist Cards before the play begins.

Scenario 'Quick Guide'

Each scenario has a 'Quick Guide' that provides a brief summary of key information for the Director to use during the simulation.

Participant Information Handout

Before the simulation learners are sent a *Participant Information Handout* that includes the following:

- General information about the simulation, including dates, times, and venue
- A brief overview of the TTPSS approach, including the simulation rules
- The prologue (scenario) and participant roles
- The NSQHSS Standards relevant to the scenario
- Preparatory reading materials and a summary of key points.

The TTPSS Toolkit includes a modifiable template where the details of dates, times, and venue can be inserted. Once complete, the template provides an outline of key activities and timeframes to guide implementation.

TTPSS Structure

Each simulation package comprises two scenarios. Scenario 1 takes a foundational approach and Scenario 2 introduces more complex concepts. Each TTPSS is based on a semi-structured script that addresses specific learning outcomes and integrates one or more of the NSQHS Standards. Whilst each scenario focuses on specific standards, educators are also encouraged to address *Preventing and Controlling Healthcare-Associated Infection* and *Communicating for Safety* when opportunities arise during the simulations.

Each scenario incorporates five phases: Setup and Briefing, Act 1, Intermission, Act 2, Debrief (see Figure 3). Whilst notional times are suggested below, the amount of time spent in each phase will be dependent on the cohort and the level of complexity introduced by the facilitator.



Figure 3 TTPSS Structure

Facilitating a Tag Team Patient Safety Simulation

Setup and Briefing (10–15 minutes)



Setup

- Distribute *Participant Information Handout* as pre-simulation activity
- Set up the classroom in horseshoe shape much like a theatre production
- Prepare required physical resources

Briefing

- Welcome all learners
- Explain rules for simulation
- Provide an overview of the TTPSS roles, structure, tagging process, Cue and Antagonist Cards
- Brief participants on the learning outcomes, relevant NQSHS standards, and the significance of the scenario in relation to patient safety
- Allocate learners to either audience or cast roles (ensure a minimum of 3 cast members are allocated to each role)
- Distribute scenario briefs to cast members and provide time for them to discuss their roles
- Orientate participants to the physical environment, documentation and equipment
- Explain the use and distribute the Cue Cards to the audience members
- Ask for and addresses learners' questions
- Remind learners to use loud clear voices and to think aloud when appropriate



Preparing the learners

Act 1 (10–15 minutes depending on level of complexity)



Having explained the significance of the scenario to patient safety, the Director ensures that all learners understand their roles and

- Cast members know who is on stage at the start of the play and who is off-stage and available to be tagged
- Tagging occurs approximately every three minutes throughout Act 1
- The simulation begins with the Director providing the patient handover using ISBAR
- Act 1 commences with the Director saying 'Begin' and concludes when the Director calls 'End'
- Cast members work together to manage the unfolding issues and problems that arise. Mistakes may occur and are viewed as opportunities for learning and improvement in Act 2.



Nursing students performing a medication check

Intermission (15–20 minutes)



After Act 1 concludes, the Director calls Intermission and uses Socratic questioning to facilitate reflection on and for practice, using a Pause and Reflect approach:

- Audience members are asked to provide their observations of Act 1 with specific reference to their Cue Cards. The main focus should be on **feeding forward** and suggestions for how the simulation could be improved in Act 2
- Cast members are then asked to respond to the suggestions given by the Audience and to outline how they plan to improve their practice in Act 2
- It is preferable that the learners, as a group, identify the challenges, however it is sometimes necessary for the Director to prompt the learners and provide guidance
- The cast members who were given the Antagonist Cards are asked to provide feedback about having to undertake the specified actions, with the Director emphasising that these actions were not 'usual practice' for the learners
- The Intermission should be no longer than 15–20 minutes

During Intermission it is very important for the Director to address actions resulting from the Antagonist Cards. Learners may need support because situations may be confronting. The Director should ensure that there is a focus on enhancing learners' resilience when faced with situations that require them to intervene when patient safety may be compromised.

Act 2 (10–15 minutes)



Following Intermission, Act 2 commences. This is a repeat of Act 1 using the same structure and approach but incorporating the suggestions for improvement provided by the audience members during Intermission. Cast members continue to tag in and out of the play and audience members continue to observe critically the unfolding scenario with reference to the Cue Cards provided. The Director distributes Antagonist Cards to specific cast members, if appropriate. Usually the roles are the same as those previously allocated, but there is the option to reverse the roles of the cast and audience members if desired.

Debrief (up to 30 minutes)



Debriefing guidelines

The TTPSS debrief is structured by Pendleton's Rules of Feedback (Pendleton, Scofield, Tate, & Havelock, 1984):

1. The Director begins by thanking the cast and audience and congratulates them on their performance during the simulation and Intermission.
2. The focus of the Debrief is clarified and the Learning Outcomes reviewed.
3. The learner who played the role of the 'patient' is asked to share their perspective of the simulation.
4. The audience and cast members are asked what they think went well in the simulation (with reference to the Cue Cards provided).
5. The Director provides their observations on what went well in the simulation.
6. The audience and cast members are asked what could have been done differently.
7. The Director provides their observations on what could have been done differently.
8. The cast members who responded to the Antagonist Cards are asked to provide feedback on how they thought and felt about being asked to take the specified actions.
9. The Director may extend the discussion by referring to the 'What If' questions to prompt learners to think more deeply about particular patient safety issues.
10. At the conclusion of the Debrief the Director asks the learners to consider what they have learned from the simulation and how they will transfer their learning to their future practice.



During the debrief the Director asks the cast and audience members to reflect on the simulation and the challenges that emerged

Evaluation

Each simulation scenario is accompanied by two evaluation instruments, a Knowledge Acquisition Test (KAT) and the Satisfaction with Simulation Experience Scale (SSES) (Levett-Jones et al., 2011).

Learner satisfaction

The SSES is an 18-item instrument that takes 5–10 minutes to complete. The items are rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The 'debriefing and reflection' subscale contains nine items measuring satisfaction with the debrief, feedback, and opportunity for reflection. The 'clinical reasoning' subscale is comprised of four items measuring satisfaction with learning about clinical reasoning and clinical decision-making. Finally, a 'clinical learning' subscale has three items measuring satisfaction with the overall learning experience and knowledge gained. The SSES is provided to learners following debrief.

The scores for the three subscales and overall SSES scale are calculated by determining mean scores and standard deviations. Higher mean scores indicate higher degree of satisfaction with the simulation experience.

Previous studies attest to the psychometric integrity of the SSES. It has a satisfactory Cronbach's alpha of 0.78 for the total scale, with 0.94 for the debriefing and reflection subscale, 0.86 for clinical reasoning subscale, and 0.85 for clinical learning subscale.

Knowledge acquisition

The KAT consists of 10 multiple choice questions related to the learning outcomes for the specific simulation and designed to test recall and application of information. The KAT is provided to learners before their simulation experience and following Debrief. An independent *t*-test can be used to determine whether there are statistically significant differences pre- and post-simulation.



Knowledge acquisition test

The Tag Team Patient Safety Simulations

Simulation 1 - Medication Safety

This package contains two pain management scenarios with a focus on NSQHS standards:



Simulation 2 - Acute Deterioration in Cognition

This package contains two deterioration of cognition scenarios which focus on NSQHS standards:



Simulation 3 - Impaired Respiratory Function

This package contains two exacerbation of asthma scenarios which focus on NSQHS standards:



Simulation 4 - Cultural Assessment

This package contains two scenarios that focus on the NSQHS standards:



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