

# Take C.A.R.E of patient safety: A call to action

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## ABSTRACT

In a dynamic healthcare environment, patient safety is crucial. A "Conscious Actions Reduce Errors" (C.A.R.E) approach is needed to safeguard safety and reduce medical errors. The dual process theory highlights two thinking modes: intuitive (fast, automatic) and analytical (slow, deliberate). Intuitive thinking, though quick and often effective, can lead to cognitive biases like anchoring and availability heuristics. A C.A.R.E approach incorporating tools like the TWED checklist (Threat, What if I'm wrong? What else?, Evidence, Dispositional factors) and Shisa Kanko (Japanese method of pointing and calling) can help to improve decision-making and action precision in clinical settings.

## KEYWORDS:

Patient safety, cognitive biases, Shisa Kanko, metacognition, medical errors

## INTRODUCTION

In today's fast-paced and ever-evolving healthcare services, the imperative to prioritize patient safety cannot be overstated. The quote, "Nothing we do is so important that we cannot take the time to do it safely," encapsulates the essence of what should be a universal guiding principle in medical practice. It underscores the critical need to adopt a "Conscious Actions Reduce Errors" (C.A.R.E) mindset that can serve as an overarching framework to enhance patient safety.

The World Health Organization (WHO) has long championed the cause of patient safety. This commitment is reflected in its annual event of World Patient Safety Day on 17 September, which aims to raise awareness and drive global action on patient safety issues. The theme for World Patient Safety Day 2024, "Improving Diagnosis for Patient Safety," with the slogan "Get it right, make it safe!" is particularly significant.<sup>1</sup> It highlights the crucial role of accurate diagnosis in ensuring patient safety and the need for healthcare professionals to adopt best practices to minimise diagnostic errors.

Medical errors are a significant concern in healthcare, often leading to adverse outcomes and compromised patient safety. They can arise from various factors, in which cognitive biases are one of them. Research evidence supports the notion that decision-making, including clinical diagnosis, can be influenced by our two modes of thinking processes as described in the dual process theory of thinking.<sup>2</sup>

The dual process theory posits that there are two modes of thinking.<sup>2,3</sup>

**Mode 1 (Intuitive):** Fast, automatic, and subconscious.

**Mode 2 (Analytical):** Slow, deliberate, and conscious.

In clinical settings, Mode 1 allows healthcare professionals to quickly recognise patterns and make rapid decisions based on experience and intuition. However, this can also lead to cognitive biases and errors. Common examples of cognitive biases, which operate at a subconscious level, that can significantly affect diagnostic accuracy include:

**Anchoring Bias:** This occurs when a clinician relies too heavily on the initial piece of information (the "anchor") and fails to adjust their thinking as new information becomes available.<sup>2,3</sup>

**Availability Heuristic:** This bias involves making decisions based on how easily information comes to mind, or "mental shortcuts". For instance, a doctor might diagnose a condition he/she has seen frequently recently, rather than considering other possibilities.<sup>2,3</sup>

Addressing these challenges requires a "conscious" approach that encompasses metacognition and proven safety techniques. In this context, the concept of C.A.R.E, the TWED checklist<sup>2,3</sup>, and the practice of Shisa Kanko<sup>4,5</sup> offer valuable tools and strategies to enhance diagnostic accuracy and patient safety.

## Conscious actions reduce errors (C.A.R.E)

Ensuring patient safety begins with mindfulness and intentionality in every aspect of patient care. The concept serves as a reminder that vigilance and careful verification are crucial at every stage of patient management. This approach goes beyond mere technical accuracy.

Additionally, C.A.R.E symbolises a commitment to patient safety through deliberate and conscious actions. Every process, no matter how routine, must be executed with an acute awareness of its potential impact on patient outcomes. This ethos fosters a culture of safety where healthcare professionals are consistently reminded of their responsibility to act thoughtfully and conscientiously.

Indeed, an extra few seconds of proper checking does make a difference! This small investment of time ensures that important pieces of information are verified and double-checked before proceeding, which can potentially prevent significant errors. The idea of taking an extra moment to

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confirm actions aligns perfectly with the concept of C.A.R.E, emphasising that mindfulness is a critical component of patient safety.

**The TWED checklist: facilitating metacognition and improving diagnosis**

Metacognition, the practice of reflecting on one's thought processes<sup>3</sup>, is a crucial skill for making clinical diagnoses. The TWED checklist is an instrumental tool designed to enhance this reflective practice by systematically addressing key aspects of decision-making.<sup>2,3</sup> The components of the TWED checklist are as shown in Table I below.

The implementation of TWED checklist can foster a thorough and reflective approach to patient care and prompts clinicians to consciously evaluate their decisions in order to reduce diagnostic errors, improve patient safety, and minimize risk of oversight in clinical judgment.

**Shisa Kanko: pointing and calling to mitigate human errors**

Shisa Kanko, a safety technique originating from Japanese railway operations, has demonstrated efficacy in reducing human error through the method of pointing and calling.<sup>3</sup> This practice entails physically pointing at the pertinent pieces of information and verbally affirming them. When translated to healthcare, Shisa Kanko can significantly enhance focus and verification processes, such as during medication dispensing and administration or handling blood products.

Research evidence supports the effectiveness of Shisa Kanko in reducing errors. Indeed, a study conducted by the Japanese railway industry demonstrated that implementing Shisa Kanko led to a six-fold reduction in errors.<sup>3</sup> This remarkable decrease underscores the potential of this technique in

improving accuracy and safety in various settings, including healthcare.

The act of pointing and verbal confirmation, which engages multiple sensory modalities - visual, auditory, and kinesthetic<sup>4,5</sup>, can significantly enhance concentration and accuracy through the activation of the prefrontal and visual cortex.<sup>6</sup> By integrating Shisa Kanko into daily routines, healthcare workers can reduce errors caused by distraction or routine complacency.<sup>4</sup> This method fosters a heightened state of awareness and mindfulness, contributing to a safer clinical environment.

**Combining TWED checklist and Shisa Kanko as a unified C.A.R.E. tool**

Combining the TWED checklist (a cognitive tool for "checking on our thinking") and Shisa Kanko (a psychomotor skill for "checking on our doing") into a unified C.A.R.E. tool can safeguard clinical decision-making and precision of actions in clinical settings. Starting from the constellation of patient's data, a physician generates a list of probable diagnoses, which can be subjected to an iterative metacognitive screening using the TWED checklist to reduce cognitive biases. A treatment plan is then implemented to manage the working diagnosis. Shisa Kanko is performed by physically pointing to and verbally confirming key actions to enhance focus and accuracy (Figure 1).

**Case illustration on the application of TWED checklist and Shisa Kanko**

Just before handover in a chaotic emergency department, an unconscious 30-year-old polytrauma patient was brought in. Recognizing traumatic brain injury (TBI) as a threat (T), a CT brain scan was ordered. Considering what else (W) the patient might have sustained; a CT cervical scan was also

Table I: TWED Checklist Components and Explanation

<b>T - Threat</b>	Identifying potential threats (e.g.: considering worst-case scenario) to patient safety in any given situation.
<b>W - What if I am wrong? What else</b>	Challenging assumptions and ensuring all possible diagnoses and contributing factors have been considered.
<b>E - Evidence</b>	Evaluating whether there is sufficient and robust evidence to support the diagnosis or clinical decision.
<b>D – Dispositional factors</b>	Recognising how emotion and environmental factors may influence decision-making

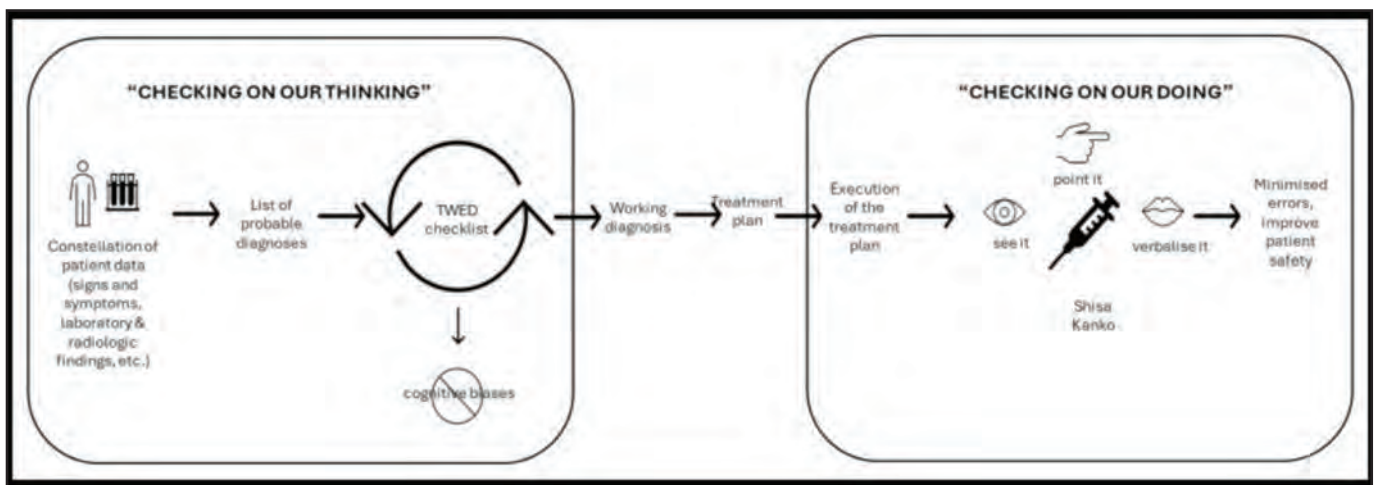


Fig. 1: Diagrammatic representation of combining TWED checklist and Shisa Kanko as a Unified C.A.R.E tool

performed as evidence (E) despite a clear X-ray. The fatigued night shift doctor, acknowledging his dispositional (D) factor, handed over to the morning shift. The patient, later found in hypovolemic shock, received whole blood. Before administering the blood product, the nurse utilised the Shisa Kanko method by pointing to the wristband and verbalising the patient identifiers (full name and identification number). Immediately afterwards, the nurse pointed to the blood product label and again verbalised the patient identifiers, ensuring the correct identification of the patient. This method is also applied to the process of checking blood grouping and the administration of medications to ensure accuracy.

### CONCLUSION

Patient safety requires continuous vigilance and proactive measures. By implementing C.A.R.E, medical errors can be reduced, and patient safety can be enhanced to foster a culture of mindfulness, thoroughness, and accountability. The message is clear: "Nothing we do is so important that we cannot take the time to do it safely." As we celebrate World Patient Safety Day 2024, reaffirming the commitment to "First, Do No Harm" is therefore, essential.

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