

RED TEAM / BLUE TEAM CHALLENGE

INFORMATION FOR CLINICIANS

Red Team / Blue Team exercises were developed by the military as a method of testing force readiness and are now well established in the corporate world as a simulation based means of testing strategy and security systems. During military style game-based simulation, the Blue Team hopes that security systems prove resilient to attacks, while the Red Team strives to find holes in the system that has been overlooked by designers.

In health, traditional hierarchical structures inhibit challenge among team members, and the holes can go undetected or the significance is not recognised. Diagnosis is being increasingly recognised as one of the most difficult cognitive challenges within medicine. The Red Team / Blue Team Challenge has been adapted, based on the military exercises, to suit the health care environment and provide a safe method of debating diagnosis and improving diagnostic decision making among team members in complex clinical situations.

The Red Team / Blue Team Challenge

The Red Team / Blue Team Challenge aims to test the hierarchical model and provides tools for team members to safely question and challenge the diagnostic decision making process within the team environment.

This strategy enables the Blue Team to undertake history taking, clinical assessment and synthesis in the traditional manner, however, at a set point - usually during rounds - someone is allocated to the Red Team role.

The Red Team provides an independent review by thinking critically about the clinical scenario and identifying potential alternative diagnoses to those presented by the Blue Team. The Red Team member is rewarded for speaking up, thinking 'outside the box' and identifying potential alternative diagnoses to be refuted.



Team roles

Blue Team role

The Blue Team is the person, or people who conducted the primary clinical assessment and collected a history for the patient. This team is responsible for synthesising the clinical information obtained, determining whether any further information is required and documenting the differential diagnosis.

Red Team role

The Red Team should be allocated to another member of the team. This person plays a 'devil's advocate' role that critically considers the clinical information presented. They will identify alternative possible diagnoses and clinical symptoms that don't fit the picture presented; ensure the worst case scenario is ruled out; and flag any possible atypical presentations that may not have been considered.

Supervisor role

The supervisor is usually the senior MO responsible for the patient and may not always be present or available during the Red Team / Blue Team Challenge. Their role is to encourage and promote the Challenge at appropriate points in the patient's journey and provide rationalisation, expert knowledge and support during the decision making process.

When to challenge

Opportunities for utilising the Red Team / Blue Team Challenge will vary depending on the clinical unit and specialty structures and processes. Some identified opportunities include:

- During ward rounds
- At initial presentation in ED
- During whiteboard rounds or team meetings
- At medical team handover
- During multidisciplinary team meetings and case conferences
- Prior to discharge

Creating a safe environment

Establish some ground rules. These are essential to creating and maintaining a safe environment.

Sample ground rules

1. Challenge respectfully
2. Listen actively and respect others when they are talking
3. Ask questions if you need clarification
4. Critique ideas, not people
5. Reward inventive thinking

Before commencing a Challenge

1. **Establish who will act in which role**
Roles are interchangeable and team members may switch roles from patient to patient or day to day.
2. **Remember the ground rules**
It is important to reinforce ground rules regularly and remind team members of these before commencing a Challenge.
3. **Determine where the challenge will take place**
This could be either at the patient's bedside or in a huddle away from the patient. There are advantages to both methods.
4. **Identify how you will reach an agreed plan to proceed at the end of the challenge**
Difficulty in reaching an agreed diagnosis or plan for proceeding may indicate that this is a complex patient or rare presentation that would benefit from escalation or a second opinion.

Considerations during structured rounds

As part of an 'In Safe Hands' round

- Include a prompt in the script that questions - Do we need to 'Take 2' on this patient?
- At the end of the round create a huddle to undertake Red Team / Blue Team Challenge on patients identified for 'Take 2' during the round

During a 'Whiteboard Round'

- Ensure the relevant patient history and clinical information is available to refer to during the discussions

So you're the Blue Team...

Start the Challenge with:

The working diagnosis to be challenged is...

- Present the case for discussion as you normally would
- Give the Red Team an opportunity to ask questions and challenge the diagnosis

Conclude the Challenge with:

The agreed working diagnosis is...

And the ongoing plan / or plan for review is...

- This will take into account planned and additional investigations, changes to the diagnosis, clinical management plan and a time frame for follow-up and review.

So you're the Red Team...

Things to consider

Worst case scenario

1. What is the worst case scenario?
2. Is this a time-critical problem requiring urgent action?
3. Have we ruled this out?

Alternative diagnoses

1. What else could this be?
2. Is this an atypical presentation of a common problem?
3. Are there any symptoms that don't fit?

Investigations

1. Do we have all the investigation results?
2. Will the proposed investigations rule out the differential diagnoses? (i.e. are they necessary?)
3. What other investigation/s will provide the right information to answer the questions being asked?

Ask the patient

1. What do you think this could be?
2. Is there anything that you think isn't right?

About the Take 2 – Think, Do Project

The CEC's *Take 2 – Think, Do* project aims to improve the morbidity and mortality associated with wrong, missed or delayed diagnosis through enhancing the clinicians' critical thinking and recognition of the potential for diagnostic error across a broad clinical arena.

For further information on the Take 2 – Think, Do project, please contact:

Project Lead, Diagnostic Error

Phone: (02) 9269 5626 **Fax:** (02) 9269 5599

Email: CEC-Take2@health.nsw.gov.au