Using 7EAM™?

Training for 7€Am™ use is essential and should include the following:

- Selection of a small team of expert clinicians to maintain viability, inter-rater reliability and succession planning;
- Provision of key references, reports, and handbooks;
- Experience and understanding of leadership, teamwork, decision making and situation awareness (non technical skills);
- An understanding of psychometric rating;
- Understanding and insight into the specific requirements of emergency performance (e.g. command and control structures);
- The development and contents of 7EAM™; and
- Observational practice with 7EAM™ in either simulated or 'real' events. This is best achieved through observation of video recorded events enabling users to discuss performance and outcomes thereby enhancing inter-rater reliability.

Training and assessment with 7EAM™

Whether using 7EAm[™] as a training tool or for assessment the level of training and experience of the trainee should be taken into account. Through discussion and feedback 7EAm™ can be used to develop leadership and teamwork skills for undergraduates, postgraduates and for professional development. $7\mathcal{E}\mathcal{A}\mathcal{M}^{\text{TM}}$ can also be used for formative and summative performance assessments.

Using 7EAM™

How to rate with 7EAM™

- Observe each performance, making notes on positive aspects (and points for improvement) throughout;
- Consider observed behaviours only;
- Consider the behavioural markers listed in Table 2:
- When complete use the rating scale for each item to make a judgement on *overall* performance. The 7EAM™ is designed to rate leadership and team performance as a whole, not as a second by second break down of performance by each individual. Raters should become accustomed to making judgements on global performance in a training phase (see above) to ensure, for example, that occasional positive and negative actions do not unduly influence the final rating.
- Performance ratings for the primary eleven items are based on the following scale:
 - Never/Hardly ever = '0'
 - Seldom = '1'
 - About as often as not = '2'
 - Often = '3'
 - Always/Nearly always = '4'
- Item ratings therefore run from 0-4. The first number is '0' (as opposed to '1') to enable applicable feedback to non-performers i.e. "your score was '0' out of '44'" and not "your score was '11' out of '55";
- The scale is uneven with five response options ('0-4'). This means that there is a middle option ('2' 'about as often as not'). Be cautious here as this is often the easy option for raters when time is limited or judgement is difficult;
- Prompts are provided for some of the categories and items, and detailed examples of good and poor practice are listed below;

- Item 12 is an overall (or global) rating of '1–10' ('1' being a poor performance and '10' being the top);
- Performance summations for debriefing and assessment can be made by:
 - Summing the categories Leadership items 1-2;
 Teamwork items 3-9; Task management items 10 –11 (as a specific performance summary).
 - Summing the items (1 –11) (as an overall performance summary)
 - Reporting the global rating (item 12)
 - Or a combination of the above.

General recommendations

- Training of raters will enable them to become familiar with the language and structure of the 7EAM™ whilst comparisons and discussions with colleagues will ensure consensus is reached;
- Feedback and debriefing is an essential component of all the ratings. Ensure that sufficient time is available for this task focussing on positive points, points for improvements and positive 'take home' messages (ref Medical education handbook);
- Training and assessment using the 7£Am[™] should not interfere with clinical care. Ratings are best made on completion of the resuscitation episode i.e. not during the event.

Table 2: The 7EAM™ behavioural markers

Leadership:

Two leadership elements are included that demonstrate 1. command and control of the situation, an essential component in a time bound emergency setting, and 2. a global overview to ensure team and task management. It is assumed that a leader will either be designated (i.e. at the start of a shift in an Emergency Department), will emerge or will be the most senior clinician. Occasionally there will be no obvious leader in which case a '0' should be allocated to the two elements below.

1. The team leader let the team know what was expected of them through direction and command

Behavioural markers for good practice Behavioural markers for poor practice Communicates role as team leader on arrival; ■ Inadequate verbal and/or non verbal communication with regard to leadership role; Gives clear precise commands throughout the Team leadership 'challenges' leading to conflict: emergency (applicably assertive and decisive); Identifies and utilises team members' strengths; Deference to other clinicians without formal transfer of the leadership role – often leading to Allocates task roles directly to named individuals: diffusion of responsibility; and Explicitly plans tasks in advance preparing team Diffusion of leadership responsibility. members for their role; and Monitors and responds to team members' skill sets and performance.

2. The team leader maintained a global perspective

Prompts: Monitoring clinical procedures and the environment? Remaining 'hands off' as applicable? Appropriate delegation

Behavioural	markers	for acod	practice

- Maintenance of an overall view of the team, tasks and future direction;
- Where possible/applicable* remaining 'Hands off – Head up' – physically positioned at the patient's feet;
 - *This may not be possible where the team is small or tasks can only be completed by the team leader.
- Delegation of tasks to applicable team members and in advance of requirements; and
- Where applicable** discusses and plans resuscitation progress and cessation with team.
 - ** Where family are present a team member should be allocated to support individuals and explain procedures.

Behavioural markers for poor practice

- Undertaking technical tasks that could be delegated e.g. defibrillating, cannulating, or intubating;
- Leaving the team for extended periods; and
- Protracted consultation with individual team members.

Teamwork:

Seven elements are included that cover communication, timely action, composure, morale, adaptation, monitoring of the situation and anticipation of future events. Ratings should include the team as a whole i.e. the leader and the individual team members as a collective, bearing in mind that some will have a greater role than others.

3. The team communicated effectively

Prompts: Verbal, non-verbal and written forms of communication?

Behavioural markers for good practice	Behavioural markers for poor practice
 Clear, audible and sharp verbal communication; Applied listening skills; Confirmation of understanding and orders; Lines of communication between team members and the leader; Culturally acceptable non-verbal forms of communication e.g. eye contact, nods of the head, touch between team members; and Where practical a designated individual to record decisions and actions in medical records (during the event) e.g. drug doses and time of administration. 	 Infrequent verbal direction; Culturally insensitive non-verbal communication; Aggressive and demanding communication styles; and Biased communication lines e.g. between the leader and a senior clinician only.

4. The team worked together to complete the tasks in a timely manner

Behavioural markers for good practice	Behavioural markers for poor practice
 Rapid applicable prioritization of treatment and care; Clarity of task and role allocation within the team; Tasks linked in a co-ordinated fashion. 	 Protracted delayed task completion e.g. significant delays in chest compression for defibrillation; Diffused lines of communication e.g. 'can I have some adrenaline please' whilst failing to make eye contact or name an individual; Inexpert or incompetent skill sets; and Protracted fixation on an individual task.

5. The team acted with composure and control

Prompts: Applicable emotions? Conflict management issues?

Behavioural markers for good practice	Behavioural markers for poor practice
 Professional calm and controlled performance; Tolerance of uncertainty; Perception of confidence; and Demonstrated release of tension (e.g. reassurance, humour). 	Failure to manage conflict; andInappropriate displays of emotion.

6. The team morale was positive

Prompts: Appropriate support, confidence, spirit, optimism, determination?

Behavioural markers for good practice	Behavioural markers for poor practice
 Harmony and positive rapport; Demonstrated commitment to role and outcome (effort, optimism and determination); Applicable psychological and emotional support; Applicable autonomy and trust; and Debriefing and summary discussions following cessation of resuscitation. 	 Inter-personal and inter-professional conflict; and Negative responses to suggestions and critic.

7. The team adapted to changing situations

Prompts: Adaptation within the roles of their profession? Situation changes: Patient deterioration? Team changes?

Behavioural markers for good practice	Behavioural markers for poor practice
 Demonstrated adaptability to changing situations (within professional roles); Flexibility within and between roles; and Openness to new ideas. 	■ Failure to identify and prompt team members when situation changes e.g. junior team members not informing the leader of patient deterioration or potential clinical errors.

8. The team monitored and reassessed the situation

Behavioural markers for good practice	Behavioural markers for poor practice
 Gathering of information through information exchange and monitoring of the situation; and Frequent summary reiterations of progress and plans. 	 Failure to identify potential or actual situations that may cause complications or errors; and Fixation on a single problem or issue.

9. The team anticipated potential actions

Prompts: Preparation of defibrillator, drugs, airway equipment?

Behavioural markers for good practice	Behavioural markers for poor practice
 Anticipation of likely events and required actions; Advanced preparation of equipment and drugs. 	■ Unavailable or insufficient equipment/drugs.

Task Management:

Two elements are included that cover task prioritisation and the use of applicable standards and guidelines. Again ratings should include the team as a whole i.e. the leader and the individual team members as a collective.

10. The team prioritised tasks

Behavioural markers for good practice	Behavioural markers for poor practice
 Verbalised and anticipated prioritisation of care; Clarity of objectives and articulation of goals; Scheduled actions. 	 Excessive demands/priorities voiced at one time e.g. can we give adrenaline, cannulate and defibrillate now; and Delayed actions due to excessive demands and priorities.

11. The team followed approved standards and guidelines

Prompt: Some deviation may be appropriate?

Behavioural markers for good practice	Behavioural markers for poor practice
High standards of performance and applicable adherence to guidelines e.g. advanced life support or trauma life support guidelines.	■ Rigorous inflexibility to guidelines.

Overall

12. On a scale of 1-10 give your global rating of the team's non-technical performance

Behavioural markers for good practice	Behavioural markers for poor practice
 Directive leadership with a clear global overview; Sharp and clear communication; Effective composed, timely teamwork; Positive morale; Adaptability; Continuous monitoring and reassessment; Anticipation of potential actions; and Prioritisation of tasks whilst following approved standards. 	 Laissez-faire or inadequate leadership; Communication errors leading to confusion; Inadequate role clarity, anxious and stressed team members; and Inadequate monitoring, anticipation and prioritisation of tasks.