

Simulation en santé
et innovations pédagogiques

Crisis resource management

M. Mouhaoui

Erreurs humaines

Incidence élevée

- Urgences
- Soins intensifs
- Bloc opératoire

Erreurs humaines

Facteurs de risque

- Complexité
- Intervenants
- Multidisciplinarité
- Criticité

Erreurs humaines

- Travail d'équipe
- Gestion quotidienne des crises



Opérationnalisation des compétences non techniques



CRM crisis resource management

CRM & CRM

- Cockpit resource management
- Crew resource management
- Company resource management
- Crisis resource management

CRM

Ensemble des compétences non techniques,
nécessaires à la gestion d'une situation de crise



Coordonner, utiliser et intégrer toutes les ressources
disponibles, pour assurer la sécurité du patient

Compétences non techniques

Habiletés inter-personnelles

- Leadership
- Communication
- Attribution des rôles

Habiletés cognitives

- Anticipation
- Planification
- Conscience/situation

CRM



CRM



CRM

- 1. Appeler à l'aide précocement**
- 2. Anticiper et planifier**
- 3. Connaître l'environnement**
- 4. Utiliser toutes les informations disponibles**
- 5. Allouer judicieusement l'attention**
- 6. Mobiliser les ressources**

CRM

- 7. Utiliser les aides cognitives**
- 8. Communiquer efficacement**
- 9. Répartir la charge du travail**
- 10. Établir des rôles clairs**
- 11. Désigner un leader**

CRISIS RESOURCE MANAGEMENT

Call for Help Early

- Call for help early enough to make a difference
- Err on the side of getting more help
- Mobilize early personnel with special skills if they may be needed

Designate Leadership

- Establish clear leadership
- Inform team members who is in charge
- 'Followers' should be active in asking who is leading

Anticipate and Plan

- Plan & prepare for high work-load periods during low work-load periods
- Know where you are likely headed during the crisis and make backup plans early

Establish Role Clarity

- Determine who will do what
- Assign areas of responsibility appropriate to knowledge, skills, and training
- Active followers may offer specific roles

Know the Environment

- Maintain situational awareness
- Know how things work and where things are
- Be aware of strengths and vulnerabilities of environment

Use All Available Information

- Monitor multiple streams of data and information
- Check and cross check information

Distribute the Workload

- Assign specific tasks to team members according to their abilities
- Revise the distribution if there is task overload or failure

Allocate Attention Wisely

- Eliminate or reduce distractions
- Monitor for task saturation & data overload
- Avoid getting fixated
- Recruit others to help w/ monitoring

Communicate Effectively

- Command and request clearly
- Seek confirmation of request (close the loop)
- Avoid "thin air" statements
- Foster input and atmosphere of open information exchange among all personnel

Mobilize Resources

- Activate all helpful resources including equipment and additional personnel

Use Cognitive Aids

- Be familiar with content, format, and location
- Support the effective use of cognitive aids

TEACHING THAT COUNTS

CRISIS RESOURCE MANAGEMENT (CRM) IN MEDICAL SIMULATION

3 Key Principles to Teach Your Learners

WHY IS CRM IMPORTANT?



- Optimizes team performance in high-stakes environments, like the ED
- Reduces medical error
- Improves patient safety

3 Key Principles of CRM

1. Closed Loop Communication

- Transmitter sends message
- Receiver acknowledges receipt
- Receiver confirms task was completed, closing loop



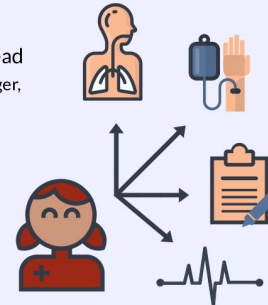
James, can you put in an IV?



Yes, IV placed.

2. Role Clarity

- Each team member has a role **explicitly delegated** by the team lead
- Ex. Team lead, Recorder, Airway Manager, Medication Administration
- Roles will **differ with each unique clinical scenario**
- Ex. In an academic ED an RT might be airway manager. In a rural ED the physician may take this role.



Tip

Assign a single task to a team member at a time

- E.g. say "Give 2 mg lorazepam IV now" vs "Give 2 mg IV lorazepam now, and if the patient doesn't stop seizing then give another 2 mg IV"
- **Start with the most critical task** (e.g. epinephrine first in anaphylaxis before solumedrol)

3. Situational Awareness



- **Be aware** of changes in the patient's condition.
Ex. Reassess ABCDEs, repeat vitals and physical exam.



- **Share your mental model.**
Ex. "This patient is having a STEMI."



- **Gather feedback** from your team.
Ex. "What else could we do?"; "What am I missing?"

This infographic was created by Dr. Krista Dowhos and Alex Aliferis, and was edited by Drs. Alvin Chin, Sarah Foohey, Alim Nagji and Teresa Chan

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