Prehospital Advanced Non-Technical Skills

Managing the Environment
Safety first. Control space, light, heat, noise, hostility/distraction
Identify and control workspace Control your environment, don’t let it control you

Managing Self
Physical readiness:
I'M SAFE checklist - illness meds stress alcohol/drugs fatigue eating/elimination
Full stomach, empty bladder. Hungry, Angry, Late or Tired? = HALT

Cognitive readiness and resilience:
Stress affects memory, attention, judgement
Stress minimisation strategies:
Team brief (en route)
Visualisation (between, before, en route), and access ‘performance state’
Mindfulness (be ‘in the moment’, attention to breathing)
Metacognition (thinking about/ awareness of your thought processes)
Reduce cognitive load: SOPs, simulation, control environment, delegate, checklists
Simulation with stress exposure and perturbation improves adaptability to novel conditions
Post-mission debrief
Stay in the right performance zone - ‘combat breathing’ can lower heart rate and restore focus and fine motor control

Cognitive and perceptual limitations and errors
No-one can truly multi-task well
Perception / map of world constructed by brain from limited data so much of it is best guess/made up
Much of memory is a confabulated narrative
Stress makes these even less reliable - very easy to miss things / be fooled
Visual and attentional resolution limited to tiny part of visual field - fixation on a task leads to loss of situational awareness
Behaviour is context-specific: you can’t assume you will perform ‘normally’ in unusual circumstances
Bystander effect = contagious inaction; be the one to speak up / act. Use your ‘discontinuity detector’ (this doesn’t fit with what I think is right and I am going to act)

Managing the Team
Managing a large resuscitation team and making things happen
Establish assertive leadership – verbal and physical
Manage expectations and biases - remember people might only see the uniform and assume non-specialist ambulance officers have arrived: ‘I am Doctor Reid, [consultant] anaesthetist/emergency physician/intensivist. I’m the critical care physician leading the retrieval today.
Task appropriately; do things only you can do
Remove/reduce distractions - give annoying people a job
Set goals and share mental model: define the ‘mission trajectory’ & temporality (what and when)
Resuscitation by voice: commentary approach (cf black boxes silent minutes before crash)
Closed loop communication: Doctor: “Give 20 mg Ketamine iv, that’s 2mls” Paramedic: “20 mg that’s 2mls of ketamine iv”
Doctor: “That’s correct”
Preventing and managing conflict

Communication styles:

- Aggressive: What the hell happened
- Submissive: I’m sorry to bother you
- Cooperative: I could use your help
- Assertive: This is what I think

Overly aggressive or submissive approaches can change focus of interaction from patient care to power.

‘How about we’, ‘Could you please’, ‘I’d like us to’ = ‘mitigating language’ – good for team building but not for immediate crisis management

Dealing with authority gradients: Advocacy – 5 step approach

1. Attention grabber – excuse me Dr Gina
2. State Concern (based on FACTS they can’t disagree with) – he has a significant head injury and has had n minutes of relative haemodynamic stability. Keep it about the patient (advocacy)
3. State the problem as you see it – we can’t manage all of his clinical needs in this hospital
4. State a solution – let’s work together to get him to the trauma centre in the next 30 minutes
5. Obtain agreement – that would be okay with you Dr Gina?

Many organisations have developed graded assertiveness tools:

QANTAS: RAISE: Relay information; Ask if they are aware, seek clarification; Indicate concern; Offer a Solution; Emergency Language (“You must act now” or a simple command such as “Go Around”)

Military: PACE: Probing for a better understanding; Alerting Captain of the anomalies; Challenging suitability of present strategy; Emergency Warning of critical and immediate dangers.

One critical assertion strategy presently used in the health care setting is the CUS program (from TeamSTEPPS). CUS stands for “I’m concerned; I’m uncomfortable; this is unsafe.” Followed by “STOP - You must listen!”

Traffic lights:

Persuasion and Influence
Be nice and be liked
Be authoritative (but not aggressive)
Find common (tribal) ground: – we vs. they
State facts and don’t get personal
Use the group - power of ‘social proof’
Ask for help – more likely to get more favours (commitment & consistency)

Hypnosis tools: pacing, leading, presupposition
A light touch on the upper arm can increase persuasion and the perceived status of the toucher (careful!).

Compare “He’s bleeding and you need to take him to theatre”

with:  "His blood pressure is now 85 systolic and the FAST is positive. He needs to get to theatre to control the haemorrhage"

What about: “We’re worried his blood pressure is now 85 systolic and the FAST is positive. How fast can you help us get him to theatre so you can save his life?”

What influence / persuasion principles are employed in that sentence?

Tactical Language

Acquire some rehearsed phrases to help you get the job done when you encounter or anticipate resistance or team discordination. Embed some of the persuasion and hypnosis tools above.