

The Platinum Ten

The final countdown in the moments following a serious motor vehicle accident

Paper Presented by - Len Watson

What is meant by the 'Platinum Ten'?

The 'Golden' hour has been in existence in rescue for two decades and even now we see different explanations in relation to its breakdown in books and papers. In reality one should hope that it is a flexible time-frame which rescuers strive to meet in getting their patient to a definitive care facility in the first hour after a crash.

Of course this cannot be achieved in remote outlying areas unless the emergency services are adequately geared up to meet the response and patient transport times.

A more in-depth understanding of critical crash response is required if we are to appreciate the significance of the 'Platinum Ten' philosophy. Crashes can be categorised by severity, distance and time.

- Severity - *the life-threatening injuries sustained by the casualty and deterioration in the minutes that follow.*
- Distance - *The actual road miles to the incident and the subsequent transport time to hospital.*
- Time - *The time taken for the whole rescue team to respond to the incident and extricate the casualty.*

The Platinum Ten

An accident can happen anywhere, anytime and because the attendance time to an incidence is an unknown quantity, for all practical purposes it cannot be introduced as part of the equation. Therefore the Platinum Ten is the first 10 minutes following the arrival of the key players in the rescue team. Some may ask why we need such a philosophy? When we measure the critical nature of a serious motor vehicle crash we can arrive at a more definite logic which allows us to rationalise our performance in tune with the casualty's vital needs.

The proportion of crashes that hold the critically injured will usually be recognised by the severity of body deformity in the vehicle's structure. This can also be taken as a rule of thumb when assessing vehicle occupants. The mechanisms of injury and a person's obvious injury patterns will alert the rescue team. On the other hand the severity of a persons injuries may not always be apparent, particularly where they have been protected by an airbag. Therefore, initial primary assessment and all subsequent primary assessments will point towards the critical deterioration in life threatening injuries.

The physically trapped and unconscious person is the most likely casualty to die in the minutes following a crash. On primary assessment the paramedic may call for an 'immediate release' or where this is not possible, a 'rapid extrication'. Of course there is no value in calling for an 'immediate release' or a 'rapid extrication' if no one knows what you are talking about or has never practised for this contingency or where they are not equipped or trained to perform efficiently.

At the more serious crash, where bodywork deformity pins the seat occupant in place, critical casualty care will have to be performed in-vehicle. For this to be

effective and to optimise the life saving initiative, efficiency will be very much dependant on how often it is practised in the training environment.

Therefore, the Platinum Ten or first ten minutes must be realised and practised for as the goal for casualty retrieval and setting up life support after arrival on scene. Whether it is done in-vehicle or in the back of an ambulance should only be dictated by circumstances. If the casualty can be released, very well and good, but where the victim is pinned this will not be an option.

Where an 'immediate release' is called for, we should appreciate that it can take several minutes to perform, during which time even basic life support may not prove possible. On the other hand, in the upright vehicle, 'in-vehicle' resuscitation can invariably begin immediately and rapid extrication put into full swing.

For the Platinum Ten' to become a reality you must have an interactive rescue team. You cannot hope to save a larger percentage of casualties without the intervention of a well-practised efficient rescue team who are well versed in working together. Firefighters must know what the paramedic needs to practise and the paramedic should know what he can reasonable expect from the fire service.

How it can be made to work?

A great frustration exists between the paramedic and the technical rescuer, particularly where services are segregated. The paramedic will rarely work with the same fire crew again and can experience a radical difference in performance between crews, and this makes it extremely difficult to know what to expect. It is safe to say that generally training fails to encompass the whole rescue team and it's not sufficiently structured to meet end-user needs and afford best practice.

Training requires practised protocols for medical in-vehicle intervention, and efficient and safe technical rescue to allow invasive care, treatment and patient monitoring, packaging and removal to be adequately and safely administered. This requires a known degree of cross platform training to cater for: -

- Initial airway and c-spine management
- Surgical airways
- In-vehicle intubation
- In-vehicle oxygen therapy
- In-vehicle infusion and drug administration
- In-vehicle thorocentesis/chest drains
- In-vehicle monitoring
- In-vehicle patient packaging and removal

Protocols for technical rescue evolutions -

- Risk recognition, control or reduction
- Vehicle stabilisation
- initial vehicle entry
- Primary windscreen removal for surgical airway intervention
- Primary roof removal for advanced airway therapy
- Rapid extrication to allow the placing of chest drains
- efficient extrication for patient release

All evolutions must be conducted with safety and fail safe procedures built in, affording protection to both casualties and rescue team members alike. Team preparedness must also cater for all major crash categories and vehicle types.

Real life-saving initiative

In rescue there exists a feel-good factor where the motoring public holds the emergency services in high esteem. One has to imagine that TV and films, and the influence of media coverage of real life horrors, has something to do with this.

However, in real terms it would be difficult to highlight the good in current rescue-team performance and much easier to point the finger and show up the faults. The motorist is dying needlessly and rescue has shown that it has a direct role to play. To revisit and analyse current performance as a time and motion study (the way your team operates) and measure that in relation to best practice and casualty outcomes will leave even the best rescue team with scope for improvement.

The Platinum Ten along with suitable and efficient rapid extrication will, in the future, be seen as a real life-saving initiative. The influence is growing and 'Rapid Extrication' was first adopted for the World Extrication Competition held in Gulan in Scotland in 2000. Indeed 'Rapid Extrication' was a required evolution in the South African Extrication Challenge as far back as 1997.

Although the Platinum Ten was not part of events, the concept of rapid extrication addresses the more seriously injured entrapped casualty, whose vital signs cannot be stabilised or maintained outside the ER.

The Platinum Ten and rapid extrication is not a question of throwing caution to the wind or compromising the casualty's condition to speed their release, but rather an efficiency drive, practised and well versed in the extrication of the victim in-line with critical care administration and management. Hopefully, this concept will mature and become the norm in years to come.

If you wish to comment, have something that you wish to share, a better way to do something or a concern that you want addressed, we at resQmed have an open door. Air your views, contribute, agree or disagree: we would love to here from you -

<mailto:lenwatson@resqmed.com?subject=STUDY - Entrapment Rescue Platinum10>

resQmed, Saint Andrews House, 21 Head Street, Halstead, Essex CO9 2SZ, ENGLAND

Tel: +44 (0) 1787 479605: Voice/Fax/Data transfer: + 44 (0) 1787 478204

Hand-out Crash Rescue EMS/Teesside Airport
©*rQm* LW 6.2001