Clinical Governance in Prehospital Care

Tromso

5th February 2014
Thanks

- Collaboration with Norwegian Air Ambulance
  - Research agreement
  - Consensus statements
- Norwegian doctors at London HEMS
14th January 2014
Aims

• What is clinical governance?
• What is the history behind its development at London’s Air Ambulance
• Why clinical governance important?
• What conspires against it?
• What are the keys to success?
Clinical Governance in UK:

“A system of tools used to ensure clinical excellence”
Think of it like this......

System of events, processes & tools that help deliver the highest possible standard of clinical care

Care that is safe and supremely effective

.......consistently
Anyone can be brilliant on a good day

............. the challenge

............. is doing it day in day out & getting the whole team to do it together
Drivers For Change 20 Years Ago
For years something conspired against excellence
“Your not going to survive a crash like that”

“It was so disorganised you couldn’t do anything”

“It was so noisey we couldn’t communicate”

“After all it was an emergency you can’t expect to get it right in those situations”

“You did your best!!!”
The team had a culture that:

Believed it was ok to get it wrong in emergency situations

Why?.....Because it was an emergency.
“The team relieved itself the burden of under performance”
Steve Martin

• Lead for extrication training in UK
• 1993 no RTA training!
• All the gear...no idea!
• Written survey
“All too complex”

“too unpredictable”

“Cant plan”

“no point in practicing”
The Truth - 70% of Entrapments

- Single vehicle
- On all 4 wheels
- Frontal impact
- 360 degrees access
- Male driver
- Footwell entrapment
Therefore:

• Process that can be defined / predicted
• Jobs can be allocated before you arrive
• Audit standards can be defined
• Audit
• Expectation of performance!
So began an era where extrication was orderly, systematic, and performance managed

............But what about other elements of prehospital care?
Other areas deserve similar analysis

Disease

Interventions

System

Clinicians

Environment

Training
Lets think about the person

Operations staff

Pilot

Engineer

Paramedic

Doctor

LONDON'S AIR AMBULANCE
“Accident statistics and cockpit recorders prove that mistakes are not the exclusive territory of the marginal pilot or the poorly trained……the exceptionally gifted are just as well represented”

Failures that bind them together

……………….. are often called the human condition
First Stage of Good Governance:

Recognise the frailty of the human condition
• Enthusiastic
• Committed
• Nice
• Ruthless
• Organised

/=\ Fantastic Clinical Care

Being Good

/=\ Good all the time
Many of the diseases are time critical
  – Decisions are time pressured
  – Practical procedures are time pressured
Disease in PHC is:
- In evolution
- Rare
- Not as the books describe
Trauma the disease

– Is complex
– With competing priorities
Multiple often competing injuries

- Head Injury
- Cord Injury
- Ruptured Spleen
- Ruptured liver
- Pelvic Fracture
50 yr old male collapsed in gym

• Is it the heart?
• Is it the head?
• Is it caused by a bleed?
• Is it caused by a thrombus?
• Where she would he take him?
Its emotional
Environment
Upstairs on second floor in a door way

In an alley way

Slumped against a wall

In the sun

Round the back of house
Over commitment – “bursting baby syndrome”
Interventions are increasingly complex
- 60 male RTA
- Driver side impact
- GCS 3
- Shocked in atrial fibrillation
- Flail chest
- Disrupted pelvis

- Anaesthesia
- Blood
- INR check
  - Prothrombin concentrate
- Pleural drainage
- Warming
- REBOA
Multi-agency / complex events
Practice unsupervised
PHC grown up in a non medical culture
We can say:

- Many things that conspire against good care
- Every likelihood human performance will be limited
- We must do everything to enhance that performance in interest of clinical excellence
Human Performance

Character

Experience
Cliff Reid: Emergency Medicine Consultant 10 years post qualification

John Black: Emergency Medicine Consultant 10 years post qualification

- Not on prior achievements
- Insightful
- Honest
- Strength
- Understand “CRM” / Human Factors
Recruitment

- From the top
- Not delegated
- Year in, year out
- Look for the characteristics you want
- Not just hear about how amazing the person is!
Human Performance

Environment
Manipulating the environment
Drug Assisted Intubation

- Choose location carefully
- Choose position carefully
  - Consider the light
  - Consider the wind
  - Consider the noise
  - Get 360 access!
Human Performance

Interventions
Cockpit Ergonomics:

• Have the right dial
• In the right position
• The right shape
• Moving the right direction
• The right colour
Keep Equipment / Procedures Simple
Human Performance

The Disease
Policy

In the multiply injured patient demonstrating shock every effort should be made to exclude a ventilatory cause for the clinical picture. Thereafter every effort should be made to maximise natural tamponade and as a “last resort” fluid transfusion should be considered.

1. Fracture Reduction / Splintage
   - Fractured femur - draw out to length and splint with Sagar splint.
   - Fractured pelvis – reduce to anatomical position and apply pelvic splint.
   - Unstable pelvis and femur – reduce and splint with MAST suit.
   - Fractured tib/fib – draw out to length and splint either with Sagar or vacuum splint.
   - Fractured humerus - draw out to length and splint with a vacuum splint.

2. Bleeding Wounds
   Should be compressed and “interim” suture considered.

3. Penetrating Wounds to Limbs
   If simple compression fails to control blood loss the aneroid sphygmomanometer with the thigh cuff should be used as a simple tourniquet.

4. Use of IV Fluids
   When splintage has been maximised then fluids should be administered with the following indications:

   - **Blunt Injury**
     - Head Injury, Infuse fluid if systolic blood pressure < 100mmHg
     - Non head injury, As penetrating disease below
   - **Penetrating Injury**
     - Boluses of 250ml to achieve verbal contact which is taken to indicate CNS perfusion adequacy. In pt where this end point is not possible SBP of 80mmHg is used.

Where patients demonstrate signs of haemodynamic compromise, the receiving Emergency Department should be so informed during the “Blue Call”, and a pre-alert for the theatre can be made.

Aims

- Describe the indications for fluid infusion.
- Describe position and types of venous access.

Background

Every effort should be made to minimise blood loss, maximise clot formation and minimise clot disruption. It is therefore essential to consider handling and splintage and their effects on natural tamponade as a fundamental part of “volume resuscitation”. All fractured limbs should be drawn out to length and splinted. Reducing the limb’s circumference will close down the soft tissues on bleeding fractures and minimise the space into which bleeding can take place. Similarly judicious handling will minimise clot disruption in the chest wall, peritoneum and pelvis. Appropriate cutting of clothes and “skin to scoot” packaging are essential elements of this care. Pressure should be used to limit visible bleeding.

- This operational guideline is to be read in conjunction with the packaging, monitoring and splintage guidelines.
- Intravenous fluid administration is not routine and should only follow specific indications.
- 0.9% Sodium Chloride is the fluid of choice for HEMS.

Application

All HEMS Doctors
All HEMS Paramedics

Prehospital Care SOP – Intravenous Fluids and IV Access

<table>
<thead>
<tr>
<th>REVIEW DATE:</th>
<th>August 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRIBUTION:</td>
<td>HEMS Doctors HEMS Paramedics</td>
</tr>
<tr>
<td>RELATED DOCUMENTS:</td>
<td>SOP - Packaging</td>
</tr>
<tr>
<td>AUTHOR:</td>
<td>PHC Management Team</td>
</tr>
<tr>
<td>APPROVED BY:</td>
<td>PHC Management Team</td>
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</tbody>
</table>
Check lists

• Just fill in the boxes and you will be alright!
Human Performance

Training
Training

Not just what you train the team in......... but how
Traditional Training

• Didactic, lecture based
• Demonstrations
• No testing, just presumption
• “See One, Do One, Teach One”
Current Training:

- Work with someone experienced
- Make no assumptions
- “Tick list”
- Structured debrief for every training mission
- Simple mannequin training
- You prove they can do the job or specific task before let loose on their own!
- 1 month period
Sign Off

• Day with consultant
• Go on operational missions
• Viva on scenarios
• Viva on equipment
• Viva on SOP’s
• ........30-40% fail rate
The Essential Ingredient

• Quiet self reflection on performance
• The presumption that next time you can do it
  – Better & faster
  – More humanely, more compassionately
• Team based
• Not just after every training mission
• After every mission
  – In coffee room
  – Re-stocking the bags
Importance of shared vision

“Shared Mental Model”
Some clinical governance tools:
Death & Donuts

- Twice a week, 2 hours
- Random review of cases
- Review of clinical care
- Compliance with SOPs
- Risk management
- Multiple consultancies
- Notes audit
- Database audit
Clinical Governance Days

• Monthly (missed 1, 7/7 bombings)
• All the team rostered
• Many come in their own time
• 50-60 people
• Approved for CPD
CGD Programme

• 0900 - 1000 - Longitudinal Audit
  – Journal Club
  – Team Meetings
• 1100 - 1130 - Coffee
• 1130 - 1230
  – SOP Review
  – Checks & Returns
  – Team Training
  – Project Meeting
  – Safety Committee
• 1230 - 1330 - Lunch
• 1330 - 1345 - Clinical Audit
• 1345 - 1415 - Mr Andy Bell ‘Accident Investigation’
• 1415 - 1500 - Mr Nick Carey ‘Ground Zero’
• 1500 - 1530 - Coffee
• 1530 - 1630 - Departmental Meeting
Multi-Professional Longitudinal Audit
Good clinical governance is perhaps easier than you think

• Passion to do your best, be professional
• Passion to practice great medicine
• Passion to work as a team
• Willingness to reflect on your own performance openly

The rest will follow
Thank You!