Ambulance Service Standards of Care

James Petter M.Sc, Cert.Ed, FCPara
Head of Education and Professional Development
South Western Ambulance Service NHS Foundation Trust
James.petter@swast.nhs.uk

Mini CV

• Head of Education, South Western Ambulance NHS Trust
• Former Director of Professional Standards, College of Paramedics, now Council Member, South West
• HCPC Partner: Fitness to Practice
• Medicolegal opinion/reporting since 2008

Todays subjects

Ambulance services, business, regulation and performance

Workforce

The paramedic profession

Medicolegal perspective and case histories
Ambulance service historical context

Dr Douglas Chamberlain launches the first UK 'paramedic' scheme

Ambulance services become part of the NHS

First paramedic training course starts

First University Paramedic Science B.Sc. Hons programme

Regulation

Professional Body Representation

Future-facing Education
1. What percentage of 999 callers (to SWASFT) were not conveyed to an Emergency Department last year?

57%

SWAST achieved a 57% rate of managed non conveyance (to the emergency dept)

The English national average for ambulance services is around 23%.

2. Which of the following procedures do paramedics and specialist paramedics around the UK currently perform?

- Routine discharge of patients at scene or referral for further care
- Thoracic and abdominal sonography
- Use of ketamine for autonomous drug-assisted airway management
- Direct referral of hip fractures to orthopaedics, with use of local (nerve block) anaesthesia
- Suicide risk assessment
- Direct referrals to cardiac reperfusion (angioplasty)

All of them, (but wide variations by Trust)

3. What proportion of the overall ambulance service workload is major trauma? (ISS>15)

0.5 to 0.7% (National Audit Office)

Around 30% of 999 calls are significant trauma or medical cases.
4. At what academic level do paramedics enter their profession at registration?
   a) ‘Equivalent to Certificate of Higher Education’*
   b) Diploma of Higher Education
   c) B.Sc (Hons)

   **All of them**  (Around 60% now register with a Dip.HE or B.Sc Hons)

*Health & Care Professions Council (2012) Paramedic Standards of Education and Training 1.1

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The Range of Ambulance Service Business

- 111 Services
- Minor Injury Units
- Walk-in Urgent Care
- Other 999
  - GREEN
  - Red 19
- High acuity
  - 999 Red 1/2
- 999 Call Prioritisation
  - ‘Hear and Treat’ (Telephone Triage)
- Patient self presentation
  - ‘See and treat’

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http://www.youtube.com/watch?v=bHgtxkzbMXY

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https://www.dropbox.com/sh/6tynrymodyglgmk/zuugaO8sLZ#f:STEMI%20CLIP.wmv

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National Ambulance Performance Standards

"CATEGORY A Calls" (32.5% of 999 calls)
Presenting conditions which may be life threatening and should receive an emergency response within 8 minutes in 75% of cases

Sub divided into:

"Category A: RED 1"
Cardiac arrest patients who are not breathing and do not have a pulse and other severe. For R1 calls, the start time is when the call connects.
Emergency Response within 8 minutes [480 seconds] in 75% of cases

"Category A: RED 2"
Calls identified as serious but less immediately time critical, such as strokes and fits
Emergency Response within 8 minutes in 75% of cases

"Category A19: (replaced Category B)"
Category A incidents which may be life threatening and should receive an ambulance response at the scene (a vehicle equipped to convey) with 19 minutes

National Ambulance Performance Standards

"Category C Calls"

Around 70% of 999 calls
Presenting conditions which are not immediately life threatening or serious. For these calls standards are not set nationally but are locally determined

(There is no longer a "Category B")

Typical 999 Workload

Figures from SECAMB 2012-13
Ambulance Service Workforce

Ambulance Service Clinical Roles
(Unregistered/Unregulated Staff)

- **Technician:**
  3/52 Driving, 9/52 clinical skills.
  ? legacy role, actively discouraged in some areas where its replaced by the ECA role, but actively encouraged in others.
  Often used as an autonomous/lead clinician. Limited drugs (x4) and limited invasive skills. (x 4 meds/IM injections only)

- **Emergency Care Assistant (ECA) aka Emergency Care Support Worker (ECSW)**
  3/52 Emergency Driving, 6/52 basic clinical and supportive (to paramedic) skills

- **Community First responder (CFR)**
  Voluntary role. Intended as a means of providing basic life support in ‘hard to reach’ areas (e.g. rural)
  < 1/52 basic clinical training

Ambulance Service Clinical Roles:
Registered staff

- **Paramedic**
  3/52 Driving, Cert HE (equivalent)Dip.HE, B.Sc Hons (by 2017) Around 40 medications used, invasive techniques, range of interventions

- **Specialist Paramedic (aka Emergency Care Practitioner)** Deployed to ‘Cat C’ and Red 1 work, clinical triage desks Increasingly found outside ambulance services. Around 60 medications (more analgesics, antibiotics, steroids etc) carried, wide range of referrals/interventions.

- **Nurses and Specialist nurses**
  As above, increasingly found within ambulance services (e.g. 111, MIUs/Urgent Care, clinical triage and in the ‘ECP’ role

- **Doctors**
  Found in small numbers in ambulance services, usually on the Board or in specialist areas eg GPs, critical care
The paramedic profession

What is a paramedic?

- Approximately 20,000 registered in the UK
- A registered health profession (HCPC) since 1999
- Single dominant registered profession within ambulance services

Usually work with one other crewmate, or solo (cars/bikes)

“They are trained in all aspects of pre-hospital emergency care ranging from acute problems such as cardiac arrest to urgent problems such as minor illness and injury.” Dept of Health, (2012)

“The Swiss Army Knife of the NHS”

“Paramedics are first contact practitioners” College of Paramedics. (2013)

How would you recognise one?

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What characterises paramedics?

- Ubiquitous, found in all environments
- Specialist generalists
- High levels of decision intensity
- Accountable by registration (HCPC)

Paramedics, regulation and professionalisation

- Initial move to regulation was recent and not professionally driven: "Driven by external forces of coercive isomorphism"
- Lack of standardised pre-registration education
- Consistently high rate of Fitness to Practice concerns (HCPC)
- High levels of clinical confidence and autonomy are countered by high levels of risk aversion, a ‘blame culture’ and poor understanding of professional accountabilities

Medicolegal Perspectives

Educational standards confused

- Degree qualified paramedic
- Varying degrees of ‘frontline’ experience
- What is the ‘reasonable standard’ at registration and beyond?
- Experience counts a lot in ambulance context
- Practice learning environment very insular
- Traditional competence-based training is now replaced by education on making judgements and decisions

High degree of autonomy:

- Balance of power is heavily with the clinician in a very dynamic environment
- Limited patient choice
- Move from use of clinical protocols to guidance
- Heavy focus on key decisions (e.g. capacity/consent, discharge/referral)

‘Specialist Generalist’ clinical practice

- Uncontrolled environments
- Limited supervision/scrutiny in the field, often unwitnessed or witness/lay ignorance
Medicolegal Perspectives 2

Pressure in the system
Delays in back up (a vehicle to convey) for solo responders
Squeeze on continued professional development (CPD) training
More use of contracted staff (agency paramedics and private ambulance companies)
More reliance on the use of non-registered clinical staff (Technicians and ECAs, CFRs)

What/who are you getting post-999 call?
Registered healthcare professional?
Something else?
Agency/contracted staff
A volunteer

The Good News

• Ambulance services are obsessed by times, call logs and by data acquisition
• Duty of candour is understood
• The quality of internal investigations and enquiries are getting better (and can be very useful)
• There are various clinical guidelines specifically designed for ambulance staff (e.g. JRCALC 2006, 2013) which provide a useful framework for clinical practice

Case Histories

• Dynamic/uncontrolled environments
‘Rollover’ RTC on motorway, high speed, young male (bodybuilder) found conscious but reduced GCS, upside down, hanging by seatbelt, demanding to be released/forcibly uncooperative. Surrounded by (illegal) anabolic steroids.

Released against advice, no witnesses
Fractures to C-Spine, Subdural haemorrhage, long term disability.

Difficulty of following guidelines
Consent and capacity issues
Witnessed actions

Expertise can help define:
‘Reasonableness’ by clinical role and response
Best practice guidelines
Compounding/Supporting factors and options
Case Histories

• Dynamic/uncontrolled environments
  Male 70s, recently bereaved. RTC: High speed impact with streetlamp, icy, cold, winter. Police first on scene, Pt very compliant/helpful but ++subdued
  Arrested at scene (drink driving) ambulance called to examine Pt
  7 minute examination by a paramedic in rear of police custody vehicle by torchlight
  Pt discharged to police at scene. No clinical documentation provided.
  Detained in cells, examined by police forensic nurse two hours later
  Died in cells soon after examination
  Multiple serious injuries (#pelvis/ribs, lacerated liver, small aortic tear etc)

Difficulty of environmental factors
Inter professional disputes (paramedic felt ‘rushed’
Consent and capacity issues, Pt didn’t want to ‘cause a fuss’
Witnessed actions: disagreement btw police and amb

Expertise can help define:
‘Reasonableness’
Best practice interprofessional working
Timings and choices made by role

Case Histories

• 111 call regarding unwell infant (age 3/12) Hx of congenital renal problem, medicated with Trimethroprim
  • 111 Passed to 999.
  • Technician crew attends. Pt discharged to care of mum with advice re temperature and advice to call back if deterioration. GP visit due next am
  • GP visit goes ahead as expected. NAD
  • Infant due MCUG three weeks later. Serious deterioration overnight, Infant died soon afterwards from septicaemia
  • Scattergun litigation (Acute trust/GP/Amb)
  • Criticism of amb crew: ‘but for the fact that the child was not taken to hospital the type of infection would have been recognised and treated earlier’
  • Case settled pre-hearing

Issues arising

• Appropriateness of a technician decision not to convey.
  (Infant was happy/feeding/alert in their presence and had a GP appointment booked early the next day)
• Inability to take a temperature in an infant with standard ambulance equipment
• Resulted in ambulance service ‘ban’ on discharge of children under 3 months, plus supply of appropriate thermometers.

Expertise can help define:
‘Reasonableness’ of clinical decision making by clinical role
Issues regarding equipment used to support decision making
Control decisions (111/999 control systems and how they work)
Confirmation bias

- Female 60s GP visit for abdominal pain. Diagnosis constipation, laxative prescribed.
- No subsequent improvement, Pt’s partner called 999, previous GP diagnosis passed to attending paramedic en route. Pt discharged by paramedic at scene with advice.
- Further 999 call-6 hours afterward, cardiac arrest due to perforated gastric bleed
- Evidence suggested that the paramedic took no equipment into scene and examination of patient was ++scant
- CCTV evidence and witness testimony ++helpful

Issues arising

- Appropriateness of control’s message to clinician en route (confirmation bias) ‘She’s been diagnosed with constipation-she just needs to keep taking the medication’
- Paramedic assessment skills, practice and standards.
- Other factors (towards the end of a shift / 6am, eccentric patient with mental health history, evidence of paramedic disengagement.
- Clinical issues as regards management of abdominal pain

999 call, Emergency Care Practitioner (solo)

- Pt a male 70s, shortness of breath, fatigue, over 2 days. Hx of leg pain and swelling.
- Patient examined, decision to convey to nearby ED (5 mins)
- Patient walked to the car, but collapsed in cardiac arrest after a few yards.
**Issues arising**

- Appropriateness of decision to convey by car as a solo responder.
- Clinician cited recent experience of lack of back up, decision to convey was based on an assumption of a long wait.
- Baseline obs suggested flagged one major finding (SaO2 78%) raised respiratory rate, otherwise findings largely based on Hx.

**Expertise can help define:**
- ‘Reasonableness’ of decision to convey
- How credible was the assumption about (lack of) back up
- Credibility of clinical decision making by clinical role
- Issues regarding equipment used to support decision making
- Control decisions (111/999 control systems and how they work)