Updating the Patient Report Forms Used by Police Officers in Specialist Role.

Introduction

Patient Report Forms (PRFs) are documents filled in by those Police Officers trained to give medical care. They include details of the mechanism of injury, the injuries sustained, assessment of the patient and any interventions given by police. Overseen by clinical governance, they are used to inform future training and for auditing the quality of the medical care provided. During successive audits of PRFs from 2010-2019, potential improvements to the forms have been identified and some minor changes were made. Following an in depth review of these changes and further recommendations from two recent audits a complete update of the form was undertaken with input from the leads for the police units involved. These include features that make the form more user-friendly, easier to audit and more focussed on patient safety.

Methods

These suggested updates to the PRF have stemmed mainly from two audits which looked at all PRFs from 2019 (Elford et al. 2020) and all PRFs that documented the consideration or use of the inhaled analgesic Penthrox™ since its introduction in 2017 (Franklin et al. 2020), from five different police forces in England. The suggestions are discussed in further detail below. Input from the clinical skills leads in these units was included to ensure that the form is user-friendly and appropriate for the officers they train.

Results

Suggestions from audits covering the years from 2010-2020 are outlined in Table 1.

Table 1.

Suggestion	Evidence base	Discussion
Supraglottic airway use	Elford et al, 2020	Due to the potential for the increased use of supraglottic airways in asynchronous CPR, this should be an option on the form.
Medical Incidents	Serebriakoff, 2019 Hartley et al, 2017	An increase in the proportion of non-trauma incidents from 2010 – 2019 makes it important to include a 'tick-box' for medical incidents.
Mental Health	Elford et al, 2020 Serebriakoff, 2019	There is not a formal way of indicating whether the PRF is related to mental health problems, so it is likely to be under-reported.
Penthrox™	Franklin et al, 2020 Rhimes et al, 2020	This section on the form is inconsistent between forces and does not align clearly enough with the protocol. A new section should be added.
Heart rate	Elford et al, 2020 Rhimes et al, 2020	To improve the number of PRFs with accurate heart rates recorded, number ranges with 'tick-boxes' should be added.
ROSC	Elford et al, 2020	ROSC rates are more easily audited with a 'tick-box' option.

Previous work had suggested attempting to develop a national PRF to aid audit (Serebriakoff et al, Poster at Trauma Care, 2019) but this did not gain sufficient traction. We therefore felt that updating it for those units under the same clinical governance structure would be an appropriate next step.

Improving Form-Fill

- An option to record the time that EMS arrived and what assessment and interventions they undertook has been identified as useful (Rhimes et al, 2020). This makes it clear when police are medically unsupported and shows how long they wait for EMS to join them on scene.
- It has been highlighted that recording observations is sometimes unclear (Rhimes et al, 2020). On the updated form, the heart rate, respiratory rate and the AVPU Score appear as individually numbered 'tick-boxes.' This aims to make it easier to record changes to the observations on re-assessment.
- The mechanisms of injury were updated so that they are clearer as separate causes of injury.
- Injuries are listed in order of severity and 'abrasion' and 'bruising' were deleted to remove ambiguity.

Penthrox™

The changes to the PRF relating to Penthrox™ use include the following, all of which correlate directly to the current protocols specification for the officers to be able to administer Penthrox™;

- Check boxes for pain score of 0-10, for pre Penthrox™, after the first dose and after the second dose
- Number of vials used
- Specific sections for breathing rate, radial pulse, age and currently alert in line with the protocol restrictions
- Time, batch number and expiry date for both first and second dose
- Confirmed that there are;
    - No contraindications
    - Past medical history / Medication
    - No use of Penthrox™ in last 3 months
    - Alert card given & discussed
    - Consent obtained
- Space to record any adverse reaction to Penthrox™, the specific reaction and who the clinical governance lead reported to was
- Handover to EMS and the name of the staff receiving patient / EMS call sign
- Any other notes specifically to do with Penthrox™ use

These changes were brought about by a detailed audit into 37 PRFs that recorded the consideration or administration of Penthrox™ by specialist police officers (Franklin et al, 2020). The audit showed that penthrox given in these circumstances made a statistically

significant difference to the pain scores of the patients and the drug was easy to administer and safe to use within the current protocol's restrictions. However, it was felt that creating a section on the PRF specifically for Penthrox™, as listed above, would make it easier to record all the information required in the current protocol.

It is worth noting that the updated PRF will be sent individually to each of the forces involved as an editable document so they are able to make small adjustments to the form if required, however they will have to confirm any changes with their clinical governance lead.

Conclusion

Not only do we hope the individual changes made will make it easier for the officers to record the required information about medical care they have provided, but also allow future audits to more accurately compare the PRFs from different units.

We hope that providing this document to the forces will assist the officers and positively impact patient care. We would be happy to see it – amended as required – be used by other similar units if they felt it was of advantage to them

Operator Review Group – comprised of lead clinical skills/PRF managers for their unit.

Rich Bonner; West Midlands Police Firearms
Dave Jarvis; City of London Firearms
Stu Logan; National Crime Agency
Mark Roberts; West Mercia Police Firearms and PSU
Si Rogers; Warwickshire Police Firearms and PSU

and
Nigel Hinson, Chairman FPHC Non healthcare professional committee

References

1 Elford J, Franklin M, Elford A, Hall J, Porter K. Clinical Skills for Police Officers in Specialist Role: An Audit of Patient Report Forms in 2019. Pending Publication. 2020. Available at: https://fphc.rcsed.ac.uk/media/2899/clinical-skills-for-police-officers-in-specialist-role-an-audit-of-patient-report-forms-in-2019-final.pdf

2 Franklin, M., Elford, J. Hall, J., Porter, K., 2020. Penthrox Audit 2020. Available at: https://fphc.rcsed.ac.uk/media/2900/administration-of-methoxyflurane-penthrox-as-a-pre-hospital-analgesic-by-specialist-police-officers-a-retrospective-audit-of-patient-report-forms.pdf

3 Hartley, F., Howells, A., Thurgood, A., Hall, F. and Porter, K., 2017. Medical training for police officers in specialist role (D13): A retrospective review of patient report forms from 2010–2015. *Trauma*, 20(1), pp.20-24.

4 Rhimes, P., Williams, S., Hall, J., Porter, K, 2020. Retrospective Audit of Patient Report Forms (PRFs) from semi rural specialist police firearms units January to December 2017. Faculty Published Resources - The Faculty of Pre-Hospital Care. Available at:

https://fphc.rcsed.ac.uk/media/2883/retrospective-audit-of-patient-report-forms-prfs-from-semi-rural-specialist-police.pdf [Accessed: 30 July 2020].
5 Serebriakoff, P., Hartley, F., Hall, J. and Porter, K., 2019. An update on firearm police medical response. *Trauma*, 22(1), pp.76-77.
6 Serebriakoff, P, Hartley, F. National Patient Reporting Form; poster at Trauma UK March 2019. Available at https://fphc.rcsed.ac.uk/media/2626/genericd13prfposter.pdf

Authors

Dr Jane Elford, Foundation Year One Doctor, Ysbyty Gwynedd, Bangor.

Maggie Franklin, Medical Student, University of Liverpool

Dr J Hall MBE, Hon Secretary FPHC RCS Ed

Prof. Sir K Porter, Professor of Clinical Traumatology, University Hospital Birmingham

Patient Report Form

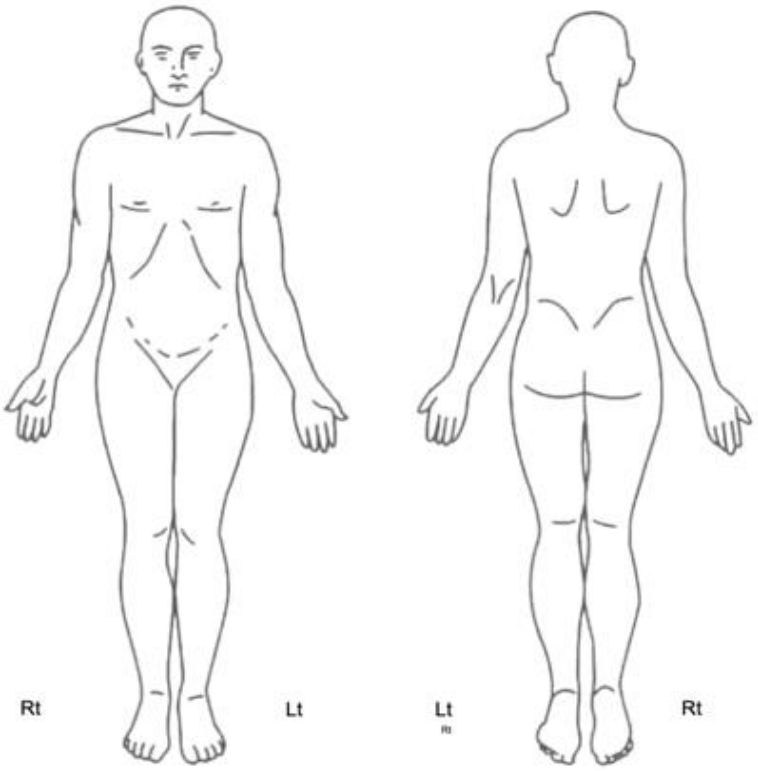
Date:	Casualty Age: ☐ < 18 ☐ > 18	Casualty Sex: ☐ M ☐ F	URN:
Time On Scene:	Time Off Scene:	Time EMS Arrived:	Firearms Deployment: ☐

Transport:	☐ Land Ambulance	☐ Air Ambulance	☐ Police Vehicle	☐ Other
Hospital:	☐ Example 1	☐ Example 2	☐ Example 3	☐ Example 4
Mechanism of Injury:	☐ **Blunt trauma**	☐ **Penetrating injury**	☐ **Medical**	☐ **Mental health**

☐ Stabbing	☐ Alcohol/ drugs	☐ Vehicle RTC	☐ Self-harm
☐ Shooting	☐ Punched/ kicked	☐ Pedestrian hit by vehicle	☐ Suicide / parasuicide
☐ Burn	☐ Hanging	☐ Cyclist	☐ Fall < 6ft ☐ Fall > 6ft
☐ Other (*please specify):*			

Injuries

Notes:



(Please use numbers to code and mark location of injuries on body map)

1. Amputation ☐	6. Fracture closed ☐
2. GSW entry ☐	7. Burns ☐
3. GSW exit ☐	8. Head injury ☐
4. Stab ☐	9. Laceration ☐
5. Fracture open ☐	10. Other ☐ *(Please Specify):*

On arrival	☐ Cat Haem	Airway: ☐ Clear ☐ Obstructed	☐ Breathing ☐ Not Breathing	1. ☐ A ☐ V ☐ P ☐ U

Observations carried out by EMS ☐

Airway

Clear ☐

Obstructed Snoring ☐
☐ Patient position
☐ Chin lift
☐ Jaw thrust
☐ NP; size ☐ 6 ☐ 7
☐ OP; size ☐ 3 ☐ 4 ☐ 5
☐ SGA; size ☐ 3 ☐ 4 ☐ 5

Obstructed Gurgling ☐
☐ Patient turned
☐ Suction

Complete Obstruction ☐
☐ Back blows
☐ Abdominal / chest thrusts

Soft tissue facial injury ☐

Bony facial injury ☐

C-Spine
☐ Normal
☐ Suspected injury
☐ Manual control

Breathing

Rate
1. ☐ <10 ☐ 10-30 ☐ >30
2. ☐ <10 ☐ 10-30 ☐ >30

Volume/ Effort
☐ Normal
☐ Abnormal

Oxygen ☐
☐ High flow mask
☐ BVM

% O_2 Saturations
1 ☐ < 95 ☐ > 95
2 ☐ < 95 ☐ > 95

FLASH ☐

Holes
Front: ☐ L ☐ R Chest seal ☐ Vented ☐ Non vented
Back: ☐ L ☐ R Chest seal ☐ Vented ☐ Non vented

Bruising / abrasion ☐

Rib Fractures / Flail Chest
☐ Splinted
☐ Patient self-splinted

Circulation

Tourniquet ☐
☐ Rt arm ☐ Lt arm ☐ Rt leg ☐ Lt leg

External Bleeding ☐

Bleeding Wound
☐ Direct pressure

Dressing
☐ Field ☐ Blast
☐ Windlass ☐ Haemostatic

Internal Bleeding suspected
☐ Chest ☐ Abdomen
☐ Pelvis ☐ Long Bones

Pelvis / Femur Fracture
☐ Splint

Radial Pulse
1. ☐ ☐ < 60 ☐ 60-120 ☐ >120
2. ☐ ☐ < 60 ☐ 60-120 ☐ >120

No Pulse ☐

☐ CPR ☐ AED ☐ ROSC ☐ Dead

Disability

2. ☐ A ☐ V ☐ P ☐ U
3. ☐ A ☐ V ☐ P ☐ U

Exposure for Examination

☐ Fully undressed
☐ Logroll
☐ Back & sides check
☐ ? Spinal injury
☐ Patient cold
☐ Patient covered

Burns
☐ < 10 mins irrigation
☐ 10 - 20 mins irrigation
☐ Clingfilm
☐ Diphoterine

Pain

Initial Pain Score

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Patient complaining of pain? ☐
Penthrox used: Y ☐ N ☐
Number of vials used: 1☐ **2**☐

After Dose 1

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Time:
Batch Number:
Expiry date:

Signature:

After Dose 2

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Time:
Batch Number:
Expiry date:

Signature:

Breathing
☐ Rate > 10
☐ Normal breathing

Confirmed: ☐
No contraindications
Past medical history / Medication
No use of Penthrox in last 3 months
Alert card given & discussed
Consent obtained

Adverse Reaction to Penthrox:
Y ☐ N ☐
If yes, please specify:

Radial pulse
☐ Present

Handover to EMS ☐

ADRs reported to CG lead ☐
Name:
Date:

Age
☐ > 18 years

Name of staff receiving patient / EMS call sign:

☐ **Currently Alert & able to obey commands**

Notes on Penthrox use:

Overall Patient Outcome:

Signature: **Date:**

Internal review by:

External Review by: