Pre-Hospital Emergency Care Council

Medical Advisory Committee Meeting

28th January 2016

Osprey Hotel, Naas

In attendance	Apologies	Present
Mick Molloy	Joe Mooney	Brian Power
Niamh Collins	Declan Lonergan	Peter Dennehy
Gerald Kerr	Sean Walsh	Mark Doyle
Seamus McAllister	Jack Collins	Margaret Bracken
Neil Reddy		Ray Carney
David Hennelly		
Macartan Hughes		
Shane Knox		
Shane Mooney		
David O'Connor		
Ken O'Dwyer		
Martin O'Reilly		
Derek Rooney		
David Menzies		

1. Chair's Business

The Chair welcomed the members and apologies were noted. Peter Dennehy addressed the meeting and explained PHECC's perspective in relation to S.I. 449 of 2015, Medicinal Products (Prescription and Control of Supply) (Amendment) Regulations 2015. Dr Mark Doyle, the Medical Advisor to the Director, outlined his opinion on the role and responsibilities of PHECC under the SI. This was then followed by a discussion with the members present.

2. Draft Meeting Report – 25th & 26th November 2015

Resolution: That the minutes of the Medical Advisory Committee 25th & 26th November 2015 be approved.

Proposed: Ken O'Dwyer **Seconded:** Derek Rooney

Carried without dissent

3. Prescription only Medications for non-medical persons

Brian Power tabled two documents received from Prof Hourihane, UCC in relation to anaphylaxis. Brian outlined that both he and Pauline Dempsey met with Prof Hourihane and the anaphylaxis committee in UCC. Prof Hourihane submitted feedback on the CPG and standards but was too late for inclusion in the meeting papers.

1) Anaphylaxis First Responder Programme UCC, Standard Operating Procedure Version 1.0 Jan 2011
2) Email from Jonathan Hourihane, UCC with feedback re: Anaphylaxis/SI 449 implementation.

The content of Prof Hourihane's documents were debated during discussions on the anaphylaxis CPGs.

3.1 CPGs for review

The following changes were agreed for all of the CPGs for SI 449 of 2015 implementation:

- Title - replace 'Cardiac First Response' with 'Listed Organisations'
- Remove Equipment List
- Remove pictures
- Delete clinical level flags

1.4.15 Listed Organisations and Epinephrine (auto injector adult)

- Red box top right
  - delete 'Circulation (blood) pressure drop'
  - add 'swollen eyes'
  - delete 'diminished consciousness'
- After 'Allergic reaction diagnosed or prescribed Epinephrine auto-injector previously'
  - add arrow for No
  - add diamond; 'Signs of anaphylaxis present'
  - Add red box to right of CPG:

Signs of Anaphylaxis Rapid onset Exposed to trigger ABC compromised

Resolution: That CPG 1.4.15 Listed Organisations and Epinephrine (auto injector adult) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Knox **Seconded:** David Menzies
Carried without dissent

1.7.31 Listed Organisations and Epinephrine (auto injector paediatric)

Changes as per CPG 1.4.15 Listed Organisations and Epinephrine (auto injector adult)

Resolution: That CPG 1.7.31 Listed Organisations and Epinephrine (auto injector paediatric) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** David O'Connor
Carried without dissent

1.3.6 Listed Organisations and Naloxone

- Entry box to CPG – insert 'and unresponsive' after 'Suspected opioid overdose'
- Scene safety box – instead of 'with' insert 'of' to read: 'Be careful of sharps'
- Delete the diamond with 'Unresponsive'
- Delete 'Perform 30 chest compressions followed by 2 rescue breaths.....'

Resolution: That CPG 1.3.6 Listed Organisations and Naloxone be recommended to Council for approval subject to the changes agreed.

Proposed: Niamh Collins **Seconded:** Mick Molloy
Carried without dissent

1.3.4 Listed Organisations and Salbutamol

- Red box to right of CPG – 'During an asthma attack;'
  - Last bullet point insert the word 'may' to read: 'they may have had attacks before'

Resolution: That CPG 1.3.4 Listed Organisations and Salbutamol be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** Niamh Collins
Carried without dissent

1.4.19 Listed Organisations and Glucagon (adult)

- After 'Blood glucose < 4 mmol/L' insert 'Or suspected low blood sugar'
- Delete 'Glucose gel, 10-20g buccal' on right of CPG

Resolution: That CPG 1.4.19 Listed Organisations and Glucagon (adult) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Knox **Seconded:** Gerald Kerr
Carried without dissent

1.7.32 Listed Organisations and Glucagon (paediatric)

Changes as per CPG 1.4.19 Listed Organisations and Glucagon (adult) CPG

Resolution: That CPG 1.7.32 Listed Organisations and Glucagon (paediatric) be recommended to Council for approval subject to the changes agreed.

Proposed: Derek Rooney **Seconded:** Ken O'Dwyer
Carried without dissent

1.4.10 Listed Organisations and Glyceryl Trinitrate

- Top left of CPG: replace 'cardiac' with 'angina' to read: 'Patient with chest pain and known angina history'
- Insert box 'Place patient in a sitting position'

Resolution: That CPG 1.4.10 Listed Organisations and Glyceryl Trinitrate be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Ken O'Dwyer
Carried without dissent

3.2.6 Listed Organisations and Nitrous Oxide & Oxygen

No further changes

Resolution: That CPG 3.2.6 Listed Organisations and Nitrous Oxide & Oxygen be recommended to Council for approval subject to the changes agreed.

Proposed: David Hennelly **Seconded:** Macartan Hughes
Carried without dissent

4. National Pre-alert Guidelines

Feedback and comments were received from the members to 'The National Pre-alert Guidelines version 0.4' and changes made accordingly.

Mechanism of Injury:

- Bullet point 1
  - replace 'MVC' with 'RTC'
  - after 'roll over', insert 'relevant passenger compartment intrusion > 30 cm'
- Bullet point 2
  - delete 'transfer time from scene'; insert '> 20 minutes'
- Bullet point 3
  - Change 'MBC' to 'motorbike cyclist'
  - after 'patient thrown' insert '/run over with significant impact'

Clinical Assessment:

- **B –** delete 'after' before 'treatment' and insert 'not responding to'
- **C –** change '150' to '120'
- **D –** insert 'V, P or U on AVPU' before '(trauma)'
- Delete **E**

Specific Clinical Conditions

- Insert new bullet point 1; 'Cardiac Arrest and/or Post ROSC'
- Bullet point 4
  - delete 'Flail chest' and insert 'Chest injury with altered physiology'
  - delete 'penetrating injury to head or torso'
  - after 'inhalation burn injury' add 'crushed degloved extremity, amputations'
- Add two new bullet points
  - 'Severe hypothermia'
  - 'Severe hyperthermia'
- Last bullet point – move 'pregnant patient' after 'imminent delivery' to read; 'Imminent delivery - pregnant patient'

Situational:

- Change '(> 1)' to '(> 3)'
- Delete 'Disaster (as per PHECC definition and escalation policy)' and insert 'Isolation precaution required'

Resolution: That the National Pre-alert Guidelines, subject to the changes agreed, be commended to the Emergency Medicine Programme and subject to ratification be recommended to Council for approval.

Proposed: Niamh Collins **Seconded:** Mick Molloy
Carried without dissent

5. ILCOR CPGs

5.1 ILCOR updates

4/5/6.4.1 Basic Life Support – Adult

- Box top left – delete 'on site to assist with cardiac arrest management' to read; 'Initiate mobilisation of 3 to 4 practitioners / responders'
- Box – CPR direction, replace content with
  - 1 practitioner on site = continuous chest compressions
  - 2 or more practitioners / responders on site = CPR
- delete box - 'Continue CCC/CPR while defibrillator is charging if AED permits'
- bottom left – 'Ventilations'; delete 'Rate: 2 ventilations in 10 sec'

Resolution: That CPG 4/5/6.4.1 Basic Life Support - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Mick Molloy
Carried without dissent

1/3.4.1 Basic Life Support – Adult

- Box top left – delete 'on site to assist with cardiac arrest management' to read; 'Initiate mobilisation of 3 to 4 practitioners / responders'
- Replace 'Request AED' with the ILCOR AED sign

Resolution: That CPG 1/3.4.1 Basic Life Support - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Ken O'Dwyer
Carried without dissent

1/2.4.1 Basic Life Support – Adult

- Delete pictures
- Replace 'Request AED' with the ILCOR AED sign

Resolution: That CPG 1/2.4.1 Basic Life Support - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Shane Knox
Carried without dissent

5/6.3.1 Advanced Airway Management – Adult

- Delete box; 'maintain adequate ventilation and oxygenation throughout procedures'
- Delete box; 'Minimum interruptions of chest compressions. Maximum hands off time 10 seconds'
- Box bottom left; insert 'if required' after '100 to 120 per minute' to read;
  ii) Unsynchronised chest compressions continuous at 100 to 120 per minute (if required)

Resolution: That CPG 5/6.3.1 Advanced Airway Management - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** Shane Mooney
Carried without dissent

4/5/6.4.3 VF or pVT – Adult

- Box top right; Amiodarone doses – move down after 'Consider mechanical CPR assist'
- Epinephrine; change from '4 minutes' to '3-5 minutes'
- Delete box; 'Initial Epinephrine after 2nd shock'
- Delete box; 'CPR principal: compression fraction of > 80%'
- Delete the following boxes;
  - For crew safety and optimum CPR mechanical CPR is required during transport
  - Clinical leader to monitor quality of CPR
  - If persistent refractory VF contact STEMI protocol
  - Capnography mandatory with ETT insertion
- Delete 'Drive smoothly' icon
- Delete black box around box 'Consider transport to ED.....' and change 30 minutes to '20 minutes'
- It was agreed that care principles would be drafted for cardiac arrest management thus enabling removal of many information boxes from the resuscitation CPGs.

6. CPG updates To be reviewed at the next MAC meeting

7. Emergency Obstetrics CPGs To be reviewed at the next MAC meeting

8. NCEC National Clinical Guidelines

8.1 Letter from Minister for Health re National Clinical Guidelines

For information purposes.

8.2 NCG No 14 Acute Asthma attack in Adults

For information purposes.

8.3 Update Asthma CPG

4/5/6.3.4 Asthma – Adult

The following changes were agreed to the CPG

- Consider CO_2 monitoring
- Removal of timeframe for Salbutamol repeats
- Salbutamol aerosol up to 12 puffs

There was no agreement to introduce Nebulised Magnesium Sulphate

It was agreed that the paediatric CPGs for asthma would be similarly updated.

Resolution: That CPG 4/5/6.3.4 Asthma - Adult and CPG 4/5/6.7.12 Asthma – Paediatric be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** Shane Knox

Carried without dissent

9. Medication schedules

9.1 Seventh Schedule (medications) update

The seventh schedule is the legal basis for PHECC registered practitioners to administer the listed medications. A draft update of the seventh schedule was included in the papers for information. There was a general discussion between the members and suggestions were given:

- If members identify medications which may be useful for future care and are not currently on the seventh schedule the medications will be put on the draft schedule which will be submitted to the DoH for updating; if not on the schedule these medications cannot get onto a CPG.

9.2 Tenth Schedule - oxygen inclusion

A copy of a letter from the National First Response Network to the Minister for Health re inclusion of oxygen onto the tenth schedule was included in the meeting papers. The DoH have requested advice on the issue. No definitive answer on whether oxygen is a prescription only medication could be obtained prior to the meeting.

Following discussion it was agreed that PHECC would write back to the DoH and advise that oxygen should be put on the tenth schedule.

A discussion also took place on Methoxyflurane and the benefit it would add for rescue organisations. It was agreed that the DoH should be requested to include it on the tenth schedule also.

Resolution: That MAC supports the inclusion of oxygen and Methoxyflurane onto the tenth schedule and recommend this to the DoH.

Proposed: David Hennelly **Seconded:** Derek Rooney
Carried without dissent

10. Standard of Operations To be reviewed at the next MAC meeting

11. Practitioner queries re CPGs and medications To be reviewed at the next MAC meeting

12. AOB

Concerns were raised by some of the members about the volume of work, and it was contended that the current mechanism for conducting MAC business is not sustainable on a voluntary basis. Time is a factor as the members are very busy. It was noted that the meeting papers are very large and should

not be presented as one big document. Brian Power explained that a lot of the documents included in the papers are for reference only and the draft CPGs have the current CPG attached for comparison following previous instruction from MAC. These factors contribute to the size of the meeting papers.

It was agreed that material for information purposes be separated from the meeting papers as a separate document.

Brian Power reminded the members that the Council's term of office will finish in June 2016. MAC will therefore have to complete all current business prior to that date. The importance of completing the 2016 edition CPGs prior to June was emphasised. It was agreed that a two day MAC would be organised for the next meeting.

To improve MAC effectiveness for the next Council it was agreed that the June meeting would debate the terms of reference for MAC and make recommendations to the incoming Council.

Next meeting 24th and 24th February 2016.

Signed: _____ Date: 31/3/16

Chair

Pre-Hospital Emergency Care Council

Medical Advisory Committee

Meeting Minutes 24th February 2016

Osprey Hotel, Naas

In attendance	Apologies	Present
Mick Molloy Chair	Niamh Collins	Brian Power
Gerald Kerr	Michael Dineen	Margaret Bracken
Rory Prevett	Joe Mooney	Ray Carney
Martin O'Reilly	David McManus	
Declan Lonergan	Peter O'Connor	
David O'Connor	Shane Knox	
Eoghan Connolly	David Menzies	
Shane Mooney	Cathal O'Donnell	
Ken O'Dwyer	Seamus McAllister	
Conor Deasy	Neil Reddy	

1. Chair's Business

The Chair welcomed the members and apologies were noted. There was a minute's silence for Niamh Collins's father, Paddy Collins RIP, who very recently passed away. The Chair welcomed Eoghan Connolly, who has replaced David Irwin on the Committee. The Chair brought to the members attention that the current Council's term of office comes to an end in June and with this all committees including MAC will also finish. He stated that the input of the members is very important, and asked that members make a sepcial effort to attend all remaining meetings. The EMS Gathering 2016 will be held in Killarney on 9th & 10th June and it was agreed that the final MAC meeting for this Council will be held in Killarney on 8th June.

2. Draft Meeting Report – 28th January 2016

The minutes of the meeting held on 28th January 2016 were reviewed.

Resolution: That the minutes of the Medical Advisory Committee 28th January 2016 be approved.

Proposed: Martin O'Reilly **Seconded:** Ken O'Dwyer

Carried without dissent

3. ILCOR CPGs

3.1 ILCOR updates

Brian Power explained that changes were made to all the ILCOR related CPGs based on member's previous comments/feedback and that they were being presented today for final review.

4/5/6.4.3 VF or pVT – Adult

- Move 'NaCl IV/IO 500 mL' underneath 'Epinephrine (1:10 000) 1mg IV/IO'
- Lidocaine – change dose from weight based to '100 mg IV'
- Amiodarone
  - delete (5 mg/kg) to read 'Amiodarone 300 mg IV/IO'
  - delete (2.5 mg/kg) to read 'Amiodarone 150 mg IV/IO'
- After 'Consider transport to ED' add 'if no ALS available'

Resolution: That CPG 4/5/6.4.3 VF or pVT – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Declan Lonergan **Seconded:** Conor Deasy
Carried without dissent

5/6.4.4 Asystole – Adult

- Change '20 minutes' to '10 minutes' to read 'Following 10 minutes of asystole'
- Move 'NaCl IV/IO 500 mL' underneath 'Epinephrine (1:10 000) 1mg IV/IO'

Resolution: That CPG 5/6.4.4 Asystole – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Ken O'Dwyer
Carried without dissent

4.4.4 Asystole – Adult

Brian Power pointed out that there are two important questions in relation to this CPG.

1. Should EMTs by permitted to cease resuscitation?
2. At the end of resuscitation period (20 minutes) what are we asking the EMTs to do?

Following discussion it was agreed that in general EMTs should not be permitted to cease resuscitation. A case was presented for EMTs working in a hostile environment where back up was not available that it was appropriate to permit cease resuscitation.

- Replace 'NAS' with 'Ambulance control' to read: 'Contact Ambulance control for direction' and insert new box underneath:
  'Contact Ambulance Control and identify timeframe for arrival of P or AP and follow direction re transport'
- Insert Special Authorisation box to read 'An EMT may cease resuscitation, following 20 minutes of asystole and no P or AP available, provided that the EMT is privileged to do so by the licensed CPG provider on whose behalf he/she is acting'

Resolution: That CPG 4.4.4 Asystole – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Martin O'Reilly **Seconded:** David O'Connor
Carried without dissent

4/5/6.4.6 Pulseless Electrical Activity – Adult

- After 'Consider transport to ED' add 'if no ALS available'
- Move 'NaCl IV/IO 500 mL' underneath 'Epinephrine (1:10 000) 1mg IV/IO'

Resolution: That CPG 4/5/6.4.6 Pulseless Electrical Activity – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Declan Lonergan
Carried without dissent

5/6.4.12 Tachycardia – Adult

- Delete '(unstable & unresponsive)' after 'Adverse signs – Yes'
- After 'Consider cardioversion' insert 'if unresponsive'
- Remove 'Continues to be unstable' at the end of the CPG and delete Yes arrow back up to 'Adverse signs'
- Bottom right of CPG: Adenosine dose – add 'max' after 'repeat at 12 mg x 2 prn'
- Insert box bottom left 'Continue cardioversion prn'

Resolution: That CPG 5/6.4.12 Tachycardia – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** David O'Connor
Carried without dissent

5/6.4.10 Acute Coronary Syndrome

- STEMI box:
  - 'ST elevation ≥ 0.1 mm'; change to '≥ 1 mm'
  - 'adjacent limb leads and/or ≥ 0.2 mm'; change to ' ≥ 2 mm'
  - after 'new LBBB' add 'with clinical symptoms of AMI'
- Box underneath STEMI:
  - 'ST segment elevation ≥ 0.1 mV'; change to '≥ 1 mm'
- Switch the 'Yes' and 'No' arrows emerging from 'Time to PPCI center' diamond
- Add 'Consider' before oxygen therapy

Resolution: That CPG 5/6.4.10 Acute Coronary Syndrome be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Rory Prevett
Carried without dissent

4.4.10 Cardiac Chest Pain – Acute Coronary Syndrome

- Before 'Oxygen therapy' add 'Consider'

Resolution: That CPG 4.4.10 Cardiac Chest Pain - Acute Coronary Syndrome be recommended to Council for approval subject to the changes agreed.

Proposed: Declan Lonergan **Seconded:** Shane Mooney
Carried without dissent

5/6.4.7 Post-Resuscitation Care – Adult

- Delete box – 'Titrate O_2'
- Insert 'Consider' before 'Advanced airway & positive pressure ventilations'
- 'If Cardiogenic shock suspected consider Epinephrine'
  - change from '0.05 mg IV/IO' to '0.01 mg'
- Insert box underneath; '1 mg Epinephrine in 100 mL NaCl, 1 mL / min'
- Replace 'Prevent hyperthermia' with 'Avoid warming'
- Delete 'Drive smoothly' graphic

Resolution: That CPG 5/6.4.7 Post-Resuscitation Care - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Conor Deasy **Seconded:** Declan Lonergan
Carried without dissent

4.4.7 Post-Resuscitation Care – Adult

- Delete box – 'Titrate O_2'
- Insert 'Consider' before 'Advanced airway & positive pressure ventilations'
- Delete box 'Recovery position'
- Replace 'Prevent hyperthermia' with 'Avoid warming'
- Delete 'Drive smoothly' graphic

Resolution: That CPG 4.4.7 Post-Resuscitation Care - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** David O'Connor
Carried without dissent

1/2/3.4.7 Post-Resuscitation Care – Adult

- Replace 'Prevent hyperthermia' with 'Avoid warming'

Resolution: That CPG 1/2/3.4.7 Post-Resuscitation Care - Adult be recommended to Council for approval subject to the changes agreed.

Proposed: David O'Connor **Seconded:** Conor Deasy
Carried without dissent

4/5/6.8.x Team Resuscitation

A discussion ensued about the requirements for this CPG. A consensus was reached that this CPG identifies and sets out clearly the roles of each member of the resuscitation team and that following publication by PHECC that it would become a national standard across all licensed CPG providers.

Resolution: That CPG 4/5/6.8.x Team Resuscitation be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** Conor Deasy
Carried without dissent

1/2/3.8.x Team Resuscitation

Similar to the previous CPG, a consensus was reached that this CPG identifies and sets out clearly the roles of each member of the resuscitation team and that following publication by PHECC that it would become a national standard for all responders.

Resolution: That CPG 1/2/3.8.x Team Resuscitation be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** Declan Lonergan
Carried without dissent

6.7.10 Advanced Airway Management – Paediatric (≤ 15 years)

- Replace 'Prolonged CPR' with 'Apnoea or special clinical considerations'
- Insert 'Special clinical considerations' box, to reflect adult CPG criteria.

Resolution: That CPG 6.7.10 Advanced Airway Management – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

5.7.10 Advanced Airway Management – Paediatric (≥ 8 years)

- Replace 'Prolonged CPR' with 'Apnoea or special clinical considerations'
- Insert 'Special clinical considerations' box, to reflect adult CPG criteria.

Resolution: That CPG 5.7.10 Advanced Airway Management – Paediatric (≥ 8 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Rory Prevett **Seconded:** Mick Molloy
Carried without dissent

4/5/6.7.20 Basic Life Support – Paediatric (≤ 15 years)

- Red box: replace 'If puberty has not commenced' with current text reflecting < 8 years
- Replace 'Puberty commenced' diamond with '< 8 years' and switch No and Yes

Resolution: That CPG 4/5/6.7.20 Basic Life Support – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

1/2/3.7.20 Basic Life Support – Paediatric (≤ 15 years)

- Red box: replace 'If puberty has not commenced' with current text reflecting < 8 years

Resolution: That CPG 1/2/3.7.20 Basic Life Support – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

4/5/6.7.22 VF or pVT – Paediatric (≤ 15 years)

- No further changes recommended.

Resolution: That CPG 4/5/6.7.22 VF or pVT – Paediatric (≤ 15 years) be recommended to Council for approval.

Proposed: Shane Mooney **Seconded:** Mick Molloy
Carried without dissent

4/5/6.7.23 Asystole/PEA – Paediatric (≤ 15 years)

- No further changes recommended.

Resolution: That CPG 4/5/6.7.23 Asystole/PEA – Paediatric (≤ 15 years) be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** Declan Lonergan
Carried without dissent

4/5/6.7.24 Symptomatic Bradycardia – Paediatric (≤ 15 years)

- No further changes recommended.

Resolution: That CPG 4/5/6.7.24 Symptomatic Bradycardia – Paediatric (≤ 15 years) be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

5/6.7.25 Post-Resuscitation Care – Paediatric (≤ 15 years)

- Replace 'Prevent hyperthermia' with 'Prevent warming'

Resolution: That CPG 5/6.7.25 Post-Resuscitation Care – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

4/7.25 Post-Resuscitation Care – Paediatric (≤ 15 years)

- Delete box: 'Recovery position'
- Replace 'Prevent hyperthermia' with 'Prevent warming'

Resolution: That CPG 4/7.25 Post-Resuscitation Care – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** David O'Connor
Carried without dissent

5/6.5.2 Basic & Advanced Life Support – Neonate (< 4 weeks)

- Remove '*' before 'HR 60 to 100' and 'CPR (ratio 3:1) for 30 sec'
- Move down box '* Supplemental O_2 (≤ 30%)'
- Insert '*' before 'Continue CPR'

Resolution: That CPG 5/6.5.2 Basic & Advanced Life Support – Neonate (< 4 weeks) be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Shane Mooney
Carried without dissent

4.5.2 Basic Life Support – Neonate (< 4 weeks)

- Delete '*' before 'HR 60 to 100' and before 'CPR for 30 sec (Ratio 3:1)'
- Insert 'If ongoing CPR consider' before '* Supplemental O_2 (≤ 30%)' and move box underneath 'Wrap baby well and give to mother'
- After 'Wrap baby well and give to mother' insert '(or skin to skin)'
- Replace 'NAS' with 'Ambulance' to read 'Contact Ambulance control for direction'

Resolution: That CPG 4.5.2 Basic Life Support – Neonate (< 4 weeks) be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Shane Mooney
Carried without dissent

4/5/6.6.6 Heat Related Emergency – Adult

- Delete box top left 'Exercise related dehydration should be treated with'
- Insert box 'Mild Hyperthermia (heat stress)'

Resolution: That CPG 4/5/6.6.6 Heat Related Emergency – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Eoghan Connolly
Carried without dissent

2/3.6.6 Heat Related Emergency

- Delete box top left 'Exercise related dehydration should be treated with'

Resolution: That CPG 2/3.6.6 Heat Related Emergency be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Rory Prevett
Carried without dissent

3.3.4 Asthma – Adult

- No further changes recommended

Resolution: That CPG 3.3.4 Asthma – Adult be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

3.2 CPGs with ILCOR reference and no anticipated changes

- Equipment list to be removed from all CPGs

There are no changes recommended to the following CPGs:

4/5/6.2.1	Primary Survey Medical – Adult
4/5/6.2.2	Primary Survey Trauma – Adult
6.4.2	Foreign Body Airway Obstruction – Adult
5/6.4.9	Recognition of Death – Resuscitation not Indicated
5/6.4.21	Hypothermia
6.4.22	Poisons – Adult
4/5/6.7.1	Primary Survey Medical – Paediatric (≤ 15 Years)
4/5/6.7.2	Primary Survey Trauma – Paediatric (≤ 15 Years)
6.7.21	Foreign Body Airway Obstruction - Paediatric (≤ 15 Years)
4/5.4.2	Foreign Body Airway Obstruction – Adult
4/5.7.21	Foreign Body Airway Obstruction - Paediatric (≤ 15 Years)
4.3.1	Advanced Airway Management - Adult
4.4.9	Recognition of Death - Resuscitation not Indicated
4.4.21	Hypothermia
3.2.3T	Primary Survey – Adult
1/3.3.1T	Advanced Airway Management – Adult
1/2/3.4.2	Foreign Body Airway Obstruction – Adult
1/2/3.4.9	Recognition of Death - Resuscitation not Indicated
3.4.21	Hypothermia
2/3.4.22	Poisons
2/3.6.1	Burns
3.6.1T	External Haemorrhage
3.7.3	Primary Survey - Paediatric (≤ 15 Years)
1/2/3.7.21	Foreign Body Airway Obstruction - Paediatric (≤ 15 Years)
2/3.2.3	Primary Survey – Adult
2/3.6.3	External Haemorrhage

Resolution: That the CPGs with ILCOR references and no anticipated changes be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** Conor Deasy
Carried without dissent

4/5/6.4.11 Symptomatic Bradycardia – Adult

- Move '12 Lead ECG' to after 'ECG & SpO2 monitoring'
- After 'Titrate Atropine to effect (HR > 60)' add 'and non symptomatic'
- After 'NaCl (0.9%) 250 mL IV infusion' add a box
  - 'If cardiogenic shock suspected consider Epinephrine 0.01 mg IV/IO Repeat prn'
- Add box '1 mg Epinephrine in 100 mL NaCl, 1 mL / min'

Resolution: That CPG 4/5/6.4.11 Symptomatic Bradycardia – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** David O'Connor
Carried without dissent

5/6.4.28 Stroke

- Change 'T – time to transport now if FAST positive' to 'time of onset'
- Delete 'Oxygen therapy' box
- Delete 'Follow local protocol re notifying ED prior to arrival'

Resolution: That CPG 5/6.4.28 Stroke be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Shane Mooney
Carried without dissent

4/5/6.6.3 External Haemorrhage – Adult

- After Catastrophic haemorrhage – No;
  - insert diamond 'Wound still bleeding'
  - add Yes arrow
  - After yes add new box: 'Consider wound closure clips for temporary closure if serious haemorrhage' with P flag
- Add EMT/BTEC to Special Authorisation box for tourniquet and wound clips
- Delete Equipment list

Resolution: That CPG 4/5/6.6.3 External Haemorrhage – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** David O'Connor
Carried without dissent

4/5/6.7.35 Pyrexia – Paediatric (≤ 15 Years)

- Change '≥ 38°C' to '≥ 38.3°C'

Resolution: That CPG 4/5/6.7.35 Pyrexia – Paediatric (≤ 15 Years) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Ken O'Dwyer
Carried without dissent

4/5/6.7.50 External Haemorrhage - Paediatric (≤ 15 Years)

- Changes as per 4/5/6.6.3 External Haemorrhage – Adult

Resolution: That CPG 4/5/6.7.50 External Haemorrhage - Paediatric (≤ 15 Years) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Mick Molloy
Carried without dissent

4/5.4.22 Poisons – Adult

- Naloxone 0.4 mg IM/SC
  - replace '(Repeat x one prn) with '(Repeat to Max of 2 mg prn)'

Resolution: That CPG 4/5.4.22 Poisons – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Declan Lonergan **Seconded:** Rory Prevett
Carried without dissent

4.4.28 Stroke

- Delete 'Oxygen therapy guidelines' box to right of CPG
- Delete 'Follow local protocol re notifying ED prior to arrival'
- Change 'T – time to transport now if FAST positive' to 'time of onset'

Resolution: That CPG 4.4.28 Stroke be recommended to Council for approval subject to the changes agreed.

Proposed: Eoghan Connolly **Seconded:** Rory Prevett
Carried without dissent

1/2/3.4.10 Cardiac Chest Pain – Acute Coronary Syndrome

- Move 'Monitor vital signs' to before 'Chest pain ongoing' and add FAR flag to it

Resolution: That CPG 1/2/3.4.10 Cardiac Chest Pain – Acute Coronary Syndrome be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Declan Lonergan
Carried without dissent

2/3.4.15 Anaphylaxis – Adult

- Delete box 'patient name'
- Salbutamol change to '1 puff (0.1 mg)'
- Add box 'Salbutamol may be repeated up to 11 times prn'

Resolution: That CPG 2/3.4.15 Anaphylaxis – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Conor Deasy
Carried without dissent

1/2/3.4.28 Stroke

- Delete '999' to read 'Time of onset'

Resolution: That CPG 1/2/3.4.28 Stroke be recommended to Council for approval subject to the changes agreed.

Proposed: Declan Lonergan **Seconded:** Martin O'Reilly
Carried without dissent

2/3.7.31 Anaphylaxis - Paediatric (≤ 15 Years)

- Changes as per CPG 2/3.4.15 Anaphylaxis – Adult

Resolution: That CPG 2/3.7.31 Anaphylaxis - Paediatric (≤ 15 Years) be recommended to Council for approval subject to the changes agreed.

Proposed: David O'Connor **Seconded:** Declan Lonergan
Carried without dissent

3.3 Transportation destination with refractory VF/VT

The members discussed an email sent from Brian Power to Prof Kieran Daly, UCHG, and Prof Daly's response, regarding the introduction into Ireland of the direct transport of a patient in refractory VFib to a PPCI while using mechanical CPR device.

In his response email Prof Daly stated that 'only patients with an ECG diagnosis of acute STEMI should be transported directly to the cath lab, and then only after a discussion with cardiology in the PPCI centre. Refractory VF in this setting could be suitable for direct transfer, but again only with pre or peri STEMI ECG. In other cases it is preferable to go to ED of nearest hospital for stabilisation/ further assessment / ventilation and then decide re transfer to cath lab.'

4 CPG updates

4.1 Pain Management

4/5/6.2.6 Pain Management – Adult

- Delete box on right: 'If > 50 Kg, Paracetamol 1.5 mg IV'. It was agreed that 1 g Paracetamol was the maximum dose regardless of route
- Last box on right:
  - delete 'initial dose of' prior to Fentanyl IN
  - replace 'second or subsequent' with 'next'
  - Insert 'IV' after both Fentanyl and Morphine

It was agreed that Pain Management - Adult CPG requires more deliberation and in-particular a visual graphic presentation of the management of mild to severe pain should be reintroduced.

4.2 Sepsis CPG

4/5/6.4.24 Sepsis - Adult

- No further changes recommended

Resolution: That CPG 4/5/6.4.24 Sepsis – Adult be recommended to Council for approval.

Proposed: Eoghan Connolly **Seconded:** Mick Molloy
Carried without dissent

5 Emergency Obstetrics CPGs

5.1 CPGs for Obstetric Emergencies

5/6.5.1 Pre-Hospital Emergency Childbirth

- Gestation: change from '< 28 weeks' to '< 32 weeks'

Resolution: That CPG 5/6.5.1 Pre-Hospital Emergency Childbirth be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** Eoghan Connolly
Carried without dissent

4.5.1 Pre-Hospital Emergency Childbirth

- No further changes recommended

Resolution: That CPG 4.5.1 Pre-Hospital Emergency Childbirth be recommended to Council for approval.

Proposed: Eoghan Connolly **Seconded:** David O'Connor
Carried without dissent

4/5/6.5.3 PV Haemorrhage in Pregnancy

- No further changes recommended

Resolution: That CPG 4/5/6.5.3 PV Haemorrhage in Pregnancy be recommended to Council for approval.

Proposed: Eoghan Connolly **Seconded:** Declan Lonergan
Carried without dissent

4/5/6.5.4 Postpartum Haemorrhage

- Oxytocin: change to Paramedic level

Resolution: That CPG 4/5/6.5.4 Postpartum Haemorrhage be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Rory Prevett
Carried without dissent

4/5/6.5.5 Umbilical Cord Complications

- Change 'Hold presenting part off the cord using fingers' from AP to P level

Resolution: That CPG 4/5/6.5.5 Umbilical Cord Complications be recommended to Council for approval subject to the changes agreed.

Proposed: Eoghan Connolly **Seconded:** Shane Mooney
Carried without dissent

5/6.5.6 Breech Birth

- Delete 'not applicable for Paramedic'
- Change 'Consider Entonox' to 'Consider Nitrous Oxide & Oxygen'

Resolution: That CPG 5/6.5.6 Breech Birth be recommended to Council for approval subject to the changes agreed.

Proposed: Eoghan Connolly **Seconded:** Ken O'Dwyer
Carried without dissent

6 Standard of Operations

6.1 Transport to local Injury Units by ambulance

Brian Power outlined that the Emergency Medicine Programme (EMP) had informally advised him that the EMP had not supported this initiative.

Pre-Hospital Emergency Care Council

6.2 Palliative Care

STNxxx Palliative Care by PHECC registered practitioners – V0.5

Brian Power spoke to the members about a new draft standard for 'Palliative Care by PHECC registered practitioners'. He explained that this is the final draft following 18 months of meetings and discussions with the Palliative Care programme and the Irish College of General Practitioners.

Martin O'Reilly outlined his concerns relating to the introduction of the palliative care CPG and associated procedures for practitioners. Whereby he agreed with the care and treatment principles outlined within the CPG, he felt the need to take account of additional demands that the CPG will place on the emergency ambulance service. These demands include education and training and emergency ambulance capacity. Martin also highlighted that consideration may need to be given to the development of a suitable protocol within the medical priority dispatch system.

The members discussed, comments and suggestions were noted.

- How should the call be identified to control so that it is dealt with appropriately?

The following changes were recommended:

In the section 'Managing the symptoms at home by PHECC registered practitioners' change point 2 to:

2. If there is no medication directive for the patient in the home;

    2.1 Advanced paramedic:- follow the palliative care CPG to manage the symptoms
    2.2 Paramedic:- follow the palliative care CPG and
        (a) Contact the Palliative Care homecare team (if number available)
        (b) Contact GP/GP out of hours service, and if not available
        (c) Request AP
        (d) If no support available and symptoms not abated transport to ED

Resolution: That STNxxx Palliative Care by PHECC registered practitioners – be recommended to Council for approval subject to the changes agreed.

Proposed: David O'Connor **Seconded:** Eoghan Connolly
Carried without dissent

5/6.8.xx Palliative Care - Adult

- Change all medications to AP level with the exception of Paracetamol and Midazolam 2.5 – 5 mg Buccal.

Resolution: That CPG 5/6.8.xx Palliative Care – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Mick Molloy **Seconded:** Shane Mooney
Carried without dissent

Pre-Hospital Emergency Care Council

7. Practitioner queries re CPGs and medications

7.1 Intranasal administration of Ondansetron

A PHECC registered practitioner enquired about the feasibility of including the IN route for Ondansetron and included some papers to support the request. Following deliberations it was agreed that as the IN route is not currently on Seventh Schedule for Ondansetron it cannot put it on a CPG at present. Brian Power to include this route for future drafts of the Seventh Schedule for the DoH.

7.2 Pre-hospital amputation management

A PHECC registered practitioner enquired about the inclusion of the management of amputated limbs on a CPG. The information supplied was associated with the management of the amputated parts in particular. Following deliberations it was agreed that this was a training issue and was not required on a CPG.

7.3 Medication and pregnancy

The MAC papers include, for information, a recent safety notice issued in relation to medications administered to pregnant patients.

7.4 Paracetamol for less than 6 months

A PHECC registered practitioner enquired about the dose of Paracetamol for infants between 4 weeks and 6 months as the field guide only refers to neonate and 6 months. It was agreed that this would be addressed with the undated field guide App.

7.5 ICE stickers for motor cycle helmet

A UK based organisation, iceQR®, e-mailed PHECC with a request that practitioners are informed of a new 'in case of emergency' (ICE) sticker for helmets. When practitioners come across this sticker they may scan the attached QR Code which will give access to relevant medical history of the patient. This is a voluntary process where patients provide their data to the database which can be accessed in an emergency. It was agreed that this is a matter for licensed CPG providers (to inform their practitioners).

7.6 PEA arrest

A PHECC registered practitioner enquired about the inclusion of Calcium Chloride for a PEA arrest following suspected hyperkalaemia. It was agreed as this was not an ILCOR recommendation it would not be perused at this point.

Pre-Hospital Emergency Care Council

8. AOB

The Chair thanked all present for their contribution to the meeting and the meeting concluded.

The next meeting of the Committee will be held on Thursday 31st March 2016.

Signed: _____ Date: 8/6/16

Pre-Hospital Emergency Care Council

Medical Advisory Committee

Meeting Minutes 31st March 2016

Osprey Hotel, Naas

In attendance	Apologies	Present
Mick Molloy	Conor Deasy	Brian Power PHECC
Niamh Collins	Jack Collins	Margaret Bracken PHECC
Martin O'Reilly	Ken O'Dwyer	Kathleen Walsh PHECC
Declan Lonergan	Shane Knox	
Rory Prevett		
Shane Mooney		
Macartan Hughes		
Joseph Mooney		
Gerry Kerr		
Michael Dineen		
Peter O'Connor		
Eoghan Connolly		
Gerry Bury		
David Menzies		
David Hennelly		

1. Chair's Business

The Chair welcomed the members and apologies were noted. It was again brought to the member's attention that the current Council's term of office comes to an end in June and de facto MAC's term of office will also come to an end. As there will only be a couple of more meetings before June the Chair requested the members to send any outstanding business they wish to discuss to Brian Power for inclusion on the agenda.

The final meeting in June will primarily focus on MAC Terms of Reference. All other business will need to be finalised in May. Council have approved the ILCOR 2016 CPGs, and Brian Power will have the 2016 edition CPGs for the members for final feedback at the May meeting prior to being published.

The members were informed that the proposed date for the next Spinal Injury subgroup meeting is 14th April. David Menzies explained to the members that it is the intention of the subgroup to produce the following:

1. Position Statement
2. Draft CPGs
3. Education piece

Brian Power informed the members that all the public sector Emergency Medicine Consultants in the country were consulted through a survey on spinal injury management. The pronouncing of death by paramedics and advanced paramedics project is progressing, and PHECC is engaging with the Coroners Society of Ireland and An Garda Síochána. There is a planned tripartite meeting for the 12th April. Following agreement this will go to Council for approval.

2. Draft Meeting Report – 24th February 2016

The minutes of the meeting held on 24th February 2016 were reviewed.

Martin O'Reilly expressed concern that his comments and observations regarding the Palliative Care – Adult CPG were not recorded in the minutes. Brian Power explained that the policy relating to recording minutes is primarily to record decisions and where appropriate an outline of the discussions. This CPG was proposed, seconded and carried without dissent, following which it was presented to Council for approval. Clarification were sought on the meaning of 'carried without dissent' as Martin felt strongly that he had issues with this CPG. Brian explained 'carried without dissent' means that no member present stated they were abstaining or voting against the resolution. This has been the practice for all committees and Council since PHECC was established. Brian further explained that this CPG was approved by Council at the meeting on 10th March. There was concern among some of the members that the agreed process for CPG development was not followed on this occasion as no Delphi was conducted. Brian explained that a subgroup had been established by MAC where Palliative Care Consultants, ICGP members, and members from MAC had deliberated on this policy and CPG for eighteen months. The CPG was presented in the MAC papers and no member identified any issues prior to the meeting. Martin O'Reilly stated that he wished his concerns to be recorded either in the minutes or through the Delphi process. Brian invited Martin to submit a draft for inclusion in the minutes.

Resolution: That the minutes of the Medical Advisory Committee 24th February 2016 be approved subject to the inclusion of Martin O'Reilly's issues on the palliative care CPG.

Proposed: Shane Money **Seconded:** Eoghan Connolly
Carried without dissent

Matters arising:

Clarification was sought on the wording of 'if no ALS available' on the Pulseless Electrical Activity - Adult CPG as there is a potential for people to misinterpret the wording. It was explained that this wording was agreed at the last meeting following extensive debate.

Clarification was sought on the deletion of 'Titrate O_2' from the Post-Resuscitation Care – Adult CPG. It was explained that it was previously decided to delete this from all CPGs as it is a training issue. A query was raised about a redress process whereby any member who has a disagreement with a clinical decision can have a review. Brian Power explained that the 'difference of opinion by MAC members on areas of clinical importance' had been agreed by MAC and could be utilised by MAC members if they strongly disagreed on a decision about a clinical issue.

Prof. Bury voiced his concerns about an email he sent to PHECC on medication and pregnancy, which was circulated to all members of MAC with the February meeting papers. Agreement was not sought from Prof. Bury prior to circulating this email and it is necessary to be very sensitive when circulating such material. It was agreed the author of communications to PHECC should be consulted prior to circulation.

3. CPG updates

3.1 Pain management CPG

4/5/6.2.6 Pain management - Adult

There was considerable deliberation on this CPG and the dose of Ketamine in particular. An email sent from Jack Collins was included in the papers and used as discussion material.

Changes to be made to this CPG as follows:

- Delete advice box top left – 'Practitioners, depending on his/her scope of practice .....'
- Add 'or visual' to the Analogue pain scale
- Update the principals for pain management to read;
    - Pain management should not delay the diagnosis of conditions or injuries
    - Pain management should be implemented for all relevant patients
    - Pain management to commence within 10 minutes on scene
    - The goal of pain management is to reduce pain to a tolerable level
    - Administered appropriate combinations of analgesia to take cognisance of immediate and short term pain management requirements
- 'Consider non pharmacological pain management'; replace 'Physiological support' with 'Psychological support'
- Delete consider box over the pain ladder
- Add a repeat box for Ketamine; 'Repeat Ketamine once only at not < 10 minutes prn x 1' (the time interval subject to further discussion)
- 'Following Fentanyl IN.....' add 'In the absence of acquiring IV access a second dose of IN fentanyl may be administered'

Discussions did not meet conclusions on the following;

- The appropriate 2nd dose of Ketamine and in what timeframe?

Suggestions for future developments include;

- An opportunity to devise a system for feedback on the use of Ketamine
    - preferably an online system, with the permission of the organisations, whereby APs are requested to report their experiences with Ketamine, when it is used and its effectiveness
    - CPC points could be given to practitioners for participating in the exercise
- Morphine and fentanyl use is audited every month by HSE and DFB, Ketamine should also be audited on a monthly basis

A suggestion was made to invite Dr Paul Jennings, Ambulance Victoria, to the May MAC meeting.

A Paediatric pain management CPG will be drafted based on the Adult CPG and sent to Dr Sean Walsh, ED Consultant at Our Lady's Hospital for Sick Children Crumlin, for his feedback.

It was agreed to circulate some of the evidence on Ketamine to all MAC members and decide on dosage and repetitive dosage at the next MAC meeting.

3.2 Stridor CPG

4/5/6.7.13 Stridor – Paediatric (≤ 15 years)

Changes to be made to this CPG as follows:

- Replace 'Severe Croup' decision diamond with 'Stridor'
- Epinephrine: change dosages to '< 1 year 2.5mg Neb' and '≥ 1 year 5mg Neb'
- Before ambulance icon: add boxes 'Check temperature (if 38.3°c and septic)' and 'Go to Sepsis CPG'

Consult with Dr Sean Walsh, ED Consultant at Our Lady's Hospital for Sick Children Crumlin, and put on agenda for the next committee meeting.

A discussion ensued about the use of unlicensed medications by PHECC practitioners. It was agreed that a letter to be sent to the HPRA seeking advice re use of unlicensed medications.

3.3 Limb injury CPG

4/5/6.6.7 Limb Injury - Adult

One change to be made to the CPG as follows:

- Replace blue circle 'Consider Paramedic' to 'Request ALS'

Resolution: That CPG 4/5/6.6.7 Limb Injury – Adult be recommended to Council for approval subject to the agreed change.

Proposed: Michael Dineen **Seconded:** Joseph Mooney
Carried without dissent

3.4 Nausea & Vomiting CPG

5/6.4.26 Significant Nausea & Vomiting - Adult

Changes to be made to the CPG as follows:

- After 'Check Blood glucose' add new box 'Investigate and treat underlying cause'
- Switch medications with 'Cyclizine' before 'Ondansetron'

Resolution: That CPG 5/6.4.26 Significant Nausea & Vomiting – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: David Hennelly **Seconded:** Macartan Hughes
Carried without dissent

3.5 Mental Health CPG

6.4.29 Mental Health Emergency

Changes to be made to this CPG as follows:

- Change text in black box to 'abnormal behaviour with a history of psychiatric illness'
- Red box to left; correct typo from 'caused' to 'causes'
- Delete reference to 'Queensland Ambulance Service 2001'

Resolution: That CPG 6.4.29 Mental Health Emergency be recommended to Council for approval subject to the changes agreed.

Proposed: Macartan Hughes **Seconded:** Peter O'Connor
Carried without dissent

4/5.4.29 Mental Health Emergency

One change to be made to the CPG as follows:

- Change text in black box to 'abnormal behaviour with a history of psychiatric illness'

Resolution: That CPG 4/5.4.29 Mental Health Emergency be recommended to Council for approval subject to the agreed change.

Proposed: Declan Lonergan **Seconded:** Joe Mooney
Carried without dissent

4/5/6.4.28 Behavioural Emergency

There was considerable deliberation on this CPG. Some comments include;

- Is this not an issue for the Gardaí?
- Should we be sedating a violent patient
- Practitioners have a duty of care and can't just drive off if patient is aggressive
- Is it safer to step in once Gardaí have control of the situation?
- Need legal advice before proceeding and consult with the Gardaí
- Could be facing two issues, constraint and assault
- Sedation CPG may solve the medical issues
- Should AP be separate to EMT and P 'with call a doctor or AP' on the EMT & P CPG

Changes to be made to this CPG as follows:

- 'Aid to Capacity Evaluation' box - reword as follows:

  'A person lacks of capacity to make a decision if he or she is unable to-'

  - understand the information relevant to the decision
  - retain that information long enough to make a voluntary choice
  - use or weigh that information as part of the process of making the decision, or

- to communicate decision by any means (including sign language/assistive technology) or if the implementation of the decision requires the act of a third party

- Insert box 'All persons have the right to consent to and to refuse medical treatment. Any necessary intervention must minimize restriction on a person's rights and restriction on freedom of action'
- Replace box 'If a patient has capacity.....' with original wording on current CPG 4/5/6.4.30 'Practitioners may not compel a patient to accompany them or prevent a patient from leaving an ambulance'
- 'Request Garda assistance and attempt verbal de-escalation' split into 2 boxes
  - Request and await Garda assistance
  - Consider verbal de-escalation
- 'Seek Online medical advice' delete the word 'Online' and add 'and document shared decision'
- Midazolam: change Adult dose to '5 mg IN' and Paediatric dose to '0.1 mg/Kg IN'
  change to 2prn

It was agreed that this CPG needs further discussion. Prof Bury expressed grave concerns regarding the use of the Ambulance Service in behavioral situations.

4. Process for updating field guide App

A process for updating the field guide App was presented in the papers for consideration by MAC.
A procedure needs to be put in place where there is official sign-off prior to updating items. Printed versions go out of date whereas an app can be updated as required.

- Edit point 3: After 'Chair of MAC' insert 'or Medical Advisor to PHECC'

Resolution: That the process for updating the PHECC field guide App be approval subject to the changes agreed.

Proposed: Macartan Hughes **Seconded:** Joe Mooney
Carried without dissent

5. Practitioner queries re CPGs and medications

5.1 Carbon Monoxide reference

Kevin Flannery, Quality, Safety and Risk Manager, West Regional Ambulance Office, sent a request to PHECC for the consideration of adding the Physiological effects of Carbon Monoxide to the field guide. The general consensus among the members was that there was no added benefit to include this in the field guide.

5.2 Secondary Survey Paediatric – suggestions

Recommendations from paramedic Stephen Galvin to PHECC regarding CPG 4/5/6.7.4 Version 3, Secondary Survey – Paediatric was included in the papers for discussion.

1. Align vital sign rates to those contained in the Irish Children's Triage System (ICTS) to allow for improved continuity of care between PHECC practitioners and hospital staff.
   - All members present are happy to accept vital signs parameters
   - Change vital signs of all CPGs to 'Irish Children's Triage System (ICTS)' if different

2. Include aspects of NICE guideline CG160 'Fever in under 5s: assessment and initial management' namely:
   (a) Table 1: 'NICE Traffic light system for identifying risk of serious illness'
   and
   (b) Table 2: 'Summary table for symptoms and signs suggestive of specific diseases'
   The consensus is to put both tables into the field guide.

3. Include a 'Red box' quoting Section 23-(1) of the Non-Fatal Against the Person Act 1997, to provide clarity with regards to consent. Suggestions from the members are as follows:
   - Should this be on the Core Principles?
   - Should this be included in the field guide or CPG? The consensus is to include in the field guide and the CPGs where applicable
   - All are useful except Kawasaki disease

4. Include a reference for the weight estimation provided for neonates and patients aged 6/12. In addition, consider the inclusion of a weight estimation by month for children aged from birth to one year.
   - Brian Power to consult with Dr Sean Walsh, ED Consultant at Our Lady's Hospital for Sick Children Crumlin, regarding neonate to 1 year weights.

Resolution: It was agreed that the Irish Children's Triage System values be incorporated into paediatric CPGs and the NICE guideline CG160 'Fever in under 5s: assessment and initial management' tables 1 and 2 are inserted into the field guide.

Proposed: Macartan Hughes **Seconded:** Niamh Collins
Carried without dissent

6. MAC Terms of Reference

The current MAC Terms of Reference were included in the papers for information. As the current Council's term of office and all committees come to an end in June, Council have requested that all committees' terms of reference be reviewed.

David Menzies voiced his concerns about the operation of the current MAC committee as the volume of work required and the structure around it is not really fit for purpose. The MAC is too big to function as an advisory committee. The Committee should be using evidence based practice as opposed to opinions. Changes to the MAC Terms of Reference will be prepared for discussion at the final MAC meeting in June.

7. AOB

David Hennelly discussed with the members a paper he sent to PHECC on prehospital sedation, unfortunately it was too late for inclusion in the papers and was tabled on the day. David explained that sedation is an issue which is not addressed fully in PHECC CPGs but is an area that is increasingly arising in clinical practice.

Five specific points were identified for pre-hospital sedation and require exploring.

1 Which medication is the most suitable for each case?
2 What are the minimum monitoring standards for each case?
3 What is the most suitable sedation assessment tool?
4 What are the Paramedic and AP educational needs?
5 What cases should require telemedical support?

There was agreement to include each specific clinical requirement for sedation as outlined by David Hennelly on the CPG Prioritisation matrix and proceed from there.

The Chair thanked all present for their contribution to the meeting and the meeting concluded.

The next meeting of the Committee will be held on Thursday 28th April 2016.

Signed: _____ Date: 08/06/16

Pre-Hospital Emergency Care Council

Medical Advisory Committee

Meeting Minutes 28th April 2016

Osprey Hotel, Naas

In attendance	Apologies	Present
Niamh Collins	Mick Molloy	Brian Power PHECC
Declan Lonergan	Jack Collins	Margaret Bracken PHECC
Martin O'Reilly	David Menzies	
David Hennelly	Stephen Cusack	
Neil Reddy	Eoghan Connolly	
Shane Knox	Gerry Kerr	
Macartan Hughes	Seamus McAllister	
Shane Mooney	Conor Deasy	
Ken O'Dwyer	Rory Prevett	
Peter O'Connor	Joseph Mooney	
David O'Connor	Cathal O'Donnell	
Derek Rooney		
Michael Dineen		

1. Chair's Business

The Chair was unable to attend and the vice chair, Niamh Collins chaired the meeting. She welcomed the members and apologies were noted. Brian Power informed the members that the draft minutes of the meeting held on 24th February 2016 were amended to include Martin O'Reilly's concerns regarding the Palliative Care – Adult CPG as requested.

2. Draft Meeting Report – 31st March 2016

The minutes of the meeting held on 31st March were reviewed.

Matters arising:

Martin O'Reilly requested that 'from an operational perspective' be deleted from the amendment to the minutes.

CPG 6.4.9 and CPG 4/5.4.29 Mental Health Emergency: typo to be amended from 'behavior' to 'behaviour'.
CPG 4/5/6.4.28 Behavioural Emergency: typo to be amended from 'behavioral' to 'Behavioural'.

There was an expression of dissatisfaction that the Palliative Care – Adult CPG did not go to Delphi before it was presented and approved by Council. Some members conveyed concern that the agreed process was not followed. Brian Power reiterated that the Palliative Care CPG had gone through 18 months of deliberation with representatives from MAC, the Palliative Care Programme and the ICGP on the sub group which reported its findings back to MAC. MAC had accepted the findings and the CPG was then presented to Council for approval.

Resolution 1: That CPG 5/6.8.7 Palliative Care – Adult to be put through the Delphi process.

Proposed: Macartan Hughes **Seconded:** Peter O'Connor
Carried without dissent

Resolution 2: That the minutes of the Medical Advisory Committee 31st March 2016 be approved subject to the changes agreed.

Proposed: Michael Dineen **Seconded:** Derek Rooney
Carried without dissent

3. CPG updates

3.1 Pain management adult CPG

Feedback from Jack Collins, who could not attend the meeting, on the Pain Management Adult and Paediatric CPGs, was tabled and included for discussion.

The members questioned if the dose of 0.1 mg/Kg of Ketamine is a little low and should it be increased to 0.2 mg/Kg. The consensus was that it is reasonable to start with 0.1 mg/Kg and review it later after practitioners have had the experience of using it. It was agreed that practitioners need to be educated correctly on how to document the effects of using ketamine and an education piece will have to be developed to go hand in hand with the CPG.

Members debated the routes of administering ketamine and should there be other routes available, should the IM and IN routes be included? Shane Knox suggested leaving it at the IV route and review the possibility of administering IN and IM six months after implementation of the CPG.

Brian Power brought to the committee's attention that CHC Ireland are considering the use of Morphine IM for pain management and have requested the opinion of the MAC.

After deliberation it was decided Fentanyl IN should not be extended to Paramedic scope of practice at this stage.

4/5/6.2.6 Pain Management - Adult

- Remove 'Treatment principles' and include them in the 'Care Principles' section.
- Change 'Consider Medical Oversight' to 'Consider Medical Support'
- 'Severe pain' box: insert 'And/or' between 'Morphine' and 'Paracetamol IV'
- Delete 'Special Authorisation' box

Resolution: That CPG 4/5/6.2.6 Pain Management – Adult be recommended to Council for approval subject to the changes agreed.

Proposed: Michael Dineen **Seconded:** Derek Rooney
Carried without dissent

3.2 Pain management paediatric CPG

4/5/6.7.5 Pain Management – Paediatric (≤ 15 years)

- Remove 'Treatment principles'
- Change 'Consider Medical Oversight' to 'Consider Medical Support'
- 'Severe pain' box
  - insert 'And/or' between 'Morphine' and 'Paracetamol IV'
  - insert age base doses for Paracetamol;
    - ≤ 1 year – 7.5 mg/Kg IV
    - > 1 year – 15 mg/Kg IV
- Mild pain box: Include age base doses for Paracetamol PR;
    - > 1 mth > 1 year: 90 mg PR
    - 1 to 3 years: 180 mg PR
    - 4 to 8 years: 360 mg PR
- Fentanyl dose: Insert 'Fentanyl IN' before 'for ≥ 1 year olds only' and move up to top of box
- Morphine dose: move 'Morphine PO for ≥ 1 year olds' to top of box
- Methoxyflurane: replace with 'Methoxyflurane INH for ≥ 5 year olds only. Repeat once only prn'
- Delete 'Special Authorisation' box

Brian Power to check with BNF for Children 2015 – 2016 for doses of paracetamol for paediatric.

Resolution: That CPG 4/5/6.7.5 Pain Management – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Macartan Hughes **Seconded:** Shane Knox
Carried without dissent

3.3 Stridor CPG

4/5/6.7.13 Stridor - Paediatric (≤ 15 years)

- Move 'Oxygen therapy' to after 'Assess & maintain airway'
- Move 'Do not distress' to after 'Oxygen therapy' and add 'Treat and' before 'Transport in position of comfort'

Resolution: That CPG 4/5/6.7.13 Stridor – Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: David O'Connor **Seconded:** Peter O'Connor
Carried without dissent

Behavioural Emergency CPG

There was considerable debate on this CPG. It was suggested that Ketamine could be considered for use with this CPG in the future as evidence states it works best for these conditions. Including bad behaviour as a criteria on this CPG was also debated and the consensus was No.

Feedback from Jack Collins, who was absent from the meeting, on this CPG was included in the discussions.

4/5/6.4.28 Behavioural Emergency

- Delete the three coloured boxes 'Indications of .....' and
  - replace MH with 'Mental Health Illness'
  - replace I/W with 'Intoxication of withdrawal'
  - replace M/T with 'Medical or traumatic causation'
- Replace 'Request and await Garda assistance' with 'Request Garda assistance' and insert 2 new boxes-
  - 'Ensure practitioner safety'
  - 'Await Garda if any doubt'
- Remove 'Request line supervisor presence' after 'Request ALS'
- 'The patient has capacity' diamond; add 'and declines care' after 'capacity'
- 'The patient is ill' diamond; change background colour from pink to white
- 'Consider reversing causes.....'; change to 'Consider treating reversible causes with Garda assistance'
- AP box; after 'Seek medical advice' insert 'regarding sedation'
- 'Sedation authorisation received' diamond; replace 'authorisation' with 'advice'
- Change medications boxes as follows:
- Insert 'Consider (adult)' before Lorazepam Or Midazolam and delete Paediatric doses.
  - Lorazepam – delete 'to Max 4 mg'
  - Midazolam – add 'IM'
- Insert new box: 'Consider (paediatric) Midazolam 0.1 mg/Kg IN (Repeat x 2 prn)'
- 'Oxygen therapy': delete 'to maintain SpO_2 > 94%'
- Delete 'Consider Haloperodol' box
- Under 'capacity' box down the left hand side delete the next 3 red boxes
- Red box bottom left: replace 'Ensure' with 'Consider need for'

Action items:

Consideration to be given to researching and implementing a sedation score table appropriate to a prehospital setting.

Haloperodol to be considered for the Mental Health CPG. Consult HSE Mental Health Section what they currently use.

Brian Power to inform An Garda Síochána of the implications for their members in relation to this CPG.

PCR to be amended to include new capacity criteria.

Resolution: That CPG 4/5/6.4.28 Behavioural Emergency be recommended to Council for approval subject to the changes agreed.

Proposed: Peter O'Connor **Seconded:** Michael Dineen
Carried without dissent

3.4 Primary survey Paediatric CPG

4/5/6.7.1 Primary Survey Medical - Paediatric (≤ 15 years)

- The consensus was to keep the original CPG and include the estimated weights and ICTS normal pulse and respiration ranges as per the draft CPG
- Remove reference to the primary survey focus

Resolution: That CPG 4/5/6.7.1 Primary Survey Medical - Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** Shane Knox
Carried without dissent

4/5/6.7.2 Primary Survey Trauma - Paediatric (≤ 15 years)

- The consensus was to keep the original CPG and include the estimated weights and ICTS normal pulse and respiration ranges as per the draft CPG
- Remove reference to the primary survey focus

Resolution: That CPG 4/5/6.7.2 Primary Survey Trauma - Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Mooney **Seconded:** Peter O'Connor
Carried without dissent

3.7.3 Primary Survey Trauma - Paediatric (≤ 15 years)

The draft CPG was accepted and no further changes to this CPG were suggested

Resolution: That CPG 3.7.3 Primary Survey - Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Michael Dineen **Seconded:** Peter O'Connor
Carried without dissent

3.5 Secondary survey paediatric CPG

4/5/6.7.4 Secondary Survey - Paediatric (≤ 15 years)

- Delete Triage category box
- Delete 'Check for normal patterns .....'
- Delete 'Observing for .....'

Resolution: That CPG 4/5/6.7.4 Secondary Survey - Paediatric (≤ 15 years) be recommended to Council for approval subject to the changes agreed.

Proposed: Shane Knox **Seconded:** Peter O'Connor
Carried without dissent

4. Practitioner queries re CPGs and medications

4.1 Pain management proposal

A document from a PHECC registered paramedic addressed to the Medical Advisory Committee for consideration was included in the meeting papers for discussion. The document refers to pre-hospital pain management for paramedic level, and includes a proposal for the committee to consider that licensing paramedics to carry more potent medications for the treatment of serious trauma and acute medical cases.

The content of the document was incorporated into the discussion for the pain management CPGs and it is noted that the committee found it very comprehensive.

5. Priority Matrix for CPGs

5.1 Pre-hospital sedation

A paper by David Hennelly on Prehospital sedation was tabled for discussion at the MAC meeting on 31st March. An agreement arising out of that meeting was to include each of the five specific clinical requirements for sedation, as outlined by David, on the CPG priority matrix.

A Prehospital sedation priority matrix for CPGs was sent to all committee members for feedback and the results were included in the papers and discussed by Brian Power.

The results indicate that all of the five specific clinical requirements are to be put on a schedule to be addressed within six months, indicating that Pre-hospital sedation will be an issue for the next MAC to address.

6. Care principles for practitioners and responders

A list of care principles for practitioners and responders were included in the papers for discussion.

Care Principles (Practitioner)

- amend typo in heading from 'Princibles' to 'Principles'
- 2: delete 'It shall be presumed that' and 'in accordance with the provisions of' to read 'A person has capacity in respect to clinical decisions effecting themselves unless the contrary is shown (Assisted Decision Making (Capacity) Act 2015)'
- 7: add 'within scope of practice' to read 'Provide appropriate pain relief within scope of practice'
- 15: change the word 'records' to 'record'
- As agreed earlier the Pain Management principles to be included in this document.

Care Principles (Responder)

- amend typo in headings from 'Princibles' to 'Principles'
- 3: delete 'It shall be presumed that' and 'in accordance with the provisions of' to read 'A person has capacity in respect to clinical decisions effecting themselves unless the contrary is shown (Assisted Decision Making (Capacity) Act 2015)'
- 14: change the word 'records' to 'record'

Resolution: That Care principles for practitioners and responders be recommended to Council for approval subject to the changes agreed.

Proposed: Declan Lonergan **Seconded:** Shane Mooney
Carried without dissent

7. Verification of Death by paramedics and advanced paramedics

Brian Power informed the members that PHECC had a meeting in April with the Irish Coroners Association and An Garda Síochána regarding verification of death.
There was concerns from the Coroner in particular about pronouncement of death by paramedics as in certain cases a person may be buried or cremated without a death certificate. The Coroner was happy to support the verification of death by paramedics as the introductory phase. When this process beds down then PHECC may re-engage and request pronouncement of death to be extended to paramedics. Brian explained that if a practitioner verifies a person dead and there is no suspicion involved the practitioner can leave the scene and leave the body which is the responsibility of An Garda Síochána. A form shall be filled out by the practitioner which may be left on the scene for the Gardaí. This takes the responsibility away from the practitioner to stay on the scene. The body should not be left alone if the death is suspicious or the body is in a public place unless there is a life threatening call pending and the practitioner is required to respond to it.
The original flow chart for verification of death has been modified as a CPG which has not gone through a Delphi process. Brian put the question to the members if they wanted to overrule the Delphi process on this occasion as the last MAC meeting will be on 8th June and the deadline could be missed. The Chair stated that if the CPG doesn't make the deadline it can remain as a flowchart.

The consensus among the members was to go to Delphi.

Pre-Hospital Emergency Care Council

5/6.8.x Verification of Death

- Red transport box bottom right: add bullet point – 'Prior to the transport an arrangement is in place to accept the body at the destination'.

Resolution: That CPG 5/6.8.x Verification of Death be recommended for the Delphi process subject to the changes agreed.

Proposed: Peter O'Connor **Seconded:** Michael Dineen
Carried without dissent

8. AOB

David O'Connor requested confirmation from the members about miscarriage and the appropriate medication to administer. The consensus was that it is up to the hospital to administer the medication in the case of miscarriage.

The Chair thanked all present for their contribution and the meeting concluded.

The next meeting of the committee will be held on Thursday 26th May 2016.

Signed: Niamh Collins Date: 8.6.16

Pre-Hospital Emergency Care Council

Medical Advisory Committee

Meeting Minutes 26th May 2016

Osprey Hotel, Naas

In attendance	Apologies	Present
Declan Lonergan	Mick Molloy	Brian Power PHECC
Martin O'Reilly	Jack Collins	Jacqueline Egan PHECC
David Hennelly	Niamh Collins	Margaret Bracken PHECC
David Menzies	Joseph Mooney	
Cathal O'Donnell	Shane Knox	
Macartan Hughes	Seamus McAllister	
Gerry Bury	Ken O'Dwyer	
Eoghan Connolly	Shane Mooney	
Peter O'Connor		
David O'Connor		
Derek Rooney		
Michael Dineen		

1. Chair's Business

Mr Brian Power informed the members that the Chair, Dr Mick Molloy, and the Vice Chair, Dr Niamh Collins, were unable to attend the meeting and suggested that Ms Jacqueline Egan, PHECC Programme Development Officer, chair the meeting on this occasion which would permit maximum involvement from all the members present. There was general agreement with this recommendation.

Resolution: That Ms Jacqueline Egan chair the May 2016 MAC meeting.

Proposed: David Hennelly **Seconded:** David Menzies
Carried without dissent

All present at the meeting expressed their condolences to Mr Power on the recent passing of his Aunt.

2. Draft Meeting Report – 28th April 2016

The minutes of the meeting held on 28th April were reviewed.

Resolution: That the minutes of the Medical Advisory Committee 28th April be approved.

Proposed: Peter O'Connor **Seconded:** Michael Dineen
Carried without dissent

3. Pre-hospital spinal injury management standard

A draft PHECC standard for pre-hospital spinal injury management, with summary and recommendations for MAC, was included in the meeting papers. Comments and feedback from Dr Niamh Collins were tabled at the meeting for consideration.

There was robust discussion on each recommendation and amendments made as follows;

'Active spinal motion restriction' is defined as using manual inline techniques and/or spinal injury management devices to reduce spinal column motion.

Change:

- 'and/or' replaced with 'with or without'

Change 'No Risk' to 'Minimal Risk' throughout the document

Original Recommendation 2:

Following trauma should any of the following factors be present;

- age 65 years or older
- dangerous mechanism of injury
- fall from a height of greater than 1 metre or 5 steps,
- axial load to the head or base of the spine – for example
  diving, high-speed motor vehicle collision, rollover motor accident, ejection from a motor vehicle, accident involving motorised recreational vehicle, bicycle collision, horse riding accident, pedestrian v vehicle.

the patient should be regarded as 'high risk' and have active spinal motion restriction applied until assessment is complete

New Recommendation 2:

Following trauma should any of the following factors be present;

- dangerous mechanism of injury
- fall from a height of greater than 1 metre or 5 steps
- axial load to the head or base of the spine – for example
  diving, high-speed motor vehicle collision, rollover motor accident, ejection from a motor vehicle, accident involving motorised recreational vehicle, bicycle collision, horse riding accident, pedestrian v vehicle.
- age 65 years or older, with any of the above
- age 2 years or younger incapable of verbal communication, with any of the above

the patient should be regarded as 'high risk' and have active spinal motion restriction applied until assessment is complete

Pre-Hospital Emergency Care Council

Original Recommendation 3:

Following trauma should any of the following factors be present;

- involved in a minor rear-end motor vehicle collision
- comfortable in a sitting position
- ambulatory at any time since the injury
- no midline cervical spine tenderness
- delayed onset of neck pain
- the person remains at low risk if they are:

unable to actively rotate their neck 45 degrees to the left and right (the range of the neck can only be assessed safely if the person is at low risk and there are no high-risk factors)

the patient should be regarded as 'low risk' and have passive spinal motion restriction applied until assessment is complete

New Recommendation 3:

Following trauma, if no high risk factors are present, and where any of the following factors are present;

(i) involved in a minor rear-end motor vehicle collision
(ii) comfortable in a sitting position
(iii) ambulatory at any time since the injury
(iv) no midline cervical spine tenderness
(v) no immediate neck pain

and are able to actively rotate their neck 45 degrees to the left and right,

the patient should be regarded as 'low risk' and have passive spinal motion restriction applied until assessment is complete

Original Recommendation 4:

Following trauma should any of the following factors be present;

- have only one of the low-risk factors and
- are able to actively rotate their neck 45 degrees to the left and right

the patient should be regarded as 'no risk' and not have spinal motion restriction applied

New Recommendation 4:

Following trauma should only one of the low-risk factors be present;

- involved in a minor rear-end motor vehicle collision
- not comfortable in a sitting position
- non ambulatory at any time since the injury
- no midline cervical spine tenderness
- no immediate neck pain

and

- are able to actively rotate their neck 45 degrees to the left and right,

the patient should be regarded as 'minimal risk' and not have spinal motion restriction applied

Pre-Hospital Emergency Care Council

Original Recommendation 5:

Following a trauma assessment should a patient present with any of the following PHECC indicators for spinal injury;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism (unconscious or exposed male)
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.

or an appropriate assessment cannot be completed, a 'spinal rule in' shall be apply. Active in- line spinal motion restriction shall thereafter be implemented until arrival at ED

New Recommendation 5:

Following a trauma assessment should a patient present with any of the following 'spinal injury rule in' considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.
- unable to actively rotate their neck 45 degrees to the left and right (P & AP only)

or an appropriate assessment cannot be completed, a 'spinal injury rule in' shall be apply. Active spinal motion restriction shall thereafter be implemented until arrival at ED

INSERT NEW RECOMMENDATION

New Recommendation 6:

Uncooperative patients shall not be forced into active spinal motion restriction as this is a greater risk to the patient.

Please note; as a result of inserting a new recommendation the numbering sequence from original to new will alter from here down.

Original Recommendation 6, now 7:

Following trauma assessment should a patient not present with any of the PHECC indicators for spinal injury and are deemed at low risk; passive spinal motion restriction shall be implemented until arrival at ED

Pre-Hospital Emergency Care Council

New Recommendation 7:

Following a trauma assessment and in the absence of any of the following spinal injury rule in considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.
- unable to actively rotate their neck 45 degrees to the left and right

passive spinal motion restriction should be implemented until arrival at ED.

Original Recommendation 7, now 8:

There is no requirement to carry out or maintain active or passive spinal motion restriction following trauma if patients:

- are deemed to have no risk factors
- do not present with any of the PHECC indicators for spinal injury
- are pain free and are able to actively rotate their neck 45 degrees left and right

New Recommendation 8:

There is no requirement to carry out or maintain active or passive spinal motion restriction following trauma if patients:

- are deemed to have minimal risk factors
- do not present with any of the spinal injury rule in considerations
- are pain free and are able to actively rotate their neck 45 degrees left and right

Original Recommendation 8, now 9:

If a decision is made, after the primary survey is complete and significant injuries stabilised, to continue active spinal motion restriction a cervical collar may be considered at this point prior to lifting/moving the patient.

New Recommendation 9:

If a decision is made, after the primary survey is complete and significant injuries stabilised, to continue active spinal motion restriction a rigid cervical collar may be considered at this point prior to lifting/moving the patient.

ORIGINAL RECOMMENDATION 9 TO BE DELETED

Pre-Hospital Emergency Care Council

Original Recommendation 10:

If mechanism of injury and clinical assessment suggest an isolated non cervical spine injury a cervical collar is not indicated.

New Recommendation 10:

If mechanism of injury suggests a possible isolated lumber or thoracic injury without cervical injury involved, cervical motion restriction is not indicated.

Original Recommendation 11:

Patients with high or low risk factors and not presenting with any of the PHECC indicators for spinal injury may be requested to self-extricate from a vehicle and be instructed to lie down on a trolley stretcher in a position of comfort.

New Recommendation 11:

Patients with high or low risk factors and in the absence of any of the following spinal injury rule in considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.

may be requested to self-extricate from a vehicle and be instructed to lie down on a trolley stretcher in a position of comfort.

Original Recommendation 12:

If a patient, with a suspected spinal injury, is ambulatory following trauma request the patient to lie down on the trolley stretcher and do not utilise a 'standing take down'.

New Recommendation 12:

If a patient, with a suspected spinal injury, is ambulatory following trauma request the patient to lie down on the trolley stretcher if he/she is able to do so. If unable to comply consider alternative methods.

Original Recommendation 13:

Supine patients with suspected spinal injuries, where spinal motion restriction is being continued, should be lifted with a split device in preference to a log roll.

New Recommendation 13:

Supine patients with suspected spinal injuries, where active spinal motion restriction is being continued, should be lifted with a split device in preference to a log roll.

Original Recommendation 14:

A long board or a split device should not be used during transportation of a patient. It may be acceptable only if the patient has immediately life threatening injuries and the time to repackage the patient would be detrimental to the patient.

New Recommendation 14:

A long board is primarily an extrication device and should be used primarily for this purpose.

Original Recommendation 15:

The standard of care for the transport of a patient with active spinal motion restriction shall be on a vacuum mattress. It is acceptable to use other spinal injury management devices during transport if the patient has immediately life threatening injuries and the time to repackage the patient would be detrimental to the patient.

New Recommendation 15:

The preferred mode for the transport of a patient with active spinal motion restriction is on a vacuum mattress. It is acknowledged that other options which suit the clinical needs of the patient may be used.

Original Recommendation 16:

Patients presenting with penetrating trauma and no neurological signs should not have spinal motion restriction applied. Rapid transport to ED is more essential to reduce mortality.

New Recommendation 16:

Patients presenting with penetrating trauma and no neurological signs should not have spinal motion restriction applied. Rapid transport to ED is essential to reduce mortality.

Original Recommendation 17:

For patients with non-standard spinal anatomy i.e. ankylosing spondylitis, permit them to find a position where they are comfortable with manual spinal motion restriction. Non-proprietary methods such as rolled blankets may be utilised to accomplish spinal motion restriction.

New Recommendation 17:

For patients with non-standard spinal anatomy i.e. ankylosing spondylitis, permit them to find a position where they are comfortable with manual spinal motion restriction. Non-standard methods such as rolled blankets may be utilised to accomplish spinal motion restriction.

Pre-Hospital Emergency Care Council

Original Recommendation 18:

When possible, the highest practitioner level on scene will determine if spinal motion restriction is to be used or discontinued i.e. cease active spinal motion restriction

New Recommendation 18:

When possible, the highest PHECC registered practitioner level on scene will determine if spinal motion restriction is to be used or discontinued i.e. cease active spinal motion restriction

Original Recommendation 19:

Paediatric patients following trauma should be assessed for spinal injury using the PHECC indications for spinal injury, however practitioners should err on the side of caution.

New Recommendation 19:

Paediatric patients following trauma should be assessed for spinal injury using the spinal injury rule in considerations.

Original Recommendation 20:

Paediatric patients with suspected spinal injury should have spinal motion restriction applied using a vacuum mattress, however they should not be forced into this position. Manual spinal motion restriction should be provided if the child is distressed or uncooperative. Non- proprietary methods such as rolled blankets may be utilised to accomplish spinal motion restriction.

New Recommendation 20:

The preferred mode for the transport of a paediatric patient with active spinal motion restriction is on a vacuum mattress or appropriately sized vacuum device. It is acknowledged that other options which suit the clinical needs of the patient may be used.
Non-standard methods such as rolled blankets may be utilised to accomplish spinal motion restriction.

INSERT NEW RECOMMENDATION

New Recommendation 21:

Manual spinal motion restriction should be provided if the child is distressed or uncooperative.

Original Recommendation 21, now 22:

Very young paediatric patients with suspected spinal injury should have spinal motion restriction applied using the child's own car seat if it is intact following the trauma, however they should not be forced into this position. Manual spinal motion restriction should be provided if the child is distressed or uncooperative.

New Recommendation 22:

Very young conscious paediatric patients with suspected spinal injury may have spinal motion restriction applied using the child's own car seat if it is intact following a collision, however they should not be forced into this position.

Pre-Hospital Emergency Care Council

Original Recommendation 22, now 23:

(i) **EMTs shall provide active spinal motion restriction for all patients with any PHECC indicators for spinal injury whether 'High Risk', 'Low Risk' or 'No Risk' factors are present.**
(ii) **EMTs shall provide active spinal motion restriction for all patients with no PHECC indicators for spinal injury and 'High Risk' or 'Low Risk' factors are present.**
(iii) **EMTs may consider no spinal motion restriction if no PHECC indicators for spinal injury and 'No Risk' factors are present.**

New Recommendation 23:

(i) EMTs shall provide active spinal motion restriction for all patients with any spinal injury rule in considerations whether or not 'High Risk', 'Low Risk' or 'Minimal Risk' factors are present.
(ii) EMTs shall provide active spinal motion restriction for all patients, in the absence of any of the spinal injury rule in considerations and with 'High Risk' or 'Low Risk' factors present.
(iii) EMTs may consider no spinal motion restriction in the absence of any of the spinal injury rule in considerations and with only 'Minimal Risk' factors present.

Original Recommendation 23:

Recommendations 1, 2, 5, 7, 8, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21 shall apply to EMTs when managing suspected spinal injury.

New Recommendation 24:

Recommendations 1, 2, 5, 6, 9, 12, 13, 14, 15, 16, 17, 19, 20, 21 and 22 shall apply to EMTs when managing suspected spinal injury.

INSERT NEW RECOMMENDATION

New Recommendation 25:

While waiting for the arrival of a practitioner Responders shall provide active spinal motion restriction for all patients if 'High Risk' or 'Low Risk' factors are present.

Original Recommendation 24, now 26:

Responders at EMR and FAR/ OFA level should return head to neutral position (unless pain or resistance increases) and maintain spinal motion restriction if spinal injury is suspected.

New Recommendation 26:

Responders at FAR/ OFA level should maintain the patient, with suspected spinal injury, in the position found while maintaining active spinal motion restriction.

INSERT NEW RECOMMENDATION

New Recommendation 27:

Responders at EMR level should consider returning the head to neutral position (unless pain or resistance increases) and maintain active spinal motion restriction if spinal injury is suspected.

Original Recommendation 25, now 28:

Responders at EFR level, while maintaining spinal motion restriction, may apply a cervical collar to facilitate extraction.

New Recommendation 28:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, may apply a cervical collar while maintaining active spinal motion restriction to facilitate extraction.

Original Recommendation 26, now 29:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, may extricate a patient on an appropriate device in the absence of a practitioner if;
An unstable environment prohibits the attendance of a practitioner or
While awaiting the arrival of a practitioner the patient requires rapid extrication to initiate emergency care

New Recommendation 29:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, may extricate a patient on an appropriate device in the absence of a practitioner if;
(i) An unstable environment prohibits the attendance of a practitioner, or
(ii) While awaiting the arrival of a practitioner the patient requires rapid extrication to initiate emergency care

Original Recommendation 27, now 30:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, if waiting for an ambulance response should remove an extricated patient from an extrication device and secure into a vacuum mattress.

New Recommendation 30:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, if waiting for an ambulance response should remove an extricated patient from an extrication device and secure into a transport device.

Original Recommendation 28, now 31:

Responders at EFR level, who are operating on behalf of a licenced CPG provider shall not utilise a 'standing take down' if a patient, with a suspected spinal injury, is ambulatory following trauma. The patient shall be requested to lie down on the trolley stretcher or other device.

New Recommendation 31:

Responders at EFR level, who are operating on behalf of a licenced CPG provider may request a patient, with a suspected spinal injury, who is ambulatory following trauma to lie down on a trolley stretcher or other device if he/she is able to do so. If unable to comply consider alternative methods.

Original Recommendation 29, now 32:

Responders at EFR level, who are operating on behalf of a licenced CPG provider following the provision of spinal injury management, shall complete an Ambulatory Care Report (ACR) or PCR and present the top copy to the practitioner transporting the patient to ED.

New Recommendation 32:

Responders at EFR level, who are operating on behalf of a licenced CPG provider following the provision of spinal injury management, shall complete an Ambulatory Care Report (ACR) or Patient Care Report (PCR) and present the top copy to the practitioner transporting the patient to ED.

INSERT NEW RECOMMENDATION

New Recommendation 33:

Recommendations 1, 2, 5, 6, 13, 14, 16, 17, 19, 21 and 22 shall apply to EFRs operating on behalf of a licenced CPG provider when managing suspected spinal injury.

4. CPG updates

4.1 Spinal injury management CPGs

5/6.6.9 Spinal Injury Management

- Replace 'Trauma Initial indications for spinal injury' with 'Trauma and concern by practitioner of spinal injury'
- Concern was expressed about the use of 'Any PHECC indicators for spinal injury present'
- Replace 'No risk factors' with 'Minimal risk factors'
- As per policy all patients presenting with 'High risk factors' should have active spinal motion restriction applied until assessment is complete
- As per policy all patients presenting with 'Low risk factors' should have passive spinal motion restriction until assessment complete
- Under 'Minimal risk factors' retain the red box from the current CPG; 'Immobilisation may not be indicated'
- Edit grey box 'Vacuum mattress' to read 'Secure to appropriate transportation device'
- Update all red information boxes on right to correspond with changes to policy recommendations

4.6.9 Spinal Injury Management

- Changes as per CPG 5/6.6.9 and new policy recommendations

2/3.6.9 Spinal Injury Management

- Replace 'Trauma Initial indications for spinal injury' with 'Trauma and concern by responder of spinal injury'
- Changes as per CPG 5/6.6.9 and new policy recommendations

4.2 Palliative Care CPG

5/6.8.7 Palliative Care – Adult

At the last MAC meeting on 28th April some members expressed concerns that the palliative care CPG was signed off by Council without going through the Delphi process. Following a resolution from the meeting the palliative care CPG was put through a Delphi process. The results of the Delphi were included in the meeting papers.

Brian Power explained that the National Palliative Care Programme and the ICGP have been notified that Council had approved both the palliative care policy and the CPG. He also outlined that Dr Feargal Twomey, Consultant in Palliative Medicine, a member of the Palliative Care Sub Group had agreed to be involved in developing the training package.

There was a robust and detailed conversation among the members and issues identified. The members all agreed that this is a clinically excellent CPG and represents the way CPGs should be developed in the future. Concerns were raised about the services, structures and the education specific to this, which are currently not in place.

Resolution: that MAC has concerns about service delivery and educational requirements in relation to the introduction of the Palliative Care – Adult CPG. MAC recommends that the CPG be brought back to Council for further consideration.

Proposed: David Menzies **Seconded**: Cathal O'Donnell
Carried without dissent

4.3 Verification of Death CPG

5/6.8.x Verification of Death

The results of the Delphi for the Verification of Death CPG were included in the meeting papers. Brian Power informed the members that the Dr. Myra Cullinane, President of the Coroners Society of Ireland, and An Garda Síochána were consulted in relation to the policy. To date Dr Cullinane requested minor changes to the policy and PHECC is still awaiting final feedback from An Garda Síochána. The members expressed their support and welcomed this CPG as it will enable ambulance crews to leave the scene and not be tied up for several hours waiting for a doctor to pronounce death.

There was some concern that verification of death will not change anything as the patient still has to be pronounced by a medical practitioner. It was suggested that the CPG and policy be reviewed within one year of being enacted to progress to full pronouncement of death when experience following implementation will assist with this review.

Resolution: that CPG 5/6.8.x Verification of Death be recommended to Council for approval.

Proposed: Cathal O'Donnell **Seconded**: Peter O'Connor
Carried without dissent

4.4 Sepsis – Paediatric CPG

5/6.7.34 Septic Shock – Paediatric (≥ 15 years)

No changes recommended.

Resolution: that CPG 5/6.7.34 Septic Shock – Paediatric (≥ 15 years) be recommended to Council for approval.

Proposed: Peter O'Connor **Seconded**: Michael Dineen
Carried without dissent

5. Practitioner queries re CPGs and medications

An email to Brian Power with the following practitioner queries was included in the meeting papers for discussion.

5.1 Definition of 'tolerable' pain

Query:
"the omission in the care principals for pain, of a means of determining from the patient where practical what their goal is so we can then determine what constitutes tolerable".
The practitioner's concern is that tolerable pain can be very different for everyone and the definition in the care principals is too vague. After significant discussion the general consensus was that pain is subjective, and pain free is not possible otherwise all patients would be administered medications from the top of the pain ladder i.e. morphine regardless of the severity of the pain. Brian Power explained that 'tolerable pain' was the term agreed at the previous MAC meeting.

5.2 Hypoglycaemia as a reversible cause of cardiac arrest

Query:
"the absence of hypoglycaemia on the reversible causes list for cardiac arrest, the consequent teaching in the NASC was not to check blood sugar due to this omission".
It was clarified that hypoglycaemia is not a reversible cause of cardiac arrest. The general consensus among the members was that blood sugar should be checked post ROSC in particular and it is not necessary to list this on a CPG.

6. PHECC CFR Information Standard 2016

A draft of the PHECC CFR Information Standard 2016 was handed out to each of the members present, and a differences table with the current 2011 edition was included in the meeting papers. Ms Jacqueline Egan, PHECC Programme Development Officer, gave an overview of the differences. Ms Egan explained that new CFR training materials are currently being developed and due to be in circulation shortly. The feedback from the members was very positive with a recommendation to include a box for 'time of onset'.

Recommendation: That the PHECC CFR Information Standard 2016 be recommended to Council for approval subject to the inclusion of a box for 'time of onset'.

Proposed: Derek Rooney **Seconded:** Eoghan Connolly
Carried without dissent

Pre-Hospital Emergency Care Council

7. Suggested update for 'Difference of opinion by MAC members on areas of clinical importance' document

The current PHECC Council's term of office and all committees will terminate in June. The final MAC meeting scheduled to take place on 8th June will focus on Terms of Reference, and it was agreed to postpone this document for the attention of the new Medical Advisory Committee, as the Terms of Reference might change in June.

8. AOB

As there was no other business the Chair thanked all present for their contribution to the meeting and the meeting concluded.

The next meeting of the Committee will be held on Wednesday 8th June 2016 in The Malton Hotel, Killarney.

Signature:  Date: 14th June 2016

Pre-Hospital Emergency Care Council

Medical Advisory Committee

Meeting Minutes 8th June 2016

The Malton Hotel, Killarney

In attendance	Apologies	Present
Mick Molloy Chair	David Menzies	Brian Power PHECC
Niamh Collins	Jack Collins	Jacqueline Egan PHECC
Martin O'Reilly	Peter O'Connor	Margaret Bracken PHECC
David Hennelly	Joseph Mooney	Kathleen Walsh PHECC
Shane Mooney	David McManus	
Cathal O'Donnell	Seamus McAllister	
Macartan Hughes	Gerry Kerr	
Shane Knox	Stephen Cusack	
Eoghan Connolly	Neil Reddy	
Ken O'Dwyer	Declan Lonergan	
David O'Connor		
Derek Rooney		
Michael Dineen		
Conor Deasy		

1. Chair's Business

The Chair welcomed the members and noted that this was the last meeting of the committee as the term of the current Council concludes in June 2016. Apologies were noted. The Chair thanked all the members for their attendance, valuable contribution and feedback during the period of this committee. The Chair pointed out that the Department had not yet appointed a new Council. When appointed, the new Council will review the terms of reference of MAC and other committees. The Chair thanked Ms Jacqueline Egan for chairing the meeting on 26th May in the absence of the Chair and vice-Chair.

2. Draft Meeting Report – 26th May 2016

The minutes of the meeting held on 26th May were reviewed.

Matters arising:

Shane Mooney requested that he be added to the list of apologies which was not recorded in the minutes.

The members expressed their concerns that comments noted in the minutes regarding item 4.2 Palliative Care - Adult CPG were misrepresentative and could be misconstrued. Brian Power explained that some of the members had previously expressed dissatisfaction that some of their comments and issues were not recorded in the minutes of earlier meetings, and as a result of this all comments were minuted on this occasion. The members requested that the bulleted comments be removed and some of the wording be rephrased.

It was agreed to edit the last sentence to read 'Concerns were raised about the services, structures and the education specific to this, which are not currently in place'.

Item 4.3 Verification of Death CPG was highlighted. The consensus among the members was that the suggested timeframe recorded in the minutes of 'within three years' for review of the CPG and policy was inaccurate and should be changed to 'within one year of being enacted'.

David O'Connor sought clarification regarding item 5.2 Hypoglycaemia as a reversible cause of cardiac arrest and requested that the minutes be amended to state that 'Hypoglycaemia is not a reversible cause of cardiac arrest'.

Resolution: That the minutes of the Medical Advisory Committee 26th May be approved subject to the changes agreed.

Proposed: Michael Dineen **Seconded:** Derek Rooney
Carried without dissent

3. Pre-hospital spinal injury management standard

A draft Pre-hospital spinal injury management standard and recommendations for MAC were included in the May meeting papers, and following substantial deliberation and feedback from the members amendments were made by Brian Power and included in the June meeting papers for further discussion.

There were concerns regarding the 3 types of risk factors and the question was raised if there should be a binary 'rule in' or 'rule out' system of high and low risk factors instead of a 3 tier system which includes 'minimal risk factors'. Clarification was sought on the difference between 'minimal' and 'low risk factors', and 'position of comfort'. After a robust discussion the general consensus was to simplify the risk factors and remove 'minimal risk factors'.

It was noted that an educational component will be required and that all Emergency Departments will need to be notified of the recommendations and accompanying CPGs to inform them of the change in practice. There was considerable discussion on each recommendation and additional amendments made as follows.

Pre-hospital spinal injury management - PHECC position paper

Introduction

It was agreed to add the word 'unselected' before 'penetrating trauma' to the last sentence in paragraph 3: 'Immobilisation of patients with unselected penetrating trauma is resulting in increased mortality and should cease is indicative for the need for change to current practice'.

Spinal injury

There were concerns expressed regarding the statement that 'injuries to the spinal column are uncommon in Ireland with 240 cases (62 with spinal cord injury) admitted to the National Spinal Injury Unit in 2014 (Mr Morris, Orthopaediac Surgeon, National Spinal Injury Unit)'. The general opinion among the members is that this evidence refers to a specific unit and is not an accurate reflection nationally. It was agreed to reword to include a national statistic for spinal cord injuries.

Current Recommendation 1:

Change terminology from 'spinal immobilisation to 'spinal motion restriction' when referring to the management of pre-hospital spinal injuries.

No change

Current Recommendation 2:

Following trauma should any of the following factors be present;

- dangerous mechanism of injury
- fall from a height of greater than 1 metre or 5 steps
- axial load to the head or base of the spine – for example diving, high-speed motor vehicle collision, rollover motor accident, ejection from a motor vehicle, accident involving motorised recreational vehicle, bicycle collision, horse riding accident, pedestrian v vehicle.
- age 65 years or older, with any of the above
- age 2 years or younger incapable of verbal communication, with any of the above

the patient should be regarded as 'high risk' and have active spinal motion restriction applied until assessment is complete

Updated Recommendation 2:

Following trauma should any of the following factors be present;

- dangerous mechanism of injury
- fall from a height of greater than 1 metre or 5 steps
- axial load to the head or base of the spine – for example diving, high-speed motor vehicle collision, rollover motor accident, ejection from a motor vehicle, accident involving motorised recreational vehicle, bicycle collision, horse riding accident, pedestrian v vehicle.
- Impaired awareness (alcohol/ drug intoxication, confused/ uncooperative or ALoC)
- age 65 years or older, with any of the above
- age 2 years or younger incapable of verbal communication, with any of the above

the patient should be regarded as 'high risk' and have active spinal motion restriction applied until assessment is complete

Current Recommendation 3:

Following trauma, if no high risk factors are present, and where any of the following factors are present;

(i) involved in a minor rear-end motor vehicle collision
(ii) comfortable in a sitting position
(iii) ambulatory at any time since the injury
(iv) no midline cervical spine tenderness
(v) no immediate neck pain

and are able to actively rotate their neck 45 degrees to the left and right,

the patient should be regarded as 'low risk' and have passive spinal motion restriction applied until assessment is complete

Updated Recommendation 3:

Following trauma, if no high risk factors are present, and where any two or more of the following factors are present;

- involved in a minor rear-end motor vehicle collision
- comfortable in a sitting position
- ambulatory at any time since the injury
- no midline cervical spine tenderness
- no spinal column/ midline pain

and are able to actively rotate their neck 45 degrees to the left and right,

the patient should be regarded as 'low risk' and have passive spinal motion restriction applied until assessment is complete

Current Recommendation 4:

Following trauma should only one of the low-risk factors be present;

- involved in a minor rear-end motor vehicle collision
- not comfortable in a sitting position
- non ambulatory at any time since the injury
- no midline cervical spine tenderness
- no immediate neck pain

and

- are able to actively rotate their neck 45 degrees to the left and right,

the patient should be regarded as 'minimal risk' and not have spinal motion restriction applied

Delete current Recommendation 4

Current Recommendation 5:

Following a trauma assessment should a patient present with any of the following 'spinal injury rule in' considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.
- unable to actively rotate their neck 45 degrees to the left and right (P & AP only)

or an appropriate assessment cannot be completed, a 'spinal injury rule in' shall be apply. Active spinal motion restriction shall thereafter be implemented until arrival at ED

Updated Recommendation 5 (now Recommendation 4):

Following a trauma assessment should a patient present with any of the following 'spinal injury rule in' considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.
- unable to actively rotate their neck 45 degrees to the left and right (P & AP only)

or an appropriate assessment cannot be completed, a 'spinal injury rule in' shall apply. Active spinal motion restriction shall thereafter be implemented until arrival at ED

Current Recommendation 6:

Uncooperative patients shall not be forced into active spinal motion restriction as this is a greater risk to the patient.

No change (now Recommendation 5)

Current Recommendation 7:

Following a trauma assessment and in the absence of any of the following spinal injury rule in considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.
- unable to actively rotate their neck 45 degrees to the left and right

passive spinal motion restriction should be implemented until arrival at ED.

Delete current Recommendation 7

Current Recommendation 8:

There is no requirement to carry out or maintain active or passive spinal motion restriction following trauma if patients:

- are deemed to have minimal risk factors
- do not present with any of the spinal injury rule in considerations
- are pain free and are able to actively rotate their neck 45 degrees left and right

No change (now Recommendation 6)

Current Recommendation 9:

If a decision is made, after the primary survey is complete and significant injuries stabilised, to continue active spinal motion restriction a rigid cervical collar may be considered at this point prior to lifting/moving the patient.

No change (now Recommendation 7)

Current Recommendation 10:

If mechanism of injury suggests a possible isolated lumber or thoracic injury without cervical injury involved, cervical motion restriction is not indicated.

No change to current Recommendation 10, however reduce negative phrase in explanation.
(Now Recommendation 8)

Current Recommendation 11:

Patients with high or low risk factors and in the absence of any of the following spinal injury rule in considerations;

- any significant distracting injuries
- impaired awareness (alcohol/ drug intoxication, confused /uncooperative or ALoC)
- immediate onset of spinal/ midline back pain
- hand or foot weakness (motor issue)
- altered or absent sensation in the hands or feet (sensory issue)
- priapism
- history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.

may be requested to self-extricate from a vehicle and be instructed to lie down on a trolley stretcher in a position of comfort.

Updated Recommendation 11 (now Recommendation 9)

Patients with high or low risk factors and in the absence of spinal rule in considerations may be requested to self-extricate from a vehicle and be instructed to lie down on a trolley stretcher in a position of comfort.
For patients not meeting these criteria use active spinal motion restriction practice for extrication.

Current Recommendation 12:

If a patient, with a suspected spinal injury, is ambulatory following trauma request the patient to lie down on the trolley stretcher if he/she is able to do so. If unable to comply consider alternative methods.

No change (now recommendation 10)

Current Recommendation 13:

Supine patients with suspected spinal injuries, where active spinal motion restriction is being continued, should be lifted with a split device in preference to a log roll.

No change (now recommendation 11)

Current Recommendation 14:

A long board is primarily an extrication device and should be used primarily for this purpose.

No change, however insert 'strongly' into explanation prior to 'discourage' (now Recommendation 12)

Current Recommendation 15:

The preferred mode for the transport of a patient with active spinal motion restriction is on a vacuum mattress. It is acknowledged that other options which suit the clinical needs of the patient may be used.

Updated Recommendation 15 (now Recommendation 13):

The preferred mode for the transport of a patient with active spinal motion restriction is on a vacuum mattress. It is acknowledged that other devices may be utilised.

Current Recommendation 16:

Patients presenting with penetrating trauma and no neurological signs should not have spinal motion restriction applied. Rapid transport to ED is essential to reduce mortality.

Updated Recommendation 16 (now Recommendation 14):

Patients presenting with isolated penetrating trauma and without neurological signs should not have spinal motion restriction applied. Rapid transport to ED is essential to reduce mortality.

Current Recommendation 17:

For patients with non-standard spinal anatomy i.e. ankylosing spondylitis, permit them to find a position where they are comfortable with manual spinal motion restriction. Non-standard methods such as rolled blankets may be utilised to accomplish spinal motion restriction.

Updated Recommendation 17 (now Recommendation 15):

For patients with non-standard spinal anatomy e.g. ankylosing spondylitis, permit them to find a position where they are comfortable with manual spinal motion restriction. Non-standard methods such as rolled blankets may be utilised to accomplish spinal motion restriction.

Current Recommendation 18:

When possible, the highest PHECC registered practitioner level on scene will determine if spinal motion restriction is to be used or discontinued i.e. cease active spinal motion restriction

No change (now recommendation 16)

Current Recommendation 19:

Paediatric patients following trauma should be assessed for spinal injury using the 'spinal injury rule in' considerations.

Updated Recommendation 19 (now recommendation 17):

Paediatric patients following trauma should be assessed for spinal injury using the 'spinal injury rule' in considerations.

Current Recommendation 20:

The preferred mode for the transport of a paediatric patient with active spinal motion restriction is on a vacuum mattress or appropriately sized vacuum device. It is acknowledged that other options which suit the clinical needs of the patient may be used. **Non-standard methods such as rolled blankets may be utilised to accomplish spinal motion restriction.**

Updated Recommendation 20 (now recommendation 18):

The preferred mode for the transport of a paediatric patient with active spinal motion restriction is on a vacuum mattress or appropriately sized vacuum device. It is acknowledged that other options may be used. **Non-standard methods such as rolled blankets may be utilised to accomplish spinal motion restriction.**

Current Recommendation 21:

Manual spinal motion restriction should be provided if the child is distressed or uncooperative.

Updated Recommendation 21 (now Recommendation 19):

Uncooperative paediatric patients shall not be forced into active spinal motion restriction as this is a greater risk to the patient.

Current Recommendation 22:

Very young conscious paediatric patients with suspected spinal injury may have spinal motion restriction applied using the child's own car seat if it is intact following a collision, however they should not be forced into this position.

No change (now Recommendation 20)

Current Recommendation 23:

(i) EMTs shall provide active spinal motion restriction for all patients with any 'spinal injury rule in' considerations whether or not 'High Risk', 'Low Risk' or 'Minimal Risk' factors are present. (ii) EMTs shall provide active spinal motion restriction for all patients, in the absence of any of the 'spinal injury rule in' considerations and with 'High Risk' or 'Low Risk' factors present. (iii) EMTs may consider no spinal motion restriction in the absence of any of the spinal injury rule in considerations and with only 'Minimal Risk' factors present.

Updated Recommendation 23 (now Recommendation 21):

EMTs shall provide active spinal motion restriction for all patients with 'High Risk' or 'Low Risk' factors present even in the absence of any of the spinal injury rule in considerations.

Current Recommendation 24:

Recommendations 1, 2, 5, 6, 9, 12, 13, 14, 15, 16, 17, 19, 20, 21 and 22 shall apply to EMTs when managing suspected spinal injury.

Updated Recommendation 24 (now recommendation 22):

Recommendations 1, 2, 4, 5, 7, 10, 11, 12, 13, 14, 15, 17, 18, 19 and 20 shall apply to EMTs when managing suspected spinal injury.

Current Recommendation 25:

While waiting for the arrival of a practitioner Responders shall provide active spinal motion restriction for all patients if 'High Risk' or 'Low Risk' factors are present.

No change (now Recommendation 23)

Current Recommendation 26:

Responders at FAR/ OFA level should maintain the patient, with suspected spinal injury, in the position found while maintaining active spinal motion restriction.

No change (now Recommendation 24)

Current Recommendation 27:

Responders at EMR level should consider returning the head to neutral position (unless pain or resistance increases) and maintain active spinal motion restriction if spinal injury is suspected.

Updated Recommendation 27 (now Recommendation 25):

Responders at EFR level should consider returning the head to neutral position (unless pain or resistance increases) and maintain active spinal motion restriction if spinal injury is suspected.

Current Recommendation 28:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, may apply a cervical collar while maintaining active spinal motion restriction to facilitate extrication.

No change (now Recommendation 26)

Current Recommendation 29:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, may extricate a patient on an appropriate device in the absence of a practitioner if;
(i) An unstable environment prohibits the attendance of a practitioner, or
(ii) While awaiting the arrival of a practitioner the patient requires rapid extrication to initiate emergency care

No change (now Recommendation 27)

Current Recommendation 30:

Responders at EFR level, who are operating on behalf of a licenced CPG provider, if waiting for an ambulance response should remove an extricated patient from an extrication device and secure into a transport device.

Updated Recommendation 30 (now Recommendation 28):

Responders at EFR level, who are operating on behalf of a licenced CPG provider, if waiting for an ambulance response may remove an extricated patient from an extrication device and secure into a transport device.

Current Recommendation 31:

Responders at EFR level, who are operating on behalf of a licenced CPG provider may request a patient, with a suspected spinal injury, who is ambulatory following trauma to lie down on a trolley stretcher or other device if he/she is able to do so. If unable to comply consider alternative methods.

No change (now Recommendation 29)

Current Recommendation 32:

Responders at EFR level, who are operating on behalf of a licenced CPG provider following the provision of spinal injury management, shall complete an Ambulatory Care Report (ACR) or Patient Care Report (PCR) and present the top copy to the practitioner transporting the patient to ED.

No change (now Recommendation 30)

Current Recommendation 33:

Recommendations 1, 2, 5, 6, 13, 14, 16, 17, 19, 21 and 22 shall apply to EFRs operating on behalf of a licenced CPG provider when managing suspected spinal injury.

Updated Recommendation 33 (now recommendation 31):

Recommendations 1, 2, 4, 5, 11, 12, 14, 15, 17, 19 and 20 shall apply to EFRs operating on behalf of a licenced CPG provider when managing suspected spinal injury.

Resolution: That position paper on pre-hospital spinal injury management be recommended to Council as the standard of care subject to the changes outlined above.

Proposed: Eoghan Connolly **Seconded:** Niamh Collins
Carried by dissent

4. CPG updates

4.1 Spinal injury management CPGs

There was considerable deliberation among the members on the spinal injury management CPGs. The CPGs were modified to reflect the recommendations agreed in the pre-hospital spinal injury management position paper.

Brian Power informed the members that a considerable amount of work was executed by the spinal injury subgroup and the CPGs were modeled on their findings and based on the NICE Guidelines and best practice.

5/6.6.9 Spinal Injury Management

The following changes were agreed.

- Rearrange the order of boxes on right and edit as follows:

  1. High risk factors
     - add '- any of the following'
     - add new bullet point 4 - 'impaired awareness (alcohol/drug intoxication, confused/uncooperative or ALoC)'

  2. Low risk factors
     - add '- any two or more of'
     - bullet point 5 - replace 'no immediate neck pain' with 'no spinal column/midline pain'
     - 'And are able to actively rotate their neck 45 degrees to the left and right' not to be included in the list of two or more – bold **And**

  3. Spinal injury rule in considerations

  4. PHECC Spinal Injury Management Standard
     - Passive spinal motion restriction: replace 'lie on a trolley stretcher in' with 'adopt' to read '.....permitting the patient to adopt a position of comfort'.

  5. Remove Minimal risk factors

- After 'Trauma and concern by practitioner of spinal injury' insert a new box: 'Manual in-line stabilisation until clinical assessment is complete'

- Remove boxes: 'Minimal risk factors', 'Immobilisation may not be indicated', 'Go to appropriate CPG'

- After 'Passive spinal motion restriction' add 'or spinal motion restriction may not be indicated' and change to grey box

- Reference: update to STN 024 Version 1

Recommendation: That CPG 5/6.6.9 Spinal Injury Management be recommended to Council for approval subject to the changes agreed.

Proposed: Niamh Collins **Seconded:** Shane Mooney
Carried without dissent

4.6.9 Spinal Injury Management

Changes made as per CPG 5/6.6.9 outlined above.

Recommendation: That CPG 4.6.9 Spinal Injury Management be recommended to Council for approval subject to the changes agreed.

Proposed: Michael Dineen **Seconded:** Ken O'Dwyer
Carried without dissent

2/3.6.9 Spinal Injury Management

- Add red box 'Low risk factors' to right and edit 'Spinal injury rule in considerations' box as per EMT CPG 4.6.9
- Move box on left 'Do not forcibly restrain a patient that is combative' to end of CPG
- After telephone
  - add a right arrow and insert new box 'advise patient to remain still until arrival of a higher level of care'
  - after left arrow insert circle with FAR flag; edit box 'Return head to neutral position.....(insert 'an' in front of increase)'; delete EFR flags
- Reference: update to STN 024 Version 1

Recommendation: That CPG 2/3.6.9 Spinal Injury Management be recommended to Council for approval subject to the changes agreed.

Proposed: Ken O'Dwyer **Seconded:** Michael Dineen
Carried without dissent

5. 2016 Medication Formulary

A draft copy of the Medication Formulary for Practitioners 2016 was included in the meeting papers for information. Brian Power explained that edits and updates are being carried out and he requested the members to email comments and feedback to him for consideration.

An email with feedback to Brian Power from Jack Collins, who was unable to attend the meeting, was tabled and included for discussion. Brian Power will update the formulary to reflect these comments.

Recommendation: That the 2016 Medication Formulary be recommended to Council for approval subject to sign off by the PHECC Medical Director, Dr Mark Doyle.

Proposed: Shane Mooney **Seconded:** Shane Knox
Carried without dissent

6. ACR Information Standard 2016

A draft copy of the PHECC ACR Information Standard 2016 was handed out to each member present at the meeting, and a differences table with the current 2013 edition was included in the meeting papers.
Ms Jacqueline Egan, PHECC Programme Development Officer, briefed the members with an overview of the differences.

The feedback from the members was very positive. The question was asked if 'MCRN' is correct for recording the registered number used by doctors and Ms Egan agreed to clarify this with the Medical Council. There was a proposal to include more space on the ACR Form to add additional notes.

Recommendation: That the PHECC ACR Information Standard 2016 be recommended to Council for approval.

Proposed: Mick Molloy **Seconded:** Derek Rooney
Carried without dissent

7. Terms of Reference for future MAC

The terms of reference and membership of the Medical Advisory Committee was discussed. Brian Power informed the members that the new Council will review the terms of reference and may change the structure of future committees in addition to the recommendations from this present committee. There were many suggestions and proposals from the members.

It was suggested to possibly reduce membership of the Committee to 10-12 as smaller groups can be more effective, large groups cannot be catered for in the PHECC office and have to be held off-site, also coordinating and chairing larger groups can prove difficult. Concerns were voiced that quality may be compromised because of the high volume of work involved, a lot of preparation and attendance at meetings has to be done voluntarily on the member's own time. The suggestion of setting up an expert group to meet twice a year was discussed. The general opinion among the members is not to reduce the number of committee meetings.

It was considered if it is necessary to have 3 clinical levels on the committee and if this adds value. The consensus among the members is that practitioner involvement is very important and necessary. It is also noted that the Delphi process needs to be strengthened to include optimum feedback from all members. The voting system was deliberated with concerns about multiple nominations from a single Service. Brian Power clarified that it is immaterial how many members are from the same Service.

As the members have to be present themselves at meetings and cannot send a replacement this can create difficulties for them.

A proposal was made to change the name of the committee to the Clinical Advisory Committee. There were suggestions that perhaps the MAC should consist of members at clinical level only and the Education and Standards Committee be composed mainly of members at educational level. The general opinion was that the educational role of the MAC is very important, valuable, and necessary for the production of high quality and comprehensive work. A recommendation to add a University representative to the membership was made.

Brian Power requested the members to email to him any further comments and suggestions from a clinical and policy basis to present to the new Council for consideration.

8. AOB

Paediatric Intubation was discussed and it was agreed to put a standard and CPG in place for this using the Queensland Service Model, to be discussed and reviewed by the future MAC. In the meantime Brian Power will consult with Dr Mark Doyle, Dr Cathal O'Donnell, and Dr Peter O'Connor.

Resolution: That a draft standard and CPG for paediatric intubation be developed for review by the next Medical Advisory Committee and Council.

Proposed: Macartan Hughes **Seconded:** David Hennelly
Carried with dissent

The members requested that teleconference dial-in details be made available for future meetings.

Brian Power thanked the Chair, the vice-Chair, the members of MAC and the PHECC executive for all their hard work over the term of the committee. He especially wished to acknowledge the painstaking work of Ms Margaret Bracken and her predecessor Ms Deirdre Borland in preparing meeting papers and drafting minutes. He highlighted the valuable contribution made by MAC to the development of pre-hospital emergency care in Ireland.

The meeting concluded.

Signed: _____ Date: 20/7/16