

### Directorate of Legal Services

PRACTITIONERS IN LAW TO THE
HEALTH & SOCIAL CARE SECTOR

2 Franklin Street, Belfast, BT2 8DQ DX 2842 NR Belfast 3

Your Ref: BC-0035-11 Our Ref: HYP B04/2 Date: 8<sup>th</sup> September 2011

Ms Bernie Conlon Inquiry Secretary Arthur House 41 Arthur Street Belfast BT1 4GB



Dear Madam

### RE: INQUIRY INTO HYPONATRAEMIA RELATED DEATHS

I refer to my letter of 9<sup>th</sup> August 2011 in response to your letter of 4<sup>th</sup> July 2011 (BC-0035-11) in which responses to EEG Equipment 1(ii) and (iii), Protocols/ Guidelines/ Policy 2 (iii), (iv) and (v), Nursing Staff 4 remained outstanding, I now enclose the additional responses:

1. EEG Equipment

(i) The equipment available in RBHSC was a Medelec DG 32 machine.

(ii) EEG Technologists

(iii)

2. Protocols/Guidelines/Policy

(iii) No

The 1996 pre-printed standardised care plan form for RBHSC as used in Claire Roberts' admission on 21<sup>st</sup> October 1996 (090-043-145) does not state the frequency for observations, nor does the routine observation chart for 21<sup>st</sup> October 1996 (090-044-147), however the CNS Observation Chart for 22<sup>nd</sup> October 1996 does (090-039-137). The introduction of the Sick Childrens Early Warning Score (SCEWS) observation chart addressed this. (Copies for Age 1-5 and Age 6-12 enclosed).

(v) There was and is no policy but practice would have been and is to discuss concerns with nurse in charge and if he/she was or is concerned he/she would contact next most senior doctor. The introduction of SCEWS has provided a clear basis for this.

4. Nursing Staff

Providing Support to Health and Social Care







- Audrey Lockhead, Nurse Manager, RBHSC Angela Pollock, Sister, Allen Ward (i)
- (ii)

Yours faithfully

Micola Dooher

Wendy Beggs Assistant Chief Legal Adviser

Direct Line: Email:

| Sedation score | FACES/RULERS Pain score |      |         |         | Woun      | Total SC        | <0.5 ml   | output 1-2 ml | 2-3                 | Unrespon | (Plot e) P | ısness              |     | Capillary refill time (sec) |       |       |      |      |       |     |     | (Plot ●) | Rate |     |       |       |        |       |     |       |       |       | system pressure. | uses only the | diastolic and mean pressures. | (Record the systolic, | Blood Bressins |          |            |       |        |          |       |     | Temperature C |        |        | Inspired O <sub>2</sub> % | number)      |          |            |                | Resp. Rate<br>(Insert number) |       |      | Observation | Observation from   |                         |   |              | a           |                 | T-      |   |
|----------------|-------------------------|------|---------|---------|-----------|-----------------|-----------|---------------|---------------------|----------|------------|---------------------|-----|-----------------------------|-------|-------|------|------|-------|-----|-----|----------|------|-----|-------|-------|--------|-------|-----|-------|-------|-------|------------------|---------------|-------------------------------|-----------------------|----------------|----------|------------|-------|--------|----------|-------|-----|---------------|--------|--------|---------------------------|--------------|----------|------------|----------------|-------------------------------|-------|------|-------------|--|-------------------------|---|--------------|-------------|-----------------|---------|---|
| score          | score                   | 8 5  | rain 2  | Drain 1 | d 182     | EWS<br>Initials | /kg/hr    | /kg/hr        | /kg/hr<br>/kg/hr    | ive U    | ain P      | lert A              | ۵   | 3-4                         | 4     |       | 40   | 50 0 | 60 70 | 80  | 90  | 100      | 110  | 130 | 140   | 150   | 160    | 170   | Map | 40    | 50    | 70    |                  |               |                               |                       |                | 150      | 180<br>170 | ,     | y,     | 36       | 37    |     | 38            | 39     | 40     | L/min                     | 85-89<br><85 | 90-92    | <12<br><92 | 15-20          | 20-25                         | 35-45 | >45  | Date        |  |                         |   |              |             |                 |         |   |
|                |                         |      |         |         | 3         | D               | w         | u =           | o, 4                | w        | 16.2       |                     |     | 252                         | ш     | OJ.   | w    |      | 00 N  | ,   | 0   | ıō:      | .5   |     | N     | Car   |        | ω     | 1,0 | w     | w     | w N   | -                | āla           | _                             | - 10                  | 100            | w w      | uu to      | 2     | 10     | -        |       |     |               | 12 K   | 0 10 1 | w l                       | w N          | ــ د     | er w       | 15.J -         |                               | - 14  |      | 3           | Step 1. Step 2. Step 3. Step 4.  | How To                  | DOB:                                    | Hospital no: | Consultant: | First names:    | 5       | Use a   |
|                |                         |      |         |         |           | 00              | ω r       | 2             | 0 -                 |          | N          | - 0                 | 100 | tu                          | ü     | w     | Lu.  | 0. 1 | w &   | l a | 13  | ıā       | 6 .  | -   | - 10  | tu.   | 00     | LUI I | w   | 00    | w     | w 2   | -                | 0,10          | _                             | . 2                   | w              | w w      | .co .to    | 2     | 13     | _        |       | ā   |               | NK     | 3 80   |                           | WK           |          | o W        | ~ -            |                               | 2     | Ga j | ,           |  |                         |   | al no: –     | tant: –     | mes: –          | į.      | ddress  |
|                |                         |      |         |         | ,         | n               | w         | _             | 0 4                 | w        | 2          | - 0                 | 0   | - 10                        | i tin | 3     | w    |      | w K   |     | G7  | a        | 0    |     | . 103 | w     | w      | W     | LL2 | 2 100 | w 1   | w N   | -                | 0 0           | _                             | 4 10                  | w              | J 10     | w w        | 2     | Na     | _        | 3     | -   |               | 22 1   | 0 10   | 4                         | W K          | 2 22     | ω          | N -            | 0                             | - 2   |      |             | the chilo sservatio ng to the sservatio servatio e points: orithm c  | o Use This Chart        |   | (            | 3           |                 |         | ograp   |
|                |                         |      |         |         |           | 0               | ω +       | g             | 0 -                 | 00       | 10         | 40                  | 0   | 100                         | w     | w     | w    | w x  | w A   |     | 0   | 9        | 0    |     | . 10  | 'Cur  | w      | ω     | w   |       | w     | (0 N  | -                | 9.0           |                               | - 10                  | Local          | u (u     | oi si      | 2     | 163    | 4 0      |       |     |               | 2 4    | 2 2    |                           | w K          | 2 -2     | o w        | N -            |                               | - NO  | L.   |             | I's basic of falls in |                         |   |              | B           |                 |         | h-oth   |
|                |                         |      |         |         | F         | m               | to A      | v ===         | ō                   |          | 10         | _ 0                 | 0   | _ 60                        | ·w    | w     | w I  | w    | ω κ   |     | 0   | 0        | 0    |     | A NO  | 9     | 100    |       | w   | ω     | w     | u N   | 1                | 0 0           | _                             | - No                  | to s           | u w      | w w        | 20    | 80     |          |       |     |               | N M    | 0 10 1 | to                        | w K          | 1        | 0 4        | N              | 0                             | - 10  | 60   |             | bservati<br>the yelld<br>key: yell<br>llow, ora<br>to give :<br>verse of :   |                         | 1                                       |              | 1           |                 |         | erwise  |
|                |                         |      |         |         | -  -      | 71              | 0 1       | J -1          | 0 -                 | w        | 2          | <b>-</b> 0          | 000 | - 10                        |       | w     | ω.   | ω .  | ou 8  |     | 6   | a        |      |     | . 10  | aut.  | 000    | w.    | · w |       | 107 1 | 00 2  |                  | 0 0           |                               | 2                     | 50 N           | w w      | do tu      | 2     | 10     |          | 5.0   | 0 - |               | NA     | 0 12 0 |                           | w K          | 0 -      | cr (0)     | N -            |                               | 2     | co)  |             | Record the child's basic observations (Resp Rate, SaO2, Temp, BP, Heart Rate, CNS, CRT and urine If an observation falls in the yellow, orange or red (at risk) zone, this observation is given a score according to the SCEWS key: yellow = 1 point, orange = 2 points, red = 3 points. Repeat this proce each observation in a yellow, orange or red zone.  Add the points together to give the Total SCEWS and record this.  The algorithm on the reverse of this chart will then show you what to do with the Total SCEWS.   |                         |   |              | Ward:       | 2               |         | Use addressograph-otherwise write in capitals |
|                |                         |      |         |         |           | ก               | ω n       | 3 1           | 0 1                 |          | 2          | 10                  | 0   | -1 22                       |       | bar   | Lo   |      | w K   |     | 6   | 0        |      |     | N     | Tar I | u I    | G.F   | 60  | 3     | tio 6 | 3 N   |                  | 6 6           |                               | 4 12                  | TWI IT         | al w     | ur u       | 53    | .2     |          |       |     |               | 2 6    |        |                           | W K          |          | 0 8        | N -            |                               | 1 2   | w    |             | o Rate, S ge or red oint, ora ed zone. SCEWS a will the  |                         | 1 |              |             | 2               |         | in cap  |
|                |                         |      |         |         | -  -      |                 |           |               |                     |          |            |                     |     |                             |       |       |      |      |       |     |     |          |      |     |       |       |        | -     |     |       |       |       |                  |               |                               |                       |                |          |            | F     |        |          |       |     |               |        |        |                           |              |          |            | N              |                               | . 10  |      |             | aO2, Ten (at risk) nge = 2 I and recol n show y  |                         | 1                                       |              |             | -               |         | itals   |
|                |                         |      |         |         | -  -      |                 | -         |               |                     |          |            |                     |     |                             |       |       | -    |      | W   N |     |     |          |      |     |       |       |        |       |     |       |       |       |                  |               |                               |                       |                |          | W.   W.    |       | 100    |          | =     |     |               |        |        |                           |              |          |            |                |                               |       |      |             | zone, th<br>zone, th<br>points, re<br>points.<br>rd this.<br>rou what  |                         | \                                       |              |             |                 |         | <del>}</del>                                  |
|                |                         |      |         |         | -  -      |                 | CO 16     | 0             | -                   | 00       | 2          | 3                   | 0   | - 2                         | G     | (0.0  | w    | W Y  | AL N  |     | 2   | 0        | 0 .  | × = | 1 20  | w     | Q2 1   | υ     | 9   | 10    | 100 1 | W 10  |                  | 0 0           |                               | - 10                  | 100            | w cu     | CI DI      | 69    | 2      | - 0      |       |     |               | 12 16  | 2 2    |                           | UJ K         | -        | 0 0        | N -            |                               | 10    |      |             | eart Rate  |                         | Ward<br>Weight of child                 |              | (Age        | Pae             | 5       | )SH   |
|                |                         |      |         |         | _         |                 | W F       | 5 <u>-</u> 2  | 0 =                 |          | 12         | _ 0                 | 0   | → 10                        | w     | ω     | w    | 60   | a) N  | -   | 0   | 0        | 0 -  | -x  | N     | w     | ω I    | 3     | w   | 50    | wit   | w N   |                  | 0,0           |                               | - No.                 | w              | 20 - 120 | turi tu    | 8     | 84     | - 6      |       | -   |               | NA     | 2 10 3 |                           | WK           | _        | 5 W        | 2 -            |                               | 1 2   |      |             | ), CNS, C<br>vation is<br>vints. Rep<br>vith the 1   |                         | nt of ch                                | '            | je C        | dia             | 50      |   |
|                |                         |      |         |         | _   7     | ×               | w r       | 4             | 0                   | w        | ю          | <u> </u>            | 0   | - 10                        | 100   | w     | w    |      | od N  |     | Ö   | ō        | ō ,, |     | . 10  | (iii  | 50 )   | ua l  | w   | w     | w     | w N   |                  | 0 0           | -                             | - NJ                  | W A            | J 50     | 0) 4       | Lu Lu | N      | 4        | 0     | G - | _             | NIK    | U KU N |                           | W K          | <u> </u> | سا ده      | N -            |                               | - 14  |      |             | given as given as peat this peat this  |                         | hild                                    |              | 6-12)       | Paediatric      | cial G  | lfast H                                       |
|                |                         |      |         |         | -         |                 | LO B      | 9 -           | 0 2                 |          | 2          | 20                  | 0   | -12                         | w     | ω     | w    | w 5  | WK    | -   | 0   | D        | 0    | 4 = | N     | and   | ω .    | us    | ш   | 10    | w     | w po  | -                | D 0           | -                             | - 10                  | u.h            | g w      | 4 4        | cu    | N      | 3 5      | 100   |     |               | No N   | N N    |                           | ω K          |          | e w        | N -            |                               | - N   | w l  |             | l es o   |                         |   | 9            |             | Sta             | are Iri | Belfast Health and                            |
|                |                         |      |         |         | 3         | S               | w         | <b>.</b>      | 0 -                 | ω        | 2          | - 0                 | 0 9 | → <sub>50</sub>             | · ·   | w     | 9    |      | ω K   | 0   | 0   | ō        | 5 .  |     | 2     | ш     | Lu I   | w     | w   | 60    | co c  | 10 12 |                  | 0 0           | _                             | 2                     | 10 1           | u u      | 00 00      | US.   | for.   | 0        | 5     | - a | -             | 100 16 | 0 80   | ۵                         | WA           | J        | 5 W        | ~ -            |                               | 1 2   |      |             | s for  |                         | ~                                       |              |             | Standard        | JSt     | and   |
|                |                         |      |         |         | 2         | z               | w         | 4 -           | 0 4                 | w        | 2          | - 0                 | 0   | - N                         | Lay 1 | cu:   | w    | w. c | W N   | -   | 0   | ю        | 0    |     | . N   | 3.05  | w      | w     | 6.0 | w     | tal t | 2     | _                | 0.0           | -                             | 1 13                  | tu u           | urau.    | w w        | w     | 2      | 4        | = = 1 |     | _             | 2 2    | 0 0 1  | u                         | 10 N         | _        | φ ω.       | N              |                               | . 2   |      |             | o On a le In the le If the le If cor   | When i                  | Month                                   |              |             |                 |         |   |
|                |                         |      |         |         | (         | 0               | cu p      | ی             | .0 =                | · ·      | 2          |                     | 0   | - 2                         | 3     | 9     | Go.  | w .  | M K   |     | o   | l a l    | 2    | A . | 62    | w     | Late 1 | w     | a   | w     | ta t  | w     |                  | 0 0           | -                             | . 2                   | SU I           | u tu     | 00 500     | 100   | 2      | <u>.</u> | 0 0   | 0   | -   -         | 10 10  | 5 N 1  | u.                        | wk           | J        | in w       | N/             | о.                            | × 10  |      |             | event cerred tected by   | s the Tot               | lth                                     |              |             | 34 <u>0</u>     |         |   |
|                |                         |      |         |         |           | 0               | 60 1      |               | 0 =                 | 103      | 2          | <b>-</b> 0          | 0   | - 2                         | w     | .03   | w    | w) u | w. K  |     | ca  | a.       | 0 .  |     |       | (4)   | W.     | ur    | w   |       | ω.    | 3     |                  | 0 0           |                               | - 10                  | 32. 1          | 50       | to to      | 3     | 10     | - 0      | i pr  | ь   |               | 2 6    | S NO   | ω                         | WA           | <u> </u> | 0 3        | 2              |                               | 1 2   |      |             | orsening the child   | When is the Total SCEWS |   |              |             | <b>Observ</b> a |         |   |
|                |                         |      |         |         | ٨         | 0               | w         | o             | 0 3                 | , w      | N          | -0                  | 0   | - 10                        | 131   | . (3) | w    |      | w P   |     | 0   | 0        | 0    |     | 1 10  | ш     | w N    | w.    | ω   | w     | LO I  | W N   | -                | 0 6           | _                             | . 2                   | w              | u w      | u 4        | 3     | tu     | _        | 0     | 0   | _             | N N    | 2      | 3                         | w            | _        | o w        | 107 -          | 0                             | - A2  | 3    |             | en worry<br>trend<br>looks un<br>rithm (ba   | S calculated?           |   |              |             | ations          |         |   |
|                |                         |      |         |         | 3         | 70              | U +       | J             | a -                 | i ii     | . 2        | - 0                 | 0   | - 10                        | ш     | 3     | 10   | w L  | M P.  | :01 | 6   | :01      | 0    |     | . 8   | iw.   | 100    | 3     | TA) |       |       | w 10  | 1                | 0 0           | _                             | 2                     | w              | u w      | tal ta     | w     | N      | _ <      | e de  |     |               | 60 K   | , N    | i.                        | w K          | o -      | 3          | 2              |                               | 1 2   |      |             | <ul> <li>On admission</li> <li>In the event of a sudden worrying change</li> <li>If there is a worsening trend</li> <li>If concerned the child looks unwell</li> <li>If directed by the algorithm (back of this chart).</li> </ul>   | ted?                    | *                                       |              |             |                 |         |   |
|                |                         |      |         |         |           | v               | 00 1      | 4             | 0 -                 | w        | 2          | 40                  | 0   | - 2                         | w     | 60    | w    | ii i | (a) K |     | 100 | ь        | 0    |     |       | 3     | w      | 3     | ω.  | 39    | (a)   | w N   | 1                | 0 0           | _                             | 2                     | w              | ii iii   | w w        | , and | 2      | _        | 0.    |     | _             | N      | o Nu   |                           | WA           | 2        | æ w        | 2              |                               | - 10  |      |             | is chart).   |                         | Year                                    |              |             | Chart           |         |   |
|                |                         |      |         |         |           | -1              | tu n      | 9 4           | ō -                 | 3        | 2          | <b>1</b> 0          | 0   | _ 10                        |       | 3     | Gar. | w .u | w. K  |     | .0. | 10       | 9    | x = | . NI  | 10    | 100    | u.    | 8   | u Lu  | w     | W 10  | 3                | 8 0           |                               | 2                     | 3              | co       | w s        | 2     | N/I    | _        |       | 0 - |               | ю      | N 10   |                           | wĸ           | 0 -1     | C2 (00'    | N -            |                               | . 10  | us : |             |  |                         |   |              |             | TIE             |         |   |
| Sedation scor  | FACES/RULER             | BM : | Drain 2 | Drain 1 | Wound 1&2 | Total SCE       | <0.5 ml/k | 1-2 ml/k      | >3 ml/k<br>2-3 ml/k | U Unresp | P Respon   | A Alert<br>V Respon | 2   | 2-3                         | 4 4   |       | 40   | 50 6 | 60    | 80  | 90  | 100      | 110  | 130 | 140   | 150   | 160    | 170   |     | 40    | 50    | 70    | 80               | 90            | 110                           | 130                   | 140            | 160      | 180        | -     | n<br>n | 36       | 37    |     | 38            | 39     | 40     | Inspired O <sub>2</sub>   | ×85-89       | 90-92    | <12<br>>92 | 15-20<br>12-15 | 20-25                         | 35-45 | >45  | Date        | Frequency  | 1                       |   | 1            | ,           | A               |         |   |

# The Royal Belfast Hospital for Sick Children Observations Algorithm

| Total SCEWS score         | Action   | Variance                               |
|---------------------------|--|--|
| 0-1                       | Continue with current management   |  |
| 2-3                       | Inform nurse in charge<br>Hourly observations  | Document rationale if action not taken |
| >4 or 3 for any parameter | Inform nurse in charge<br>Half hourly observations<br>Contact Doctor - to attend within 30 minutes | Document rationale if action not taken |
|                           |  |  |

| Observations explanation                             | ation                   |                   |
|--|-------------------------|-------------------|
| Pain tool  | Sedation score          | Nausea score      |
| FACES/RULERS   | 0 = Crying/upset        | 0 = No nausea     |
|  | 1 = Awake/settled       | 1 = Mild nausea   |
|  | 2 = Drowsy/rousable     | 2 = Severe nausea |
|  | 3 = Unrousable*         | 3 = Vomiting      |
| *If sedation score is >3, increase SCEWS by 1 point. | rease SCEWS by 1 point. |                   |

| Hospital no:     |
|------------------|
| Consultant:      |
| First names: ——— |
| Surname:         |
|                  |

HSS) Belfast Health and Social Care Trust

### Paediatric Standard Observations Chart (Age 1-5)

| Weig         | Ward  |
|--------------|-------|
| ght of child | ۵     |
| Kg           | Month |
|              | Year  |

|  | How To     |                     | Chart                  |                         |                                       | ,                                    | 3                       |   |                          |                          |            |                    |            | When is  | When is the Total SCEWS calculated?                                    | SCEWS c              | alculated | ?   |        | 5                | SCEWS kev                           |
|--|------------|---------------------|------------------------|-------------------------|---------------------------------------|--------------------------------------|-------------------------|---|--------------------------|--------------------------|------------|--------------------|------------|----------|--|----------------------|-----------|---|--------|------------------|-------------------------------------|
|  | Step 2.    |                     | g to the servation     | falls in th<br>SCEWS ke | ne yellow,<br>ay: yellow<br>aw, orang | orange or<br>= 1 point<br>e or red z | or red (at<br>t, orange | If an observation falls in the yellow, orange or red (at risk) zone, this observation is given a score according to the SCEWS key: yellow = 1 point, orange = 2 points, red = 3 points. Repeat this process for each observation in a yellow, orange or red zone. | , this obs<br>s, red = 3 | ervation i<br>points. Re | s given a  | score<br>process t | or         | In the   | In the event of a sudden worrying change If there is a worsening trend | sudden<br>sening tre | worrying  | change  |        |                  | 2 1 0                               |
|  | Step 3.    | Add the<br>The algo | points to<br>prithm on | gether to<br>the reve   | rse of this                           | chart wi                             | Il then sh              | Add the points together to give the Total SCEWS and record this.  The algorithm on the reverse of this chart will then show you what to do with the Total SCEWS   | hat to do                | with the                 | Total SCE  | EWS.               |            |          | ted by th  | e algorith           | nam (back | If directed by the algoritham (back of this chart). | hart). |                  | ω                                   |
| Observation frequency Date             |            | [                   |                        |                         |                                       |                                      |                         |   |                          |                          |            |                    |            |          |  |                      |           |   |        | Ob               | s frequency<br>te                   |
| Time<br>>50                            | a.         | Call I              | w                      | 3                       |                                       | (d)                                  | 40                      | w   | ω.                       | iii ii                   | E          | w.                 | 3          | ۵        |  |                      | 23        |   |        | Time             | 16                                  |
|  | 2          | - 12                | 1                      | 1                       | - N                                   | - 2                                  | 1                       | 1 22  | 4 80                     | - 2                      | 1 2        | 1                  | - ku       | 1 2      | - 2  | - N                  | 1 2       | - N   | 1 2    | 1 30-            | ·50                                 |
| (Insert number) 25-29<br>20-24         | <b>-</b>   | <b>-</b>            | 3 0                    | -10                     | 3 0                                   | <b>a</b> 0                           | 40                      | 40  | <b>-</b> 0               | <u> </u>                 | 1 0        | 1 0                | <b>→</b> ä | <b>-</b> |  | 40                   | - 0       | <b>-</b> (0)  | - 0    | 25.              | 29                                  |
| 15-19<br><15                           | w N        | w 12                | 3 2                    | w 2,                    | w w                                   | w N                                  | (ii) Na                 | w 12  | 3                        | w 2                      | 0 2        | 2                  | 2          | W ED     | (a) 10   | 11/12                | WN        | WN  | W 12   | 2 15-19<br>8 <15 | 19                                  |
| - 1                                    | <b>-</b> 0 | 40                  | 4 6                    | 4 0                     | 4 0                                   | - 0                                  | <b>.</b> 0              | 1 0   | 10                       | - 0                      | 1 0        | 10                 | _ 0        | <b>-</b> | - 0  | - 0                  | 10        | _ 0   | 10     | >9.              | 92                                  |
| (Insert number) 85-89                  | w 80       | 2 2                 | 2                      | 2                       | w 2                                   | w N                                  | w 10                    | 3   | w 2                      | W N                      | W 10       | W 20               | w. ru      | ω 2      | w No   | w 2                  | m (v)     | 2   | W ru   | A85              | - 89                                |
| Inspired O <sub>2</sub> % L/min%       |            |                     |                        | 2                       |                                       |                                      |                         |   |                          |                          |            |                    |            |          |  |                      | 44        |   |        | Ins              | pired O <sub>2</sub> %              |
| 40                                     | w w        | u w i               | u to c                 | u (0) 1                 | o wi                                  | N LO L                               | ul wik                  | ען ען   | u w ı                    | υωι                      | al to a    | v w i              | u 00 0     | al bul s | u w v  | o tu u               | v w a     | u w s   | Ú W L  | 40               |                                     |
| )                                      | _ w        | ب م                 | _ w                    | - W                     | - 6                                   | <u></u> <u>(a)</u>                   | _ 60                    | La Lo   | un tui                   | - 100                    | - tiv      | <u></u> ω          | - 4        | H W      | - w  | - 60                 | - W       |   | _ ω    | 39               |                                     |
| (Plot e)                               | 0 1        | CT -1.              | 0.4                    | 0 -                     | 0                                     | 0 1                                  | 0 -                     | 0   | 0. =                     | 0 4                      | 8          | 0 -                | 9 4        | 64       | 0 8  | 0 -                  | 0 -       | 5 -   |        | , ,              |                                     |
| 5/                                     | 20         | -                   | - 0                    | 40                      | 40                                    | - C                                  | # 0                     | 10  | 0                        | <b>a</b> 0               | <b>=</b> 0 | 70                 | <b>2</b> 0 | 4.0      | 40   | - O                  | 10        | - 0   | 4 0    | 1                |                                     |
| 36                                     | 4          |                     |                        |                         | _ =                                   | _                                    |                         |   |                          |                          |            | -                  | _          |          | -  |                      |           |   |        | 36               |                                     |
| 35                                     | u          | 3                   | w                      |                         | u                                     | Lu I                                 | w                       | w   | w                        | W                        | 0.1        | 100                | w          | w        | 8  | ω                    |           | 3   | w      | 35               |                                     |
| 160<br>150                             | u u        | i w                 | 0 00 00                | 0 00 tu                 | 0 00 00                               | u tu tu                              |                         | u to L  | a w w                    | wu                       | u w        | u w                | u w        | J (u) u  | u w w  | 60 0                 | a 60 0.   | u w u   | u w w  | 150              |                                     |
|  | 10 W       | 2                   | ν ω                    | NW                      | 13 W                                  | N W                                  | ww                      | N W   | N W                      | 2 3                      | N w        | Nu                 | NW         | 2 8      | N W  | Ŋω                   | 12 (4)    | 2 4   | N to   | 3 130            |                                     |
|  | 4          | -                   | 4 -                    | 1                       |                                       |                                      | 4 -                     |   |                          | -                        | -          | + -                | -          | <u></u>  |  |                      |           |   |        | 100              |                                     |
| But note, SCEWS 80 uses only the 70    | 00         |                     | - 0 0                  | 400                     | 000                                   |                                      | 000                     | 0 0   |                          | 400                      | •   o   e  | 100                | 00         |          |  |                      |           | 00  |        | 80               |                                     |
| systolic pressure.) 60                 | ω .Z       | w 12                | ω <b>2</b> 2           | W N                     | (c 1)                                 | 3                                    | W 12                    | 2 2   | 2                        | w 2                      | wN         | ωω                 | w 2        | w N      | in 143   | w N                  | w Ku      | WN  | w N    | 2 60             |                                     |
| 30                                     | u tu ta    | ω w w               | u .u .u                | e ta t                  | a w w                                 | u u                                  | u w a                   | 10 to ta  | w w u                    | u u                      | w w        | u w u              | in to      | u to u   | م سا م   | <i>a</i> w u         | u u u     | ע אין יע  | w tu t | 30               |                                     |
| Map                                    | tu'        | W                   | car                    | a.                      | 3                                     | 3                                    | w                       | U.S.  | 3                        | 3                        | w          | w                  | w          | 63       | ш  | ω                    | 3         | 60  | ω      | w                |                                     |
| 190                                    | ww         | ww                  | w                      | w w                     | w w                                   | w                                    | 20                      | tu 100  | w w                      | ωω                       | w w        | ww                 | ww         | w or     | w w  | w w                  | w.w       | wω  | ww     | 3 190            |                                     |
| 170<br>160                             | 2          | 2                   | 2                      | N) 62                   | N W                                   | 2 4                                  | 2 0                     | 80 W  | 2                        | 2 4                      | ω          | 2 02               | 2          | N        | νω   | ν ω                  | N W       | 10 W  | No to  | 3 17             |                                     |
|  |            |                     | 4 4                    |                         |                                       |                                      |                         |   | 4 4                      | -                        | 3          |                    | . 2        | _        | -  | -                    |           |   | -      | 15               | . 0                                 |
| Rate 130                               | 0          | 0                   | 0                      | 0                       | 0                                     | 0                                    |                         | 0   | 0                        | 0                        | 0          | 0                  | 0          | 0        | 0  |                      |           | 9   |        | 13               |                                     |
|  | 0 0        | 0 0                 | 10/ 0                  | 0.0                     | 0 9                                   | 0 0                                  | E 0                     | 0 0   | 0 0                      | 0 0                      | 0 8        | 0 0                | ы          | 9 0      | 0 0  | 0                    | 0 0       | 0 0   |        | 111              | 5 6                                 |
| 100<br>90                              | 0 0        | .0 0                | 0 0                    | 6 b                     | 0. 0                                  | 0 0                                  | 0 0                     | 0 0   | 0 0                      | 0 0                      | 0 0        | 6 0                | 0.0        | 61 G     | 0 0  | 0 0                  | 0 0       | 0.0   | D P    | 90               | 0                                   |
| 80<br>70                               | 10         | 2 1                 | N -                    | NU -                    | 2 -                                   | 20                                   | 20 11                   | N :-  | 20 -                     | 2                        | 2 1        | N                  | 2 1        | 2 1      | N -  | 20 -                 | NJ -      | N -   | 2 -    | 2 70             |                                     |
| 60                                     | i w        | u,                  | w                      | w                       | w                                     | ω                                    | u                       | w   | 10                       | i lu                     | u u        | ω                  | ω          | , w      | w  | g (g)                | ω         | · co  | · u    | 60               |                                     |
| <b>y</b> 4                             | Les Le     | W G                 | w. u                   | w                       | w                                     | w                                    | où lu                   | co: 0.  | w 6.                     | LO LA                    | w          | C                  | ω o.       | 02 0     | W 5  | w u                  | 0 0       | w   | w 6    | Y.               |                                     |
| Capillary refill 3-4<br>time (sec) 2-3 | 1 2        | - 2                 | 4 10                   | 4 10                    | 4 10                                  | - 22                                 | 1 2                     | 10  | 2                        | 2                        | -3 12      |                    | - 2        | N        | - N  | - 30                 | 10        | - 18  | - N    | 2-3              | 44                                  |
|  | 0 0        | 0 0                 | 0                      | 0                       | 0                                     | 0                                    | 0                       | 0   | 0.                       | 0                        | 0 0        | 0                  | 0          |          | 0  | 0.0                  | 0         | 9 0   |        | >                | Alert                               |
| U                                      | 2          | N -                 | 2                      | 2                       | 10 -                                  | 2                                    | 200                     | 12  | 2 4                      |                          | Pal =      | . s                | W -        | - 64     | N -  | o Nu -               | N -       | 2 -   | 19 -   | 70 <             | Responds to voice                   |
| Unresponsive U                         | _ (c       | - u,                | - u                    | u                       | _ (.                                  | - u                                  | 1                       | - 0.  | - 0.                     | 1                        | - 4        |                    | 1 4        | - 0      | - u  | (a                   |           | _ u   |        | 1 ×3 C           | ml/kg/hr                            |
| Jrine 2-3 ml/kg/hr                     | 0          | . 0                 | 0                      | 0                       | 0                                     | 0                                    | 0                       |   | 0                        | 0                        | 0          | 0                  | 0          | 0        |  |                      | - 0       | 0   | 0      | 2-3              | ml/kg/hr                            |
|  | 0 14       | 2                   | 2                      | v 14 -                  | 2 -                                   | 2                                    | 2                       | u nu -  | 2                        | 2                        | 2          | 2 2 -              | 2          | U NJ -   | u nu -   | W NJ -               | w N -     | N   | V N.   | 0.5              | -1 ml/kg/hr                         |
| Total SCEWS                            | U          | U                   | 0                      | 9                       | U                                     | U                                    | 0                       |   |                          |                          |            | ı                  |            |          |  |                      |           |   |        | Tot              | Total SCEWS                         |
| Initials                               | Þ          | 00                  | 0                      | D                       | m                                     | -11                                  | 6                       | I   | -                        | _                        | _          | ٦                  | 3          | z        | 0  | סר                   | 0         | 20  | S      | T Jinii          | dai                                 |
| Wound 1&2<br>Drain 1                   |            |                     |                        |                         |                                       |                                      |                         |   |                          |                          |            |                    |            |          |  |                      |           |   |        | Wor              | and 1&2<br>n 1                      |
| Drain 2                                |            |                     |                        |                         |                                       |                                      |                         |   |                          |                          |            |                    |            |          |  |                      |           |   |        | Drain 2          | n 2                                 |
| BM                                     |            |                     |                        |                         |                                       |                                      |                         |   |                          | 5                        |            |                    |            |          |  |                      |           |   |        | BM (             |                                     |
| FLACC/FACES Pain score Nausea score    |            |                     |                        |                         |                                       |                                      |                         |   |                          |                          |            |                    |            |          |  |                      |           |   |        | FLA              | FLACC/FACES Pain score Nausea score |
| Sedation score                         |            |                     |                        |                         |                                       |                                      |                         |   |                          |                          |            |                    |            |          |  |                      |           |   |        | Sed              | Sedation score                      |

# The Royal Belfast Hospital for Sick Children Observations Algorithm

| Total SCEWS score         | Action  |  |
|---------------------------|---|--|
| 0-1                       | Continue with current management  | ent management   |
| 2-3                       | Inform nurse in charge<br>Hourly observations                             | rge  |
| >4 or 3 for any parameter | Inform nurse in charge Half hourly observations Contact Doctor - to atter | Inform nurse in charge<br>Half hourly observations<br>Contact Doctor - to attend within 30 minutes |
| Observations explanation  |   |  |
| Pain tool Se              | Sedation score  | Nausea score   |
| FLACC/FACES 0 =           | 0 = crying/upset  | 0 = No nausea  |
| = 1                       | 1 = awake/settled   | 1 = Mild nausea  |
| 2 =                       | 2 = drowsy/rousable   | 2 = Severe nausea  |
| 3=                        | 3 = unrousable*   | 3 = Vomiting   |
|                           |   |  |

\* If sedation score is >3, increase SCEWS by 1 point.