



22 April 2026

Email:

Dear

FREEDOM OF INFORMATION REQUEST

Request No: 47511-26

Subject: ROSC Information

Date Received: 10/04/2026

Thank you for your request for information received on 10 April 2026 which was dealt with under the terms of the Freedom of Information Act 2000. Northern Ireland Ambulance Service (NIAS) Health and Social Care Trust has now completed its search for the information you requested and that is detailed below.

FOI QUESTION(S)	ANSWER(S)
Is rocuronium carried by your specialist/advanced paramedics in critical care?	Yes: Advanced Paramedic Critical Care (APCC)
What are the indications and dosing if so?	<p>Indications: Neuromuscular blockade in order to provide optimised oxygenation and ventilation after return of spontaneous circulation (ROSC) post cardiac arrest.</p> <p>Adults and children aged 1 year and above who are:</p> <ul style="list-style-type: none"> • Post cardiac arrest and have sustained a Return of Spontaneous Circulation (ROSC) for at least five minutes. • And, have an Endotracheal Tube (ETT) which, is secured and placement confirmed with and being continuously monitored with end-tidal capnography. <p>Or, a post-RSI HEMS patient in a multiple-patient scenario on direction from the HEMS Consultant on scene. Dosing: Initial bolus dose of 0.5mg/kg IV/IO.</p> <p>Maintenance dose 0.5mg/kg/hr, to be administered in divided bolus doses, titrate to effect if signs of paralysis wearing off (movement, spontaneous breaths). First bolus usually 30minutes after Initial dose.</p>
How many patients have received rocuronium post-ROSC in 2025?	Introduced March 2026 (i.e., Zero in 2025)



FOI QUESTION(S)	ANSWER(S)																																																																													
<p>What governance framework is in place for rocuronium administration in terms of training and ensuring competency?</p>	<p>APCCs will have a minimum of 2 years HEMS experience, Postgraduate Diploma in Critical Care, completed the APCC Independent Practice Sign Off Process (extensive clinical competency portfolio) and be up to date in the Oxylog Ventilator Critical Care Competency.</p>																																																																													
<p>What sedation agents are used and what are their indications and dosing strategies?</p>	<p>Ketamine, Midazolam and Haloperidol are all available as sedation agents. In the context of post-ROSC care, a combination infusion of ketamine and midazolam (“Ketolam”) is used alongside Rocuronium.</p> <p>Indications: -Patient aged > 1 year, with: -ROSC > 5 minutes with no sign of improving GCS, (OR a post-RSI HEMS patient in a multiple-patient scenario on direction from the HEMS Consultant on scene) -AND receiving positive pressure ventilation (iGel/ETT) and require transfer.</p> <p>Preparation: Requires a 30ml syringe. Draw up 20mls of Ketamine (10mg/ml) and add 5mls of Midazolam (1mg/ml). The syringe should be labelled with both a Ketamine AND Midazolam label. Total volume 25mls. The infusion rate (ml/hr) should be set at “(patients’ weight in kg) / 4” which provides a dose of Ketamine 2mg/kg/hr and Midazolam 50mcg/kg/hr. The hypovolaemic / hypotensive rate should be used if the patient is hypotensive or suspected to be hypovolaemic (the infusion is made up as standard, but the infusion rate is halved)</p> <p>Dosing (infusion):</p> <table border="1" data-bbox="564 1205 1426 1968"> <thead> <tr> <th>Age</th> <th>Weight (kg)</th> <th>Standard Infusion Rate (ml/hr)</th> <th>Hypotensive/hypovolaemic Infusion Rate (ml/hr)</th> </tr> </thead> <tbody> <tr><td>1 yr</td><td>10</td><td>2.5</td><td>1.2</td></tr> <tr><td>2 yr</td><td>12</td><td>3.0</td><td>1.5</td></tr> <tr><td>3 yr</td><td>14</td><td>3.5</td><td>1.7</td></tr> <tr><td>4 yr</td><td>16</td><td>4.0</td><td>2.0</td></tr> <tr><td>5 yr</td><td>18</td><td>4.5</td><td>2.2</td></tr> <tr><td>6 yr</td><td>25</td><td>6.2</td><td>3.1</td></tr> <tr><td>7 yr</td><td>28</td><td>7.0</td><td>3.5</td></tr> <tr><td>8 yr</td><td>31</td><td>7.7</td><td>3.8</td></tr> <tr><td>9 yr</td><td>34</td><td>8.5</td><td>4.2</td></tr> <tr><td>10 yr</td><td>37</td><td>9.2</td><td>4.6</td></tr> <tr><td>11 yr</td><td>40</td><td>10.0</td><td>5.0</td></tr> <tr><td>12 yr</td><td>43</td><td>10.7</td><td>5.3</td></tr> <tr><td>13 yr</td><td>46</td><td>11.5</td><td>5.7</td></tr> <tr><td rowspan="2">Small Adult</td><td>50</td><td>12.5</td><td>6.2</td></tr> <tr><td>60</td><td>15.0</td><td>7.5</td></tr> <tr><td rowspan="2">Standard Adult</td><td>70</td><td>17.5</td><td>8.7</td></tr> <tr><td>80</td><td>20.0</td><td>10.0</td></tr> <tr><td rowspan="2">Large Adult</td><td>90</td><td>22.5</td><td>11.2</td></tr> <tr><td>100</td><td>25</td><td>12.5</td></tr> </tbody> </table>	Age	Weight (kg)	Standard Infusion Rate (ml/hr)	Hypotensive/hypovolaemic Infusion Rate (ml/hr)	1 yr	10	2.5	1.2	2 yr	12	3.0	1.5	3 yr	14	3.5	1.7	4 yr	16	4.0	2.0	5 yr	18	4.5	2.2	6 yr	25	6.2	3.1	7 yr	28	7.0	3.5	8 yr	31	7.7	3.8	9 yr	34	8.5	4.2	10 yr	37	9.2	4.6	11 yr	40	10.0	5.0	12 yr	43	10.7	5.3	13 yr	46	11.5	5.7	Small Adult	50	12.5	6.2	60	15.0	7.5	Standard Adult	70	17.5	8.7	80	20.0	10.0	Large Adult	90	22.5	11.2	100	25	12.5
Age	Weight (kg)	Standard Infusion Rate (ml/hr)	Hypotensive/hypovolaemic Infusion Rate (ml/hr)																																																																											
1 yr	10	2.5	1.2																																																																											
2 yr	12	3.0	1.5																																																																											
3 yr	14	3.5	1.7																																																																											
4 yr	16	4.0	2.0																																																																											
5 yr	18	4.5	2.2																																																																											
6 yr	25	6.2	3.1																																																																											
7 yr	28	7.0	3.5																																																																											
8 yr	31	7.7	3.8																																																																											
9 yr	34	8.5	4.2																																																																											
10 yr	37	9.2	4.6																																																																											
11 yr	40	10.0	5.0																																																																											
12 yr	43	10.7	5.3																																																																											
13 yr	46	11.5	5.7																																																																											
Small Adult	50	12.5	6.2																																																																											
	60	15.0	7.5																																																																											
Standard Adult	70	17.5	8.7																																																																											
	80	20.0	10.0																																																																											
Large Adult	90	22.5	11.2																																																																											
	100	25	12.5																																																																											

FOI QUESTION(S)	ANSWER(S)
Is there a standardised practice guideline/clinical management plan for post-ROSC care for your specialist/advanced paramedics in critical care? If so, can this please be shared?	Yes, attached.
Is there a difference in survival to hospital, survival to 30 days and survival to discharge when a specialist/advanced paramedic in critical care attends cardiac arrests when compared to non-specialist crews?	Not provided under section 22 "information held with a view to its future publication."

The Public Interest Test

In determining whether or not the public interest in withholding information outweighs the public interest disclosing information, NIAS considered the factors favouring disclosure and the factors against disclosure. The application of the Public Interest Test is set out below.

Exemption claimed in respect of Section 22 Information Held With A View To Its Future Publication	
Considerations in Favour of Disclosing	Considerations in Favour of Not Disclosing
Disclosure would promote openness and transparency regarding outcomes associated with attendance by the Advanced Paramedic in Critical Care (APCC) service and non-APCC attended incidents.	The requested information is intended for future publication as part of planned analysis and publication, and there is a public interest in allowing publication to take place in a managed, orderly and equitable way so the information is made available to all at the same time.
Disclosure may contribute to public understanding and accountability in relation to the development, effectiveness and value of specialist pre-hospital critical care services.	Premature disclosure would risk release of incomplete or insufficiently validated data before the planned analysis, peer scrutiny and appropriate contextualisation have been completed. This carries a risk of misinterpretation or misleading conclusions, particularly where APCC is an emerging service model that is not yet fully established or uniformly available across the region.
Disclosure may support informed public and professional discussion regarding survival outcomes following out-of-hospital cardiac arrest and service development priorities.	The APCC cohort currently represents a relatively small and developing population. Early disclosure of comparative survival rates derived from small numbers may generate unstable or unreliable inferences which may not reflect true service effect and may be distorted by case mix, selection factors or stage of service implementation.
	There is a public interest in preserving the integrity of planned publication and associated analytical processes, including ensuring that findings are presented with appropriate methodology, limitations and explanatory context. Premature disclosure may

	undermine the value of future publication by releasing partial findings outside their intended framework and before proper interpretation is possible.
--	--

Harm in providing the Information Held

Disclosure at this stage would be likely to cause harm through premature release of incomplete and insufficiently contextualised information, creating a real risk of misunderstanding or misleading conclusions about survival outcomes associated with APCC and non-APCC attended incidents. This risk is heightened because APCC remains in development, is not yet widely available, and the underlying population is relatively small. Early disclosure could therefore undermine the integrity of the planned publication and the public value of releasing the information in a complete, validated and appropriately interpreted form.

Balancing Test

A disclosure under the Freedom of Information Act is a disclosure to the world at large, therefore information that is disclosed must be suitable to be disclosed to anyone. When considering whether disclosure is appropriate, we must consider the strongest reason for disclosure against the strongest reasons for non-disclosure.

In this case, whilst the factors favouring disclosure are important in that it would adhere to the basic principle of being open and transparent, when weighed against the risk of disclosure undermining our ability to protect the public and respond effectively to emergencies, then non-disclosure takes precedence.

I hope the above fully assists you.

Please note that, under the Re-use of Public Sector Information Regulations, if you wish to publish or otherwise use this information besides for your own means, you will need to seek our permission to do so.

If you are dissatisfied in any way with the handling of your request, you have the right to request a review. You should do this as soon as possible, or in any case within two months of the date of issue of this letter.

If you require an internal review to be undertaken, please request this via the email address: information.governance@nias.hscni.net

Or submit via

Director of Planning, Performance and Corporate Services, Northern Ireland Ambulance Service (NIAS) HSC Trust, Site 30, Knockbracken Healthcare Park, Saintfield Road, Belfast, BT8 8SG.

If following an internal review, you remain dissatisfied in any way with the handling of the request, you may make a complaint under Section 50 of the Freedom of Information Act, to the Information Commissioner’s Office and ask that they investigate whether the Trust has complied with the terms of the Freedom of Information Act.

You can write to the Information Commissioner at:

Email: ni@ico.org.uk
Website: [ICO Website](http://ico.org.uk)

Post: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow,
CHESHIRE SK9 5AF
Telephone: 028 9027 8757 or 0303 123 1114 (Belfast based Office)

Please be advised that NIAS replies under Freedom of Information may be released into the public domain via our website @ <https://nias.hscni.net> Personal details in respect of your request will have, where applicable, been removed to protect confidentiality.

Yours sincerely

(not signed – issued by email)

Information Governance Team

Enc

This response has been prepared for disclosure Log publication. Only minor editorial or redaction amendments have been made for clarity and compliance with data protection legislation. The substantive content is identical to that provided to the requestor and the original issued version remains the authoritative record.