

## **Appendix 1: Initial Delphi Survey (English)**

### **Initial Delphi Survey**

*(First page)*

#### **Which scenarios in hyperbaric oxygen therapy are relevant to simulation-based education?**

Despite the broad implementation of simulation-based education in the majority of healthcare areas, simulation has yet to be used in the context of hyperbaric medicine education.

We are looking for healthcare providers involved in the provision of hyperbaric oxygen therapy (hyperbaric physicians and allied health providers, e.g. Respiratory Therapists or Registered Nurses) to help by completing this online survey.

Learn more about how you can help us develop a simulation-based education curriculum for hyperbaric oxygen therapy to ultimately improve practice and patient safety, and get a chance to win a \$200 (CAD) Visa gift card.

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Your participation in this Delphi survey will help us to determine which scenarios in hyperbaric oxygen therapy should be included in the development of a simulation-based education curriculum.

This questionnaire is the first round of the survey. The number of rounds will be determined based on response agreement, but will most likely involve a total of 2. If you participate in the first round of the survey, you will be asked to participate in all subsequent rounds.

It will take approximately 15 minutes to complete each round. Your participation in this study is completely voluntary. You can choose not to participate, or decide to participate now and then

change your mind without loss of any benefit that you are otherwise entitled to. Participation and your individual responses will remain confidential.

If you complete all rounds, you can choose to be entered into a draw for a **\$200 (CAD) Visa gift card**.

By completing this survey, your **consent to participate in this study is implied**.

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#### INSTRUCTIONS:

- Rank the scenarios provided according to how relevant you believe they are for inclusion in the simulation-based curriculum.
- Answer all questions with a ranking number.
- A space is also provided for you to include additional comments.

We will also ask you to provide some brief demographic information and to **forward the survey link to your colleagues (optional)**.

Once we have received responses from all participants, we will collate and summarize the findings and develop the second questionnaire. You should receive this within 60 days.

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1. Please select your profession:

- Physician
- Registered Nurse
- Respiratory Therapist
- Other (Specify): \_\_\_\_\_

2. Are you a trainee?

- Yes
- No

3. Please indicate the country in which you are currently practicing: (\*\*\*DROP DOWN MENU\*\*\*)

- Canada
- United States
- Afghanistan
- Albania
- Algeria
- Andorra
- Angola
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas, The
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bhutan

- Bolivia
- Bosnia and Herzegovina
- Botswana
- Brazil
- Brunei
- Bulgaria
- Burkina Faso
- Burma
- Burundi
- Cambodia
- Cameroon
- Cabo Verde
- Central African Republic
- Chad
- Chile
- China
- Colombia
- Comoros
- Congo, Democratic Republic of the
- Congo, Republic of the
- Costa Rica
- Cote d'Ivoire
- Croatia
- Cuba
- Curacao
- Cyprus
- Czechia
- Denmark
- Djibouti
- Dominica

- Dominican Republic
- East Timor (see Timor-Leste)
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Ethiopia
- Fiji
- Finland
- France
- Gabon
- Gambia, The
- Georgia
- Germany
- Ghana
- Greece
- Grenada
- Guatemala
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Holy See
- Honduras
- Hong Kong
- Hungary
- Iceland
- India

- Indonesia
- Iran
- Iraq
- Ireland
- Israel
- Italy
- Jamaica
- Japan
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Korea, North
- Korea, South
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macau
- Macedonia
- Madagascar
- Malawi

- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Mauritania
- Mauritius
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Morocco
- Mozambique
- Namibia
- Nauru
- Nepal
- Netherlands
- New Zealand
- Nicaragua
- Niger
- Nigeria
- North Korea
- Norway
- Oman
- Pakistan
- Palau
- Palestinian Territories
- Panama

- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Poland
- Portugal
- Qatar
- Romania
- Russia
- Rwanda
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- Sao Tome and Principe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Korea
- South Sudan



- Spain
- Sri Lanka
- Sudan
- Suriname
- Swaziland
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- Timor-Leste
- Togo
- Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Tuvalu
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- Uruguay
- Uzbekistan
- Vanuatu
- Venezuela
- Vietnam
- Yemen

- Zambia
- Zimbabwe

4. How many **post-training** years of experience do you have? \_\_\_\_\_

*(Fifth page)*

5. Please rate each of the scenarios below in terms of how relevant they are for inclusion in a simulation-based education curriculum for hyperbaric oxygen therapy.

Please **add** AND **rank** any additional scenarios you feel are missing.

1 indicates least relevant/least likely to benefit from simulation practice and 5 indicates most relevant/most likely to benefit from simulation practice.

Scenarios should be rated according to the following criteria:

- The clinical scenario should be either high stakes (i.e. if an optimal course of actions is not implemented in a timely manner, the patient may suffer severe consequences) or lower stakes but with a high potential for becoming critical if the optimal actions are not followed (e.g. intubated and ventilated child who undergoes HBOT);
- Training on this clinical scenario is best done with the use of a full-body mannequin versus other potential educational modalities.

<b>Clinical scenario</b>	<b>Rating</b> (1=least relevant; 5=most relevant)	<b>IF UNABLE TO JUDGE:</b> Please explain why you indicated “unable to judge”

Cardiac arrest in the hyperbaric chamber.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Seizure in the chamber	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Fire in the chamber	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Pneumothorax in the chamber	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Intubated and ventilated patient in the chamber	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Newborn patient in the chamber.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Panic attack due to claustrophobia in the chamber.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Chest pain in the chamber	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	
Shortness of breath in the chamber	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unable to judge	

6. If you have any further comments, please list them below:

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**PLEASE FORWARD THIS LINK TO YOUR COLLEAGUES:** *(survey link)*